McDONALD-DUNN FORESTS:
HUMAN USE AND OCCUPATION

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CHAPTER 1

INTRODUCTION

The story of the human use and occupation of McDonald-Dunn Forests unfolds with people, places and events interacting within a larger social, economic and political framework. Like the human experience itself, the story of the Forests' past is intertwined with the cultural and natural environment. The people who have left their indelible impress upon the Forests are nameless and acclaimed. Who can recall the name of the settler who struggled with nature to carve out his place on Homestead Road in the Oak Creek area of McDonald Forest? (Someone thought that it was a man named "Peterson", but he was not sure.) The name of the road pays tribute to his efforts. What of the nameless Indians who lightly trod the Forests and left little evidence of their passing? Recent archaeological investigations point to a much earlier human presence than the settlers who trickled into this region after 1850. Who were the men who felled the oaks in McDonald Forest to feed the buds and leaves to starving livestock during the severe winter of 1881-1882? The oak stumps stand mute on the hillside, a testament to an earlier expediency and abundance. Who can name the men who horse-logged on Vineyard Mountain, leaving their skid-trails and sweat? These people are all forgotten, but their collective actions contribute to the historic mosaic.

If there are individual personalities who are hard to know and
remember, there are those who are hard to forget. Who can forget T.J. Starker, who by one man's estimation, "... was the mainstay of the Forestry staff, and was Oregon State forestry. He was the Forestry School."? (Dan Robinson's accolade.) Starker's legacy (and flamboyance) is probably unmatched in its impact on the course of the School's history, by any other single individual with the possible exception of George W. Peavy.

Some have cut a broad swath, leaving their names and deeds on the Forests' landscape and in the records. Starker, Peavy, McDaniel, Patterson, Nettleton, Schreiner, Davies, Dunn and Rowley are a few of these. Many other individuals are brought to mind, however, for it is a story that is inextricably bound with the School of Forestry's history. These then are some of the faceless and noteworthy people who have lived the story. Their strivings have been associated with, and often created, the places in the Forests that have been important to human use and occupation.

The places that stand out in the Forests' history reflect the uses of the land. Sulphur Springs has long been an attraction to people in Polk and Benton Counties, who have gone there to "take the waters" and generally enjoy the site with their families and friends. The Arboretum, since the initial efforts of the Arboretum Committee in 1923, has been a central thread in the story. The first and second (present) Forestry Club Cabins have played a key role. Dean Peavy's Cabin reflected the times and the man. Cronemiller Lake and Oak Creek Guard Station are enduring reminders of the Civilian Conservation Corps and the Camp Arboretum era. The cluster of buildings at the Northwest Forest Genetics
Nursery is redolent of the Oregon Forest Nursery and its wider role in state and national conservation programs. The Portland and Umpqua Valley Road, Ed Blake home site, Jackson Place, Tampico townsite, Territorial Road, and the Thomas Read House and donation land claim, provide a link with the settlement period in Willamette Valley and Oregon history. T.J. Starker's Post Farm, Ponderosa Pine Race Study and McCulloch Peak Radar Site reflect research as a human use of School lands. The roads and trees themselves indicate the use of "the outdoor laboratory for the instruction of young foresters,"—many roads were laid out by forest engineering students, and reforestation has been carried out by many classes over the years. Sawmill sites, skid-roads, log ponds, logging roads and at least one flume site, are places that tie the Forests' past to harvest activities—a dominant use of the land. More recently, places in Dunn Forest with "polluted timber"—impacted by bullets and other projectiles—have reminded the latest users of the Forest of a previous U.S. Army presence and a military use of the land. Thus, the people and the places have functioned in concert, and in disharmony, to produce the record of human use and occupation.

The people and their interaction with the places of McDonald-Dunn Forests, have not operated in isolation. Their activities have reflected, and been a part of larger social, economic and political movements in the region and nation. The penetration of the Oregon Country and subsequent settlement of the valley and foothills of the Willamette Valley, affected the School Forests. Small scale agriculture, livestock production, and limited timber harvesting were typical of the settlement pattern. With the passage of time, harvest activities became more prevalent; the presence of harvest related sites in the School Forests provides the link
with these economic trends. It was an age in American history marked by an abundance of natural resources and unrestrained exploitation. The intellectual traditions, particularly the man-nature orientation (mastery over nature) set an inexorable course in the New World and for the Oregon Country.

The movement in western Europe (especially Germany) for scientific management of forests and the concomitant growing conservation consciousness in America during the early 1900's, also had an impact on Oregon. One outcome, of the many ramifications of this developing conservation ethic, was the founding of the School of Forestry at Oregon Agricultural College in 1910. The need for an outdoor laboratory in which to learn applied forestry propelled the School toward acquiring its own lands. Thus, the founding of the School and the School Forest system that was to evolve were a part of a wider conservation movement in the U.S. and Europe. The passage of the Clarke-McNary Act in 1924 and the establishment of the Oregon Forest Nursery at the Arboretum, linked the School with the nascent conservation programs of the 1920's. The Great Depression and the "alphabet-soup" programs that constituted the federal response--W.P.A., N.Y.A., C.C.C., etc.--also tied the School and its land to a wider regional and national movement. The abandonment of Camp Arboretum in 1942, the CCC installation at Peavy Arboretum, did not end the association with national events. The U.S. Army's occupation of a large area in Polk and Benton Counties set the stage for the acquisition of the Adair Tract in the post-war period--over 6200 acres of forest and agricultural land. The environmental movement of the 1960's and 1970's resulted in many students from varied
backgrounds becoming interested in the management of natural resources. The enrollment in the School and the use of the School Forests for outdoor laboratories, reflected these national developments. Thus, the people, places and events related to McDonald-Dunn Forests have been a part of a larger story.

Objectives Of This Research

1. (a) To prepare a cultural overview of the McDonald-Dunn Forests that relates the record of human activities--in a prehistoric and historic context--to the broader fabric of local, regional, and national history.

   (b) To include within the overview an account of the native peoples of the area with special emphasis on aboriginal land use.

2. To compile an inventory of cultural sites that are significant in the prehistory and history of the Forests.

3. To trace the major patterns of land ownership and use within an historical framework.

4. To initiate an oral history program i.e., tape record informants with first-hand knowledge of the Forests' past.

Procedure

The research, funded by the Department of Forest Management (O.S.U.), commenced on September 15, 1978 with a review of primary and secondary sources. Primary sources included diaries, personal correspondence, land ownership records, early histories, newspaper accounts, historical photographs, census records, donation land claims, historical maps, scrap books, and taped interviews with first-hand informants (oral histories).
These sources were located in Benton County Courthouse; Corvallis Public Library; O.S.U. Archives; Kerr Library; School of Forestry; National Archives (Washington, D.C.); Oregon Historical Society (Portland); State Department of Forestry (Salem); University of Oregon-Oregon Collection (Eugene); and, in the personal possession of individuals. The collection of oral history information extended to Longview, Washington; Arizona City, Arizona; Oregon City, Oregon; Whittier, California; and, throughout Benton County and Corvallis, Oregon. More than 40 individual informants were interviewed concerning their knowledge of McDonald-Dunn Forests and the School of Forestry; many of these were interviewed several times. The oral history portion of this research was coordinated with the Oral History Program of Horner Museum (O.S.U.), where all original tapes and transcripts have been repossessed.

Secondary sources included School of Forestry publications; contemporary accounts (history, architecture, oral history, anthropology text books and other publications); academic journals and other periodical literature; bibliographies; biographical indexes; U.S. Government publications; State Department of Forestry (Oregon) information; masters and doctoral theses; and, contemporary maps. These secondary sources were located in many of the same places as were the primary sources.

Field work was begun in September, 1978 to gather the data for the cultural resource inventory. Summers of 1978 and 1979 were particularly active, but data collection was continued throughout the year. Field work was often carried out with the School Forests Manager, Marvin Rowley who accompanied the investigator to all tracts of the Forests. Additional survey work was done with the assistance of Karen Thomas,
graduate student in the Masters of Arts In Interdisciplinary Studies program (M.A.I.S.) at O.S.U. Ms. Thomas was collecting data for her thesis on the CCC camp, Camp Arboretum, which was located at Peavy Arboretum 1935-1942. Jennifer Lee, Oral Historian for the Horner Museum, collaborated on the research; Ken Jones, a research assistant in the Department of Resource Recreation Management, provided assistance in land ownership research and preparation of maps.

Information collected in the field included general site identification and description; measurements of identifiable historic fabric (buildings, foundations, etc.), condition of site; and, black and white photographic documentation. Sites where there was no readily identifiable historic fabric, such as early sawmills and trails, were not photographed. Under the direction of Marvin Rowley, each site was recorded on a compartment map. A summary of each site was prepared (see Inventory).

Maps showing the land acquisition chronology for McDonald-Dunn Forests (and Peavy Arboretum) were prepared from documents examined in the Benton County Courthouse. Tables were constructed showing restrictions listed on each deed, date of acquisition, source of funds, cost of purchase, and legal description. Volume II, McDonald-Dunn Forests: Maps and Deeds, contains photocopies of all deeds for all tracts contained in the two forests. Volume II also contains the following:

The research procedures and results of the prehistory section of
this project are described in a separate report prepared by Sandy Snyder, Department of Anthropology, Oregon State University (see McDonald-Dunn Forests: Ethnography). The organization of this report is as follows:

Chapter 1: Introduction
Chapter 2: Exploration, Settlement And Nature In The Oregon Country
Chapter 3: Conservation And The Founding Of The School Of Forestry
Chapter 4: Origins Of The School Forests
Chapter 5: Mary McDonald's Benefactions And The Building Of A School Forest System
Chapter 6: Government Conservation Programs In The School Forests
   Part I: Conservation, The Depression And Clarke-McNary
   Part II: The Civilian Conservation Corps, Camp Arboretum, The Oregon Forest Nursery And Other Conservation Programs
Chapter 7: The Human Uses of McDonald-Dunn Forests
   Part I: Settlement and Harvest Activities
   Part II: Education, Research, Conservation, Recreation, Military
Chapter 8: Conclusions, Recommendations and Cultural Resource Inventory

The approach was to examine the School of Forestry and its lands within a broad historical context, then sharpen the focus to view the specific facets more closely. Thus, the discussion commenced with an examination of man and nature in the Oregon Country. Detailed next were the developments up to 1910, that led to the founding of the School of Forestry and the relationship of these (conservation movement, development of scientific forestry, George Peavy's arrival, etc.) to the historical mainstream. Chapter 4, "Origins Of The School Forests," described the evolving forestry curriculum and other related School developments,
that provided the impetus for acquiring an outdoor laboratory. The foundation stone of the School system of forest lands was set in place in 1925 with the acquisition of Peavy Arboretum. This and other events important in the School's history up to 1925, were summarized and assessed.

Chapter 5 considered Mary J.L. McDonald the benefactress—her life and times, her motives, her good works, and the results of her philanthropy for building a School forest system. The examination of the historical uses of the School Forests was based on a seven-part thematic framework. These seven themes—Settlement, Harvest Activities, Education, Research, Conservation, Recreation, Military—were seen as constituting the primary and dominant uses. Chapter 6 undertook an analysis of the Conservation theme in a two-part discussion that included (1) the conservation movement and its relationship to The Great Depression, and the advent of the Clarke-McNary programs; and, (2) the federal response in the form of the Civilian Conservation Corps, Camp Arboretum, the Oregon Forest Nursery and other federal-state programs of conservation in McDonald-Dunn Forests.

Chapter 7, "The Human Uses of McDonald-Dunn Forests," considered the remaining six themes in a two-part treatment: Part I, Settlement and Harvest Activities; and, Part II, Education, Research, Recreation and Military. The final chapter offered some conclusions, recommenda-
tions and the Cultural Resource Inventory.

Finally, for the purposes of this introduction, a note about style is appropriate. Throughout the narrative direct quotations from primary sources were used to tell the story whenever possible. The oral history program that was carried on in conjunction with this research, provided the writer with much first-hand information. In most instances, these
were informants talking about events they personally experienced. It is the opinion of the writer that little is gained by trying to improve upon what someone who was there, said about what happened. This principle applies to documentary primary sources as well. For example, how could one improve upon T.J. Starker's description of the medicinal qualities of the water at Sulphur Springs?

I think the water tastes nasty. If it's bad enough they ought to get something out of it. I don't know what it would cure, though. Might put under the sod.

A camp report sent to Director Fechner, Civilian Conservation Corps in Washington, D.C. concerning conditions at Camp Arboretum, provided a glimpse of Depression attitudes: "There is no subversive activities in the camp. The camp is also free from bed-bugs, and all other vermin." This was Vernon McDaniel's frank admission of larcenous intent with regard to a Franklin stove he liked, "... sorry I didn't swipe that when I left..." When Dean Paul Dunn was attempting to persuade his faculty, President Strand, and other influential persons of the wisdom of acquiring the 8200 acre Adair Tract, he met opposition on all sides. His terse observation was, "... whatever it was (the cost) I could see some future in it." Today few would disagree with his judgment.

Alan Berg's description of the misfits with whom he served at Camp Adair offered a glimpse of Army life. One was a "roly-poly" aging Austrian soldier who goosestepped when he marched; another was an alcoholic wood carver who served in the German Army during World War I. A third one was a little man, an inveterate bed-wetter who would lie on the firing range, but could not pull the trigger. He had been involuntarily enlisted by a judge, as punishment for beating his wife
who was twice his size. These vignettes add both substance and seasoning to the narrative.
CHAPTER 2

EXPLORATION, SETTLEMENT AND NATURE IN THE OREGON COUNTRY

The area we now know as the Pacific Northwest was an Indian land for more than 20,000 years before European explorers sailed along the coast in the mid-1500's (Ross, 1979). Although the northwest coast of North America was seen by sailors from Spain, England, Russia and America during this early period, it was not actively explored until the late eighteenth century. The opening of the Oregon Country was a result of the Spanish-Anglo rivalry of the Renaissance, which saw two imperial nations locked in a struggle to control and expand far-flung empires. Other nations, however, were displaying an interest in the region as well. By the middle of the eighteenth century Russia was expanding her influence eastward to Alaska and the Aleutian Islands, which led to a Spanish countermove in the Expedition of Juan Perez who laid claim for Spain to Nootka Sound in 1774. In 1775 the Spanish crown sent Bruno de Haceta northward to spy on the Russians and take possession of lands. The legendary voyages of British Captain James Cook firmly established England's claims; Cook discovered and named Cape Foulweather on his third voyage in 1778. Robert Gray, an American, entered the mouth of the Columbia River in 1792. American explorer George Vancouver dispatched his lieutenant, William Broughton, to investigate the news of this feat and he entered the Columbia River and navigated about 100 miles upstream in October of the same year. Thus, four nations, were interested in the Pacific Northwest.

The motives for these early explorations and conflicting claims included European expansionism, scientific curiosity stemming from the
Age of Enlightenment, the lure of the fur trade and simple curiosity about the unknown. It was the value placed on the sea otter pelt and the development of the maritime fur trade, however, that focused international attention on the resources of the Pacific Northwest.

British and American explorers and traders were drawn to the region, thus setting the stage for an ultimate power struggle between the two nations. President Thomas Jefferson's decision to send Lewis and Clark overland to explore this vast new national domain (1804-06) reaffirmed American's interest. John Jacob Astor's short-lived Pacific Fur Company was located at the mouth of the Columbia River at Astoria in 1811. It was succeeded by the British owned Northwest Company and the Hudson's Bay Company in turn, which was to be the dominant power in the Northwest from 1821 until 1845.

Throughout this early period a small number of American settlers was finding their way into the Willamette Valley, but initially they constituted very little threat to British hegemony. The formidable Hudson's Bay Company, under the able leadership of John McLoughlin, could count on resources from abroad and a firmly ensconced monopoly that provided commercial as well as political power.

In 1834, however, the Methodist missionaries entered the Willamette Valley and soon their activities provided a link with the U.S. This communication led to an influx of settlers that was to continue to grow, particularly as Jason Lee became an active publicist for the Oregon country. By 1844 the Methodist Board of Missions recalled Superintendent Lee and closed the mission, but not before the American immigration had been greatly stimulated. Several other religious
colonizers--Congregational, Presbyterian and Roman Catholic missionaries--sought to spread their faith in the uncivilized country as well.

These missionaries purveyed a dual impression of nature in the Oregon Country through their public and private correspondence, and by other contact with the U.S. "Almost invariably... the Protestant missionaries described the country in enthusiastic terms, hailing its pastoral potential in words similar to those of secular pioneers on any fertile American frontier (Dodds, 1976, p. 350)." The Catholic priests found the Northwest to be wild and fearsome, but they expressed great admiration for the Indians who had adjusted to the primitive environment. Dodds pointed out that this created a tension between two widely differing world views:

The Indian lived close to nature--rather, in her very bosom--while the missionary could only see nature as an alien force, an influence which must be subdued, a hostile power that combined with government and a recalcitrant population to form potential hindrances to their final success (p. 350).

By the 1830's the number of immigrants was steadily increasing, but in total numbers the amount was still quite small compared to the flood that was to come in the late 1840's. Many who attempted the overland passage were ill-prepared for life on the trail and these groups often disintegrated into quarreling factions that went their own way, sometimes with tragic results. The so-called "Peoria Party" consisted of 18 young men from Peoria, Illinois who took as their ominous motto, "Oregon or the Grave." Meek's "Lost Wagon Train" spent 45 days aimlessly wandering in the eastern Oregon desert before finally straggling into The Dalles in small, desperate groups. The optimism with which most immigrants undertook the overland journey to their
new homes was often replaced by despair, destitution, and even death.

By the fall of 1850 there were 11,873 persons living in settlements south of the Columbia River and most of these had arrived during the previous decade. The first known crossing of a family from the Missouri frontier overland to Oregon for the expressed purpose of settling and establishing a farm had occurred in 1840. Joel P. Walker and his family were in the vanguard of a westward movement that was to swell from a trickle to a flood by 1850. Three settlements existed by 1841: the French Canadians at French Prairie, the Methodists upriver from them, and a small group of Americans on the Tualatin Plains. The latter group had been of some concern to Chief Factor McLoughlin of the Hudson's Bay Company, the self-appointed keeper of order in the Oregon Country. These free Americans from the western states had been left without livelihood with the collapse of the fur trade in the Rocky Mountains and they were increasingly turning to the Willamette Valley. The French Canadians saw these often violent, uncouth newcomers as undesirable; the Methodists were outright hostile to the American intrusion into their god-fearing midst. McLoughlin had persuaded the Americans to settle on the plains close to the Tualatin River, where they would not disrupt social harmony, but would remain within reach of the Chief Factor's supervision.

The year 1842 saw the first wagon train that was to come to typify the overland immigration to Oregon during subsequent years. Prior to this, crossings had been independent ventures that were poorly organized with very few persons. This prototype of those to come had 18 wagons, oxen, mules, horses, cattle, and an organization
that maintained order and regulated affairs among the members of the wagon train. Also typical of this first large venture was the endemic problems of the Oregon Trail: internal dissension, delays, Indian scares, exhaustion, and destitution on arrival.

The "Great Migration" of 1843 included more than 800 persons and hundreds more came in 1844 and 1845. An official census taken for the Provincial Government in 1845 listed more than 2000 persons living south of the Columbia River (Bowen, 1978, p. 13). Most of these were from the Midwest, were young and male.

About 2000 persons immigrated in 1845, roughly 1000 in 1845 and 5000 in 1847 made the overland crossing. The years just prior to 1850 were characterized by events occurring elsewhere that had a large impact on Oregon. The gold rush in California and the outbreak of hostilities with the Indians (exemplified by the Whitman Massacre) altered the flow and temporarily diverted public attention elsewhere. One important implication for Oregon's frontier economy was a new attention to agriculture, commerce, and lumber to supply the burgeoning market created by the Gold Rush in California.

What motives would cause men and women to abandon homes and all that was familiar to them for a hazardous trip to an unknown land? The 2000 mile journey was the longest single trip made by the American settler in the relentless push westward.

Certainly the mix of motives would have included economic considerations. Most came from the Midwest--Missouri, Illinois, Iowa, and other states--and most had agrarian roots. The quest for land and an opportunity to escape the economic problems of home must have been twin motives. Some wanted to further the American
settlement of the Oregon Country and thus aid in wresting it from
the grasp of the British. One source stated that considerations of
health greatly motivated the newcomer.

If pioneer journals and reminiscences are interpreted
literally, concern for physical health ranked as an
inducement to overland migration. Scores of contemporary
observers lingered on the subject of sickness and disease
throughout the great Mississippi Valley and the attendant
pursuit of health that led families ever farther westward
(Bowen, 1978, p. 18).

The people of the trans-Appalachian West were used to such
diseases as mumps, scarlet fever, measles, whooping cough, dysentery
and smallpox. Epidemics of scarlet fever regularly swept the
country, outbreaks of smallpox were common, but nothing surpassed
Asiatic cholera for sheer terror (Bowen, 1978) Outbreaks of
malaria in the lowlands would cause entire communities to be aban-
donied. Pulmonary tuberculosis, along with malaria, probably took
the most lives on the trans-Mississippi west frontier. The Oregon
Country was seen as a potential haven from the dreaded scourges.

Thus a few dominant motives for immigration were a desire for land
and economic betterment, the furtherance of American settlement in the
face of the British presence, and health considerations. The early
arrivals to the Oregon Country—the explorers, trappers, missionaries
and pioneers—each in his own way met and came to terms with the
ravness and vitality of the new land. The names of a select few are
well-known: Gray, Vancouver, Lewis, Clark, McLoughlin, Lee, Whitman,
Applegate... The sustaining force, however, was the thousands of
unknown, common people who came to make up this emergent society on
the Far Western frontier.
Settlement and the Physical Environment

The availability of agricultural land was a potent magnet for the early settlers who came to the Willamette Valley. These sturdy newcomers who came spilling into the fecund valley floor were agrarian in background and conservative in viewpoint. It was their intent to develop an "improved Missouri" in the Oregon Country, and the abundant information that was being disseminated in the U.S. indicated that this land possessed many of the Edenic qualities so prevalent in American mythology. As always, the vision was blurred by reality, but the experience did little to temper the enthusiasm of oncoming tides.

The heart of the Old Oregon Country was the broad structural lowland that came to be known as the Willamette Valley. This area, which is not really a single valley but a lowland divided into several defined sections with low intervening hills, is about 100 miles long and 20 to 30 miles wide. Its vegetation before Indian occupation was probably quite different:

It seems highly probable that before the Indians came to Oregon the Willamette Valley was completely forested, with willow, cottonwood, maple, ash, and alder along the streams and western hemlock and red cedar in other places, with scattered oak, Douglas fir, and pine. (Dicken, 1975, p. 12).

The physical environment that the first Euro-Americans encountered in the Willamette Valley was significantly altered by the Indian practice of burning. Many accounts from the earliest explorers noted the Indian custom of purposefully setting fires during the dry season in the open prairies and wood lands. First hand descriptions from journals and other sources document this. It was noted by David Douglas in 1826,
John Work in 1834, Charles Wilkes in 1841, and Jesse Applegate in 1844, to mention a few.

The Indians burned the grass on the hills as well as on the floor of the valley. In July, 1834, John Work, an employee of the Hudson's Bay Company, commented: "the Indians set fire to the dry grass on the neighboring hills (near the site of Corvallis) but none came near us. The plain is also on fire on the opposite (east) side of the Willamette. (Dicken, 1976, p. 13).

By 1850 the burning had ended, due to the decline of the Indian population, and reforestation was beginning. These newly-arrived land-hungry Mid-westerners chose farm land mostly in the grasslands, and to a much lesser degree in the oak openings and sparsely timbered areas. The forest claims were generally related to logging operations and water-powered mills, because the ample supply of available farm land made forest clearing unnecessary. It was a need for the resources from both the forests and prairies that led to settlement on the margins of these two environments. Although timber itself had very little commercial value, there was an ever present need for wood for home construction, woodworking, and firewood. Because of unhappy and sometimes economically disastrous experiences with high water in the Missouri and Mississippi River floods, these early settlers eschewed the lands immediately adjacent to the Willamette River. An additional reason for avoidance was the association of malaria with swampy mosquito-infested areas.

The initial large migrations during the 1840's brought settlers to the better prairie lands north of the Santiam River, thus shifting attention southward for subsequent newcomers. The quest for desirable lands on the forests' boundaries led to the penetration of the valley of Rickreall Creek by 1845. By 1846 settlers were entering the valleys
of the Marys and Luckiamute Rivers. Several of the settlers who
were to be remembered as the first citizens of latter-day Corvallis
and Benton County arrived during this period:

During the winter of 1845 several claims were taken, notably
that of J. C. Avery, on which the southern portion of the
city of Corvallis is now built, while the northern part was
taken up in the spring of 1846 by William F. Dixon. That
year too came Nahum King, who gave his name to King's Valley...
(Fagan, 1885, p. 324).

By previous experience and inclination these pioneers who
arrived in the 1840's were agrarian, and the physical environment
they encountered allowed them to give full vent to their yearnings.
The climate was mild, rainfall adequate, growing season sufficient
for most crops, and most important, there was good farm land for the
taking. Life was a struggle, however, particularly during the first
year when everything was needed at once-- homes to be constructed,
fields to be plowed and planted, fences to be built to contain live-
stock... Newcomers often lived with family or friends and worked for
others until they could get their stake in the new land.

The frontier economy was based on agriculture, beef and dairy
cattle, sheep and swine, and limited commerce. The principal foods
were wheat, potatoes, beef, and salted pork. In the barter economy
that developed, wheat became a common unit of exchange. During this
period few came to Oregon with the intention of living off the land,
because the accumulated experience of the trappers and missionaries
had shown that significant numbers of people could not be sustained
in this manner (Bowen, 1978). As early as 1846 people were noting
in their diaries that the general scarcity of game in the Willamette
Valley made it difficult to be successful in hunting.
The early and rapid depletion of the Willamette Valley's abundant natural resources was not surprising, given the man-nature intellectual traditions of the newcomers. It was this abundance and the American response to it, according to many students of the American character, that gave shape to the distinctive American experience. "This pervasive influence of abundance," according to Potter (1958), "that impinges upon all American social conditions and contributes in the most fundamental way to the shaping of the American culture and character (p. 84)." What was the "intellectual baggage" that the Oregon settler carried to this promised land? A discussion of the intellectual traditions of the new Oregonian and their profound impact on the natural order, follows in the next segment. These man-nature attitudes and the consequences, set the stage for a response that will be known by latter day historians as, "the conservation movement."

**Nature: The Old World Legacy**

The people of Oregon have always had an intimate relationship with nature. The early Indian legends of the Pacific Northwest centered around natural phenomena in their descriptions of the origins of man and his place on the earth. The earth was a living organism of which they were an integral part and which constituted the focal point of their religion. "To the Indian in his native state, ... everything had life or spirit; the earth, the rocks, trees, ferns, as well as birds and animals, even the hail which fell from the sky, had a spirit and a language and a song of its own and might be an inspiration to a warrior (Clark, 1953, p. 7)."

The Indian cultures of the Pacific Northwest lived in intimate union with nature, striving to fully utilize its bounties. Although
agriculture had not been developed, these peoples were wealthy in comparison with other Indians of North America:

From Alaska to northern California the coastal Indian peoples were materially among the wealthiest in North America. These riches were not acquired easily, however, for nature bestowed her greatest gifts, fish and forests, in a geographic environment of difficult terrain, dense vegetation, and dangerous waterways (Dodds, 1976, p. 344).

The ocean and coastal streams provided the staple of life, but the abundant forests were of equal importance. From these vast virgin stands the materials for clothing, storage containers, cooking utensils, canoes, and all manner of other essentials were constructed. From the forests came the wildlife--bear, deer, elk and other animals--that supplemented the marine resources, as well as other forms of life-sustaining foods and materials. The rhythm of individual and collective life was infused with animism and persistent attempts to propitiate the inscrutable forces of nature.

The European mind, before and during the great Age of Exploration, had certain intellectual traditions or predispositions toward nature that were to be manifested in the New World. Nash (1967) points out that the value system of primitive man was oriented toward survival; he appreciated what furthered his well-being and feared what he could not control. Almost all early cultures had a conception of an earthly paradise:

No matter where they were thought to be or what they were called, all paradises had in common a bountiful and beneficent natural setting in accord with the original meaning of the word in Persian--luxurious garden. A mild climate constantly prevailed. Ripe fruit drooped from every bough, and there were no thorns to prick reaching hands. The animals in paradise lived in harmony with man. Fear as well as want disappeared in the ideal state of nature (p. 9).

If the environment in a controlled, garden-like state was man's
greatest good, man's greatest evil was an environment that was beyond control. The intellectual legacy from Greek, Roman, and Judeo-Christian thought places the Garden of Eden at one pole and the desolate, uncontrollable wilderness at the opposite extreme. Medieval Christianity adamantly called man's attention to the City of God, demanding that he eschew the ephemeral City of Man. St. Augustine's City of God, which was the central vision of the Middle Ages, stressed the transient nature of mortal man—"This life is but a wayside inn."
Man's special place above nature, however, provided unique earthly privileges:

By gradual stages a loving and all-powerful God had created light and darkness, the heavenly bodies, the earth and all its plants, animals, birds, and fishes. Finally, God created Adam... Man names all the animals, thus establishing his dominance over them. God planned all of this explicitly for man's benefit and rule; no item in the physical creation had any purpose save to serve man's purposes. And, although man's body is made of clay, he is not simply part of nature: he is made in God's image.

...Man shares, in great measure, God's transcendence of nature. Christianity... not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends. ... Christianity made it possible to exploit nature in a mood of indifference to the feeling of natural objects (White, 1973, p. 25).

Old World visions of America included a complex of images that were rooted in the intellectual baggage the sixteenth century European carried. America was "...a bounteous land peopled by noble savages, a primitive world of natural beauty whose inhabitants governed themselves by an innate moral code (Dodds, 1975, p. 343)." The "Noble Redman" of unsullied morality and virgin innocence was a theme that would reach its full expression under the impulse of such Romantic writers as Washington Irving and James Fenimore Cooper. The American
myth saw America as a fresh start for humanity, a separation in history from the darkening Old World, a veritable New Eden with the native-born American the New Adam. This ubiquitous image has been expressed and repeatedly endorsed by the literati of the nation—Cooper, Emerson, Thoreau, Whitman... It was nowhere better stated than in Whitman's *Leaves of Grass*. The American myth included the innate yearning for a place where nature loomed larger than civilization, where the pastoral landscape offered the essential backdrop for Jefferson's sturdy yeoman farmers, who "shielded from the artifici-ality of commerce and city life, lived lives of quiet simplicity as the 'chosen people of God' (Schmitt, 1959, p. xv)."

Perceptions of nature were evil as well as beneficent, however, as noted in the oft-quoted thoughts of Michael Wigglesworth written on the eve of the settlement of the New World in 1662:

A waste and howling wilderness,
Where none inhabited
But hellish fiends, and brutish men
That devils worshiped. (Nash, 1967, p. 36)

The Puritan mission to go forth and possess a new land was seen as an, "errand into the wilderness (Miller, 1956.)" William Bradford stepped off of the Mayflower and saw a "hideous and desolate wilderness (Nash, 1967, p. 23)." If the Edenic image was the dominant intellectual theme in early America, at least one foreign visitor failed to observe it in action. Alexis de Tocqueville during a trip to the United States in the 1830's noted that:

In Europe people talk a great deal of the wilds of America, but the Americans themselves never think about them; they are insensible to the wonders of inanimate nature and they may be said not to perceive mighty forests that surround them till they fall beneath the hatchet. Their eyes are fixed upon another sight. ...the march across these wilds, draining
swamps, turning the course of rivers, peopling solitudes, and subduing nature (Nash, 1967, p. 23).

Thus, the man-nature consciousness that Europeans brought to the New World was multi-faceted and often contradictory. America was a new Eden and a howling wilderness that offered opportunities for unlimited riches through exploitation of nature's bounty. The accumulated Old World intellectual legacy and especially the Judeo-Christian man-nature ethic, provided the rationale for manipulating the natural environment to serve man's ends.

Transition

The forces that propelled generations of immigrants from the Atlantic seaboard toward the Pacific Slope are well known. Frontier historian Frederick Merk (1978) labeled this movement, "one of the great migrations of mankind." On the eve of the twentieth century Americans were seeing the final stages of this prolonged westward drive. An era that came to symbolize the unique American experience was officially brought to close when the Superintendent of the 1890 Census declared the frontier to no longer exist, because of widespread settlement. The annual convention of the American Historical Association in Chicago during the summer of 1893, provided the occasion for a little known historian to interpret the meaning of this development. Frederick Jackson Turner's now famous paper, "The Significance of the Frontier in American History," contained the ideas that came to be known as The Turner Thesis, and he thus launched a debate that continues today. Turner believed that the distinctive American culture was a result of having experienced successive frontiers for three centuries; it was
an experience that clearly distinguished Americans from their European cousins. This experience produced a man who subscribed to values such as mastery over nature, social mobility, egalitarianism, equality of opportunity, pragmatism, competition, and a reversion to primitivism—a casting off of old social forms inappropriate to the frontier environment. Turner (1977) stated that American democracy was born of no theorist’s dream:

... it was not carried in the Sarah Constant to Virginia, nor in the Mayflower to Plymouth. It came out of the American forest, and it gained new strength each time it touched a new frontier. Not the constitution, but free land and an abundance of natural resources open to a fit people, made the democratic type of society in America for three centuries while it occupied its empire (p. 29).

The availability of free land and abundant exploitable resources, were the key elements then, to an entire unplanned movement that converted raw wilderness into a nation. Merk (1978) pointed out that the planlessness brought penalties:

... especially in the domain of land use, and these became increasingly evident with the growing national maturity. The evidences were impoverishment and even destruction of the soil, rivers that were a flood menace to lowlands and societies stranded on impaired lands that had become a burden to the states and to the nation to maintain. The result was the inception of a program of land-use planning, participated in by the federal and state governments (p. xvii).

The uniquely American historical framework, therefore, provides the backdrop for this research. Growing out of the synthesis of these historical forces was one response—the creation of the School of Forestry at Oregon State Agricultural College, and the concomitant need for an outdoor laboratory. The relationship of this development to the broader conservation movement in the U.S., constitutes the historical thread that is followed herein.
Chapter 2

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CHAPTER 3

CONSERVATION AND THE
FOUNDING OF THE SCHOOL OF FORESTRY
(1893-1910)

The establishment of forestry as a distinct field of study at Oregon State University has its origins in the closing years of the 1800's and the first decade of this century. Forestry, viewed as a field worthy of academic attention, reflects the historical context of the era. This early interest reflected, and was a part of several underlying social, economic, and political developments and national traditions that gave shape to the new nation.

An intellectual tradition that placed man uniquely above nature, the secular rationality of the European Enlightenment, a virgin continent abundant in natural riches, and a resource-hungry people relentlessly pushing westward, provided a synthesis that set an inexorable course. These cumulative effects in the late nineteenth century, evinced a response. This growing consciousness of the need for a different land use ethic resulted in public and private actions that have since come to be seen as the origins of the contemporary environmental movement.

Forestry and Conservation

"Of the many resources subjected to unrestricted exploitation in the last half of the nineteenth century, few were so ruthlessly despoiled and dramatically open to speculation as the nation's timber resource (Robbins, 1975, p. 4)." Because there was little economic incentive for adequate reforestation, the timber harvester showed little concern for the forest environment. A reaction to this unregulated
exploitation of the natural environment began to be manifested in several ways during the late 1800's. Scientific forestry management practices that were being developed in Germany and other western European countries, influenced people who were concerned in this country. The formation of the American Forestry Association in 1875 was indicative of the growing awareness and need for a new ethic. In 1891 President Benjamin Harrison established the first forest reserve, withdrawing over 13 million acres. In 1893 President Cleveland created the Cascade Forest Reserve in Oregon. A special forestry commission was sent to the West in 1896 by the National Academy of Sciences, to survey standing timber on the public domain. Between 1898 and 1917 great strides were made in the forest conservation movement. Gifford Pinchot was appointed head of the Forestry Division in the Department of Agriculture; under his dynamic leadership a national forest system and a forest service were developed. In 1908 President Theodore Roosevelt called the White House Conference of Governors to focus on the conservation of the nation's natural environment.

The era was not without its strife, however, for not all agreed on the appropriate course the government should pursue with regard to conservation. The threat of federal regulation created a lively controversy that generated strong opinions by those affected—the timber, grazing, and mining interests. In Oregon, the larger industrial lumber interests were in favor of federal regulation and supported the implementation of scientific management. Many smaller timber, grazing, and mining operators and owners vehemently opposed the conservation programs labeling them as designed to meet the, "narrow purposes of
eastern theorists (Robbins, 1975, p. 6)."

There were also urban advocates of conservation programs during this early period, but their interests often included other issues such as the protection of urban watersheds and aesthetic landscapes. John Muir is often associated with a set of land values that places him at odds with a utilitarian approach to resource management. Muir made his contribution to the burgeoning conservation movement, and will be especially remembered for founding the Sierra Club. Although he is an appropriate symbol of the preservation philosophy, he inadequately represents the broader preservation approach to natural resource policy:

It was a philosophical movement rooted in transcendentalists such as Thoreau and Emerson. It was reflected in art, poetry, religion, and politics. Muir was a major influence on the movement, but it is broader and deeper than his wilderness life-style and concern for the Sierras suggest (Dana & Fairfax, 1980, p. 45)."

One of the earliest conservation organizations in Oregon was the Oregon Alpine Club, now known as the "Mazamas," which was founded in 1889. It was active in supporting the establishment of Crater Lake National Park, the Bull Run timber reserve for Portland's watershed, the Ashland watershed, and the Cascade Range Reserve. Other Oregon spokesmen who took a strong stand were Governor George Chamberlain, a personal friend of Theodore Roosevelt, and Oswald West, Oregon's State Land Agent in 1907 and a future governor.

During these tumultuous years of the nascent conservation movement most Western states vigorously opposed federal regulation, but Oregon was the exception. It regularly supported federal conservation programs, even creating in 1909 its own state conservation body, the Oregon Conservation Commission.
This evolving forest conservation movement created the need for professionally trained foresters who could adequately deal with the problems unique to the resource. As early as 1880 there were stirrings in support of forestry education. The Chamber of Commerce of St. Paul, Minnesota, petitioned Congress to grant 300 sections of public land to the State for the establishment of a school of forestry in that year. Proposals to initiate a program in forestry education in the Dakota Territory were also introduced, but nothing came of these. Special lectures and courses were given at some institutions of higher learning as early as 1873—in that year William H. Brewer lectured at Yale on forestry. In 1882 a forestry course was offered at the University of Michigan; by 1887 instruction in forestry was being given at colleges in Iowa, New Hampshire, Massachusetts, Michigan, Missouri, Pennsylvania, and North Carolina. Although these were a beginning, the individual seriously interested in professional education in the U.S. still had to plan to go to Europe to achieve his goal (Dana & Fairfax, 1980).

Thus, the early interest in forestry at Oregon State Agricultural College can be seen as a logical extension or by-product of larger societal developments of the period. The forest resources of the region and the burgeoning forest-related industry, also provided a receptive milieu for the initiation of forestry curriculum.

**V. Moses Craig and the Department of Botany**

The earliest reference to a course containing forestry content is found in the *Annual Catalogue of the Agricultural College of the State of Oregon* for 1893 - 1894:
Third Term - Economic Botany and Forestry. A study of special groups such as medicinal, fibre, and food producing plants; forestry, herbarium work, etc., recitations, lectures, and laboratory work 5 hours per week (p. 26).

The course was offered by the Department of Botany and was taught by V. Moses Craig. The 1893-1894 catalogue notes that Hough's *Elements of Forestry* was the required text. Thus, forestry as a field of study, gained a tenuous foothold in the College's curriculum; the unpretentious beginning was not to be representative of the future role of the nascent discipline. In a few years forestry was to move from being a minor part of the course in the Department of Botany to Department status in 1908, to the creation of a School of Forestry in 1913.

It was the Department of Botany therefore, that provided the essential springboard for this rapid maturation to full status within the academic structure. The interested student, in 1897, could enroll for a course entitled, "Forestry and Arboriculture" which was taught by the only individual at that time who had any official identification with forestry education-- Moses Craig. The course reflects considerable growth from being a topic in "Economic Botany and Forestry" in 1893:

Among the subjects considered are forest regions and their typical trees, the care of woodlands and prevention of forest fires, forest botany, uses of trees and their products, determination of trees by leaves and bark, forestry on the Pacific Coast, etc. (p. 41).

The course content was gradually moving toward a wider coverage of forestry topics, but in 1897 extensive field experience was yet to be added to the student's preparation. "...the work, which will be mainly by lectures, includes timber physics, uses and diseases of timber, recognition of trees, forest products, etc. (State Agricultural College, p. 39).
V. Moses Craig, therefore, was the first faculty person to be instrumental in developing the incipient forestry program at the Agricultural College. As a personality, no distinctive portrait emerges from the few references found that dealt with his background. The indistinct image of Craig is in sharp contrast to the pronounced uniqueness of the next two individuals who were to leave their mark: Edward Ralph Lake who arrived to Corvallis in 1888, and George Wilcox Peavy who came in 1910.

Edward Ralph Lake's Role

Edward R. Lake was a significant figure in the institutional life of Oregon Agricultural College over a 22 year period of service. His role in the early formation of the forestry curriculum was a central one in that he was the first to be directly responsible for forestry courses that were not a part of other courses in botany. Lake was born in England in 1860, and while still an infant, was brought to live on a farm in southern Michigan. His first direct work experience with forestry may have come at age 12 when he was apprenticed to two brothers who were described as, "timber and building contractors (Lake, p. 1)."

After about four years, Lake tired of this endeavor, returned to school, and ultimately graduated from Michigan Agricultural College. After some work experiences he was offered in 1888, the Chair of Horticulture and Entomology at Oregon Agricultural College. In addition to these subjects he taught a diverse range of courses that included mathematics, physical geography, history, and several others.

Lake's tenure at O.A.C. was a checkered one that included many activities related to both the College as well as the wider community and region. In 1891 he left the College to become the editor of Fruits
and Flowers, a magazine published in Portland.

Eighteen ninety-three found him holding a number of important posts at Washington Agricultural College in Pullman, two of which were the Chair of Botany and Forestry, and Acting President. He returned to Corvallis in 1894 and became editor and part owner of the Union and the Gazette Times newspapers. The records also show that in the same year he became the president and manager of the Corvallis and Benton County Prune Company, which had the largest prune orchard in the state, located six miles north of Corvallis. In 1898 he was appointed Regent of the College and elected once again to the Chair of Botany and Horticulture; at this time he sold his business interests and devoted his time to College duties. In 1900 he was appointed Expert in Pomology and sent for six months to visit Europe to study the growing, curing, and marketing of prunes. In 1904 he was elected Professor in Botany and Forestry, having established, according to one source, the first forestry courses in the West (Lake, P. 2).

Edward Lake was active in college and community social and intellectual life as well. He organized the foreign students under the name, "the Cosmopolitan Club," participated in the Corvallis Volunteer Firemen program, and was active in the first Oregon Academy of Science. He worked in the Good Roads Movement, was president of the Benton County McKinley Club during the presidential campaign, and performed many other civic duties. In 1910 he left O.A.C. to take a position as Expert Pomologist with the U.S. Department of Agriculture in Washington, D.C., where he remained until 1928, when he retired.

The annual catalogue of Oregon Agricultural College for 1899-1900 is the first indication of Professor Lake's association with forestry.
in that his name appeared as the instructor of "Course E - Forestry and Arboriculture" (p. 45); he was also listed as the only professor for the Botany Department.

The report of the Executive Committee to the Board of Regents on July 20, 1904, noted the growing importance of forestry education and Lake's role:

... In our opinion the department of Horticulture requires the individual attention of one man who must be thoroughly acquainted with the subject. There are other studies in our field which other institutions of learning are reaching out for, and which have not received from us the necessary attention - notably the study of Forestry. We therefore recommend that Forestry be added to Botany and be called the Department of Botany and Forestry, and that E. R. Lake be employed to take charge of this department at his former salary leaving Horticulture to be temporarily provided for as is present until we can provide for it permanently ... (p. 413).

The Forestry Program By 1905

Forestry, with Professor Lake at its helm, was first listed as a four-year course of study, leading to a degree, in the 1905-1906 catalogue, thus taking its place with Agriculture, Household Science, Mechanical Engineering, Electrical Engineering, Mining Engineering, Civil Engineering, Pharmacy, and Literary Commerce (p. 29).

The 1905-1906 catalogue also reflected the gathering momentum in the forestry curriculum in that for the first time there was a detailed statement of purpose, 13 separate courses, and a summer camp requirement. The statement of purpose was concise:

The course in forestry is designed to meet the needs of those men who desire to enter the government forest service, or to fit themselves to care for the forest areas of private owners. (p. 128)
Forestry I, II, III were designated "Club-work," which required that the student participate in a variety of activities related to the Forest Club, Camera Club, and Rod and Gun Club. The Forest Club's twice monthly meetings included discussions of current forestry literature, legislation and other developments generally affecting forestry and forest-related industries. The Camera Club was dedicated to the advancement of "camera craft" and the Rod and Gun Club saw its special field of endeavor as being all matters "pertaining to the game and fish interests of forest and field (p. 129)." The Forest Club made its debut on November 16, 1906 under the aegis of Edward Lake and five students (C. C. Cate, L. H. Stone, B. B. Totten, H. L. Currin, and A. B. Mitchell) (The Forest Club, 1923, p. 9); it was to set in motion a thread of historical continuity for the developing forestry program that has endured into the present. From its inception in 1906 until well into the 1950's, the Forest Club was virtually synonymous with forestry at the College. Every student who was enrolled in the forestry curriculum was automatically considered to be a part of the Club; meetings were in effect meetings of the staff and students of the School. More will be said about this important organization later.

The other ten academic courses found in the 1905-1906 annual catalogue indicated a much more ample curriculum than had existed in previous years: Sylviculture, The Forest, Dendrology, Forest Industries, Forest Finance, Forest Administration, Forest Economics, Timber Technology, Lumbering, and Forest Policy and Protection (p. 130). More important, for the purpose of this study, this was the first appearance in the curriculum of a summer camp requirement:
All students in the regular course in forestry will be required to spend two sessions of eight weeks each during July and August of the junior and senior years in the forest. One session is required at Camp Reserve; a part of the other, at the option of the forester, may be spent in lumber camps, mills or factories. The objects of these summer sessions are two fold; to give the student a practical working knowledge of the subject in hand, and to advance his technical training. In view of these ends the work of the summer session is diverse and is presented in two ways, lectures and field work. (p. 131).

Additionally, the students were expected to be knowledgeable in woodcraft, which according to the description of this requirement, included an actual working knowledge of packs and packing, trail and road making; all aspects of camping (cooking, fires, water, camp making); woodmen's tools; firearms; and, dressing and preserving game and preserving skins, furs, and hides (p. 131).

Several aspects of this program were remarkable. Professor Lake's expertise in forestry, as well as his energy to cope with the burgeoning curriculum, must have been severely taxed. It is doubtful that Lake had any formal training in forestry per se, since few or no forestry courses existed at the time he was studying at Michigan Agricultural College in the 1880's. On the other hand, the numbers of students enrolled in these courses must have been very small; the annual catalogue for 1908-1909 listed under "Forestry" five sophomores and 5 freshmen (p. 236). By 1910 the total number was to grow to 22.

Another remarkable aspect of the program outlined in 1905 was the broaden scope and visibility of the forestry program at Oregon Agricultural College, compared to preceding years. The maturation to a four year program of study and the concomitant official niche within the curricular framework was a very significant step in the formative period.
An academic unit complete with an established spokesman (Professor Lake), officially approved academic courses, a support organization (Forest Club), a nucleus of eager students, and cooperating organizations in the public and private sectors, was ideally positioned to develop momentum. It was to be Lake's successor, however, who would provide the essential alchemy.

Finally, it is with the 1905-1906 bulletin that the forestry curriculum first officially required field experiences i.e., attendance at Camp Reserve and work in lumber camps and mills. From the outset it was obvious that the study of forestry required actual field experience with the resource. Harold D. Gill, who was a member of the first graduating class in 1910, wrote in 1956 about his early experiences:

Professor Lake was a bit on the portly side, and when he became tired of us, he sent us on Field Trips. Usually we went to Mary's Peak. If we could work it, for a couple of days' holiday. Short trips took us along the River Bank to study White Fir and Cotton Wood. Once we took one of those unchaperoned Field Trips to Monroe, aboard an S. P. Freight. The entire Forestry Class insisted on riding on top of the Caboose. The nearest we came to Forestry was to duck under low branches of wide-spread Oak or Maples overhanging the track on the run up to Belfountain or Alpine (p. 4).

Gill's recollections would indicate that the early forestry students were inclined to "skylarking" as it was known in their day. T. J. Starker, also of the first graduating class, noted that Professor Lake was a kindly gentleman, who, "... put up with a lot of horse play from us young bucks (Starker, 1956, P. 5)." Thus, the importance of field experiences and the need for an outdoor laboratory, were concerns from an early date (unchaperoned trips to Belfountain, however, were most likely not what the "portly gentleman" had in mind for his students).
Lake's Contributions To Forestry Education

Edward Lake's contributions to forestry education at OAC should not be under-estimated, for he provided an important link in the evolution of a new program. During the formative period in the first decade of the twentieth century his leadership established a nucleus that was to be the foundation that George Peavy would build upon. His professional expertise and inclinations were primarily focused on horticulture and botany, but he apparently was able to reach out to encompass a new and developing discipline. Lake's perspective was probably more ample than that of many of his contemporaries, as is reflected by his background and professional endeavors. He was born in England and reared by immigrant parents in Michigan. Early experience with rural life and forest-related activities shaped his views about the natural environment. The academic preparation at Michigan Agricultural College provided a regional perspective different from the Pacific Northwest. His professional experiences included work in both the public and private sectors; he taught diverse courses at two agricultural colleges and was the Acting President at Washington Agricultural College; he managed newspapers and a prune orchard business; he served in the Oregon Legislature and traveled abroad; and, ultimately, he found his way to Washington, D. C. where he finished his career in federal service. An edition of the Barometer in March 1902 noted Lake's international contributions:

Among the many honors of a horticultural character which have been coming to Oregon is a gold medal
awarded Prof. E. E. Lake at the Paris Exposition as a collaborator in the horticultural display made there by the USDA (Lake, p. 19).

Lake's varied background, interests, and experiences must have had a broadening effect on the early forestry program, that helped to overcome the provincial tendencies of O.A.C. at the turn of the century. By the time George Peavy arrived in 1910 Lake had congealed a substantial beginning curriculum, helped establish necessary support groups such as the Forest Club, and in general, represented Forestry within the College academic framework.

A final note on Edward Lake deals with his relationship to the College administration throughout his tenure. The official minutes of the meetings of the Board of Regents suggested that there was some strife between the two. The record for July 18, 1906 noted that Professor Lake submitted a claim for supplies purchased by him for use in instruction. The following motion was presented and approved: "... the Board be authorized to make an inventory of any property, purchased by Prof. Lake, used in the College and Station and to purchase the same if they find it so (p. 439)." The April 24, 1908 minutes of the Board included a list of President Kerr's recommended salary increases for all faculty members in the College. Under the heading, "Forestry & Botany," was listed "E. R. Lake" whose salary was to increase from $1600 to $1700. The minutes noted that all recommended salary increases for faculty members were approved by the Board, with the exception of Professors Lake and Skeleton. No reason was given in the official record for this denial. The matter was rectified, however, in the minutes of July 15, 1908, when "On motion
of Mrs. Waldo, seconded by Captain Apperson, the salaries of Professors Lake and Skeleton were each increased to $1700 (p. 37)."

In 1911 Lake was still attempting to get a settlement from the College for some of his expenses:

A communication from Prof. Lake asking that he be reimbursed for certain rebates advanced to students in his Department nine years ago, application for which had not been made heretofore because of the certificates having been lost, was read and referred to the Finance Committee (Board of Regents, January 4, 1911).

Referred to a committee! Professor Lake's relationship with the Board of Regents must have been an uneasy one at times; this particular matter was resolved finally when, some months later, the Board ordered that the vouchers be paid (Board of Regents, May 29, 1911).

Edward Ralph Lake's official association with Oregon State Agricultural College and the nascent Department of Forestry came to an end in 1911 when the Board of Regents summarily ordered that:

... the Secretary of the Board address a letter to Prof. Lake advising him that the College could not arrange definitely for his future employment and suggesting the probable advisability of his remaining in Washington (July 24, p. 136).

Thus, the first person to have significantly provided direction, and influenced the incipient forestry curriculum at Oregon State College passed from the scene, having made some important contributions. Harold D. Gill (1956) remembered Lake and the role Botany played in the development of Forestry:

We Foresters occupied corner rooms on the upper floor of Agriculture Hall. Professor Lake was our Boss and the tops of the book shelves in his office, which was our principal gathering room, were crowded with glass jars containing tufts of dried grasses, grains, and specimens combined with others drying in Herbariums in the adjoining Botany Lab gave the place a dusty stuffy odor that I will always associate with Forestry. Botany played a large part in early day Forestry (p. 4).
EDWARD RALPH LAKE

FORESTRY STUDENTS FALL 1909
(Lake-upper right; Starker-lower left)
T. J. Starker, (1956) also of the first graduating class, noted that, "Professor E. R. Lake was our boss until February 1910 when George Peavy arrived on the campus, direct from California, with a wide-brimmed hat and experience in the California National Forests (p. 5.)" George Wilcox Peavy strode onto the scene in 1910 and assumed a commanding role at center stage for the next 51 years. Peavy's career, which ended with his death in Corvallis, Oregon on June 24, 1951, was to be filled with many honors and achievements. Among the varied duties he assumed were teacher, Department Head, Dean of the School of Forestry, member of the State Forestry Board, President of the College, Coordinator of War Activities, and Mayor of Corvallis.

But before launching into the multi-faceted life of George Peavy and his career at the institution of higher learning where he spent his professional life, a brief overview of OAC and Corvallis at that time would be appropriate.

OAC On the Eve of George Peavy's Arrival

In 1868 Corvallis College won out over Willamette University in the contention to be designated, "Agricultural College of Oregon;" its curriculum necessitated some overhauling to bring it into line with the intent of the Morrill Act of 1862. The dominant mold of the academic program had been classical in tradition: Greek, Latin, and Moral Philosophy. The Act had intended, among other goals, to bring technology and science into American higher education, and to make higher education available to the ordinary working people of the
nation (Groshong, 1968). By 1900 the academic cast of the College had clearly shifted from an emphasis on the study of Virgil and Homer to, ". . . such branches of learning as are related to agriculture and the mechanic arts . . . (Groshong, 1968, p. 5)."

The minutes of the Board of Regents for January 16, 1908 provide an indication of the non-classical orientation:

In Oregon, the Agricultural College can also be of great service to the state by providing directly for elementary training in different subjects of agriculture, including horticulture, dairying, animal industry, field crops, irrigation and drainage, gardening, etc. in elementary commercial subjects; in such handicrafts as plumbing, steam fitting, forge and foundary work. Machine work, cabinet making, and house building for men; and laundering, cooking, sewing, dress-making, millinery, etc., for women (p. 7).

While the curriculum clearly demonstrated that it no longer centered around the likes of Ovid, Cicero, and Sophocles, its formulators had not relinquished all aspirations to a liberal education. The goal of developing the whole person can be seen in the official statement of the College in 1910, which described the institution's purpose:

In all the work of the institution, the object is to train the mind, the eye, and the hand to act in unison; to unfold and coordinate the faculties of mind and body; to develop a symmetrical manhood and womanhood, and a just appreciation of clean, upright citizenship (p. 22).

The year that George Peavy arrived to OAC (1910) the four-year programs of study leading to a degree (B.S.) were: Agriculture including degree courses in Agronomy, Animal Husbandry, Dairy Husbandry, Horticulture, Poultry Husbandry, Agricultural Chemistry, Bacteriology, Entomology; Forestry; Domestic Science and Art; Mechanical Engineering; Electrical Engineering; Mining Engineering; Civil Engineering; Commerce; and, Pharmacy (p. 65). The course in Forestry
had an enrollment of 22 persons whose official goal, according to the administration, was to not only provide students with technical training, but "to not lose sight of the fact that a college graduate and a forester should have a well-rounded education equipping him for efficient citizenship as well as for a special occupation (State Agricultural College, 1908, p. 58.)" This thought was to be echoed many times in official and unofficial statements regarding the School of Forestry's focus, but it was perhaps most forcefully reiterated by Dean Walter McCulloch (1955-1966) who once stated, "So our concern is for the man, his capacities, his wishes, and his hopes. We're not interested in the total number of bodies in the School. (Fry, 1955, p. 93)." Voltaire would have applauded the philosophical stance on dualism (mind and body), but could not have failed to notice a certain pronounced lean toward one domain:

At OAC there is a well established policy that the physical side of young men should be developed at the same time that mental training is provided.

It is recognized that the forester must be of the husky, virile type, and the faculty of the School have always encouraged their red-blooded students to take part in all forms of athletic contests (Oregon Agricultural College, 1924, p. 11).

The vocational intent of the curriculum in forestry was stated in the 1909-1910 Catalogue, while Professor Lake was still at the helm:

Courses of instruction in Forestry aim primarily to fit the forester to care for the forest and its crops as the farmer cares for the farm and its crops. They likewise aim to meet the needs of those men who desire to enter the government forest service as fire wardens, rangers, and cruisers, but who feel that they cannot take the time necessary to complete a degree course (p. 139).
It was not due to oversight that all references to foresters, in these early official statements, were couched in masculine terms; it was not until much later in the development of the School of Forestry, that women were to be admitted. It was generally believed by policy-makers of the time that the field of forestry was not an appropriate arena for females, and as such, no encouragement was given for them to enter the profession.

The curriculum in forestry by 1910 had progressed mightily since its inception in the early 1890's in the Department of Botany. From a humble beginning as an afterthought in "Economic Botany and Forestry" in 1893, it included the following by the time Peavy arrived:

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<tr>
<th>Elementary Forestry I, II</th>
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<td>Elementary Silviculture I, II</td>
<td>Wood Preservation</td>
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<tr>
<td>General Forestry I, II</td>
<td>National Forest Administration</td>
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<td>Silviculture I, II</td>
<td>Camping and Packing</td>
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<td>Mensuration &amp; Survey, I, II</td>
<td>Field Work</td>
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Edward Lake is thought to have been the sole guiding light for the novice foresters prior to Peavy's assumption of duties in February, 1910, but an interesting historical footnote emerges from the record. The minutes of the Board of Regents for January 28, 1910 contain the following terse statement: "Mr. Peter Keplinger was elected Instructor in Forestry at a salary of $1200 for the first year and $1300 for the second year if successful in the position (p. 99)." No further mention is made of the man and one can only surmise that his performance was not satisfactory, or that he left for other reasons.
The first class of forestry graduates finished its studies in 1910; the class was small in number (4), but large in significance. The minutes of the Board of Regents for Oregon Agricultural College for May 25, 1910 listed these individuals, all of whom were from Oregon: Harold Dekum Gill, Portland; Jack Francis Pernot, Corvallis; Thurman J. Starker, Portland; and, Sinclair Albert Wilson, Linnton. One individual of this class in particular, has come to be virtually synonymous with the School of Forestry -- T. J. Starker. Starker's career has paralleled and been a part of the School's history for 70 years, thus providing the single historical link with the origins of the School. More will be said about this remarkable man, in a later section of this report.

George Peavy, therefore, inherited a beginning program that was in the process of coming to fruition, albeit, the numbers were not large. The academic environment of OAC, therefore, was favorable to the establishment of a strong forestry program; the necessary ingredient lacking was dynamic leadership and Peavy proved himself to be adequate to the task.

**Student Life at OAC.**

What about student life at Oregon Agricultural College on the eve of Peavy's appearance? What was the social environment within which the student sought to learn to "train the mind, the eye, and the hand to act in unison?" Expectations for student behavior were usually carefully detailed by the administration in the admission procedures. For example, the *Annual Catalogue of the Agricultural College of the State of Oregon, 1892-1893* stated these rules, among
SCHOOL OF FORESTRY 1910
FIRST GRADUATING CLASS

(Thurman J. Starker, Harold D. Gill, Sinclair A. Wilson
Jack Pernot)
several others, that were to be followed:

1. Students upon their arrival at the College must report at once to the President, who will give them directions as to examinations and classes.

2. Students from other schools must bring certificates of good conduct from the faculty of the schools whence they come.

3. Students before being admitted to classes must pay their tuition fee.

4. Reports of absence or misconduct will be handed to the President and students will be required to answer for such absence or misconduct, and the President will at once assign such penalty as the case may require.

5. Students from a distance must live in the Boarding Hall or in special cases, in such families as shall be approved in writing by the parents of the student, and by the President of the College. Such students must be in the Hall for the night by seven o'clock, from Monday to Friday, and nine o'clock on Saturday and Sunday. . . . Students residing, by permission, in Corvallis will not be allowed to be on the streets of the city after nine p.m. (p. 31).

The administration of William Jasper Kerr (1907-1932) brought about many changes to the institution. Some of these had a liberalizing effect on the College:

. . . a wholesome, busy, student atmosphere is maintained. Reasonable freedom is allowed, but week nights are reserved for study. All girls entering the college are expected to live in the dormitory unless their parents reside in the city. . . .

Waldo Hall, with its large, airy parlors, halls, music, and play rooms, is a pleasant residence for the young women who come from distant homes. The building is supplied throughout with pure mountain water, hot and cold in each room, electric lights, steam heat, and all modern conveniences. (State Agricultural College, 1910, p. 55.).

Males attending Oregon Agricultural College in 1910 were expected to live in Cauthorn Hall: "The building, though having been in use for many years, is yet very substantial and, with the late improve-
ments, is very comfortable (p. 56)." Male students were allowed to rent homes in the community, but were not allowed "to live at places not approved by the Faculty (p. 57)."

The Forest Club provided one of the primary mechanisms for social interchange and professional development among these early-day forestry students. As previously noted, the Club had been founded early in the new century:

A meeting of the Forestry students of the Oregon Agricultural College was called on Nov. 16-06, by Prof. Lake for the purpose of organizing a Forest Club, to comply with the rules of the Forestry course as described in the catalogue of O.A.C. The members present at the meeting were Mr. Cate, Mr. Stone, Mr. Totten, Mr. Currin, Mr. Mitchell, and Prof. Lake (Forest Club, p. 3).

In 1910 the description of the Forest Club in the annual catalogue described the organization as a group of students and instructors who had come together for the purpose of promoting the forestry interests of the state. In the attainment of this purpose it was to meet twice each month for a discussion of current forestry literature and "general progress movements pertaining to the forests, forest service, forest products, forest industries, lumbering and the lumber trade (p. 49)." Examples of activities were: a report by a member on Roth's, "First Book of Forestry;" the reading of a list of men employed "along the line of forestry;" discussion of the latest legislation affecting the forest industry; and a "stereoptician" lecture by Professor Lake on the subject of Yosemite Valley. A few other noteworthy points of interest emerge from the official minutes of the Club: V. P. Pernot moved that "girls not be admitted to the Forest Club (December 6, 1907);" Starker moved that an official pin be selected and worn (December 16, 1907); and a motion passed to
present a spoon to the young Mr. Peavy (the meaning of this act is unclear to the writer). Some of the non-academic activities are indicated by the minutes for the March 20, 1908 meeting in which members laid plans for spring vacation. Barbour was to visit a lumber company in Portland, Wilson planned a trip to the Star Box Co., Lickel and Eberley were inclined to go to Mary's Peak, and Totten wanted to look into the wood preserving industry (p. 16).

More than once the minutes noted that no meeting was held because Professor Lake forgot the keys to the building. The Forest Club in the important formative period of forestry education at O.A.C., served an essential integrative role. It apparently satisfied needs for social and professional affiliation at a time when forestry was just beginning to develop as a discipline in the U.S.; it provided a mechanism for students and faculty to informally associate, thus facilitating assimilation of the normative structure of the forestry profession; and, the Forest Club served to establish an official identity within the campus social framework.

Forestry students in 1910, as is true of students in 1980 at OSU, also had their diversions away from the weighty concerns of forestry; T. J. Starker described the social ambiance of O.A.C.:

There were practically no social fraternities on campus then, but there were literary societies. I belonged to the Philadelphian. Besides debates and oratorical contests these literary societies offered us boys the chance to socialize with the coeds. We'd get together for plays joint meetings, and dances which were held in the Men's gymnasium, later called the Old Woman's Gym, now Mitchell Playhouse (Starker, 1977, p. 17).

Starker further noted that in addition to these activities a young man could stay busy by raking leaves or washing laboratory
glassware for $.25 per hour and drilling weekly with the O.A.C.,
Cadet Regiment—all male students were required to be members of the
Regiment. Because of his physical stature and ethnic background he
was also eligible for other social affiliations:

I was in the Y and the Tall Man's Club (there was also a
Short Man's Club) and the Portland High School Alumni,
and with a name like Starker I was a natural for the
German Club, "Vorwärts." Each year they put on a play;
I acted in one called, "Sunday Hunter" playing approp-
riately enough the Head Forester... I enjoyed class
sports—track and basketball and, of course, there was
the Forest Club. (p. 17).

Corvallis at the Turn of the Century

What about the community of Corvallis and its social environs?
What was the urban setting for what one publicist touted as,
"... one of the leading institutions of higher learning in the North-
west (Woodson, 1901, p. 41)." Corvallis in 1900 had about 2000 souls
and the sobriquet most often applied to the hamlet was, "a peaceful
little town." Minerva Kiger Reynolds provided a vignette in Corvallis
In 1900 that imparts the flavor of the era. She described a settle-
ment where most people kept a horse for transportation, a few farm
animals for produce, and Sunday for God. At nine o'clock the curfew
rang and children hurried home, as did their parents who made it a
custom to retire early.

At dawn the roosters heralded the break of day with
their concern, and again the flames of the coal lamps
began to blossom in the windows and columns of blue
smoke rose from the chimney tops. The town was awake
and bustling—the was work to be done. Horses must be
fed, cows milked, and milk delivered, breakfast prepared
and lunches packed. Children walked to school. Wages
were a dollar a day with board and room or a dollar fifty
if they boarded themselves. (p. 14).
Corvallis was a town much like many other small towns throughout the West and Midwest. It was after all, a "better Missouri" that many of the early settlers were seeking, and the distinctive cast of the village reflected a definite Midwestern model not only in architecture, but in social and political norms. There were small modest homes, an occasional grand dwelling, barber shops and hardware stores where men congregated, vacant lots with cows staked out, nine churches, steamboats on the Willamette River loading grain, and buggies on the dirt streets. Christmas and July the 4th were the two important festive days of the year, bicycle clubs rode the new path they had developed between Corvallis and Albany, and the local citizenry "got culture" at the Corvallis Opera House located on Fourth and Madison, where one could enjoy programs such as "Evangeline," "Uncle Tom's Cabin," and "Ten Nights In A Bar-Room."

One writer extolled the morals and religion of Benton County and Corvallis in superlative terms:

The facts are that one of the leading and attractive features of Oregon and Benton County is its moral and religious standing.

Instead of the "Wild and Wooly West," as the country is sometimes called, it is, rather, a country blossoming with the rose. Instead of the thorn tree there is a fir tree, and instead of the savage there is a moral, peaceable, prosperous and happy people, among whom vice is at once rebuked and crime quickly punished.

The tone of pure, high morality is clear and emphatic throughout Benton County, and in her religious position she has few equals and no superiors (Woodson, p. 45).

Minerva Kiger Reynolds remembered another side of Corvallis life:

The thing that was most disturbing in those days was liquor. There were three saloons in the town and some men patronized them far too much. These were mostly
the unmarried men. Usually, after they married, and had families to support, they didn't have money for liquor and drank much less, or stopped drinking entirely. But there were some who never quit. The officers knew the drinkers and watched them closely. Some loud talking, occasionally a fist fight, and rarely a little gun play was about the extent of a disturbance they caused the community, but their families suffered from their drinking (p. 18).

One of the few events that caused a ripple in the otherwise placid social environment of Corvallis at the turn of the century was the activity of one Franz Edward Creffield. Creffield, a man of about 30 years with pale blue eyes and a deep voice, arrived to Corvallis in 1903 and shortly thereafter began to organize a religious creed he called, "The Holy Disciples" or "God's Holy Few." At a building on Second Street between Adams and Washington Streets he held meetings in which he exhorted his followers to, "Roll, ye sinners, roll," apparently in an effort to roll away their sins (Kiger, p. 51). His audience, all of whom were women, was encouraged to tear off their garments for which they exchanged ankle-length skirts.

They went barefooted and bareheaded with their hair hanging down their backs at a time when women wore their hair pinned high on their heads. As time went on, the meetings grew longer and wilder. The members screamed, moaned, and rolled on the floor. This became the talk of the town. . . . we lived about two blocks, in a direct line, from the meeting place and could hear them yelling and screaming, far into the night (p. 51).

Ultimately, Creffield's activities so outraged the good people of Corvallis that he was tarred, feathered, and run out of town.

According to one source he was later killed in Seattle by the brother of the woman who Creffield had chosen to become the "Mother of the Church."
This then, was the social environment of Corvallis in the first decade of the twentieth century. It reflected a stability and orthodoxy that would be the envy of a later age, yet in its day it experienced the small gyrations of the Creffield family and other people and events that disrupted the harmonious social order. This was the backdrop for the evolving Agricultural College and its callow forestry program.
### Chapter 3

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Chapter 4

ORIGINS OF THE SCHOOL FORESTS
(1910-1925)

The need for an outdoor laboratory for OAC's forestry program was evident from the outset. As early as 1905 field experiences were required of the novice foresters; by 1910 the College catalogue was touting the natural setting of the region and the many local opportunities for applied learning:

The College is located in the heart of a timbered region, offering exceptional opportunities to the forestry student to study conditions on the ground. Virgin forests and second growth stands are easily accessible. Logging operations can be readily reached from Corvallis, while mills in the city offer an opportunity for studying milling methods. Wood distillation plants, creosote works and factories for the production of finished wood products can be reached in a few hours' travel. The City Water Company of Corvallis has placed an eighty acre tract of forest land at the disposal of the College, for the demonstration of scientific forestry methods (p. 131).

The same source mentioned a nursery at "the College farm where native and exotic timber-tree seedlings were being grown (p. 32)."

This marked the first time that the City of Corvallis' watershed on Marys Peak was designated as a laboratory for forestry field experiences. By 1914 the official statement was expanded: "...the entire city watershed of more than 7,000 acres is used as basis for practical field work (p. 49)."

**Avery's Woodlot**

Although the above may have been the first local officially designated area for field study, it should be pointed out that an unofficial facility played a large role in forestry activities for several decades. Avery's Woodlot, designated "Avery Park" when it was acquired
by the City in 1937, was the site of many forestry happenings important to the new program. The land, which was part of a donation land claim taken out by Joseph C. Avery, originally included 640 acres on both sides of Mary's River. By 1906 when the Forest Club was formed it was being used as a woodlot, which could be reached by "... 'Shank's Mare', down the Southern Pacific railroad tracks, carrying refreshments in packsacks (Netleton, 1960, p. 1)." Activities included regular bonfire meetings of the Forest Club, school-wide picnics, other social gatherings, and under the tutelage of Professor T. J. Starker (after 1922), class exercises. A typical entry into the Minutes of the Forest Club was:

On Wednesday, April 24, 1918 the O.A.C. Forest Club gathered at Avery Wood Lot to hold its annual spring bonfire get-together. After the eats were speeches by various members of the club and by Jas. O'Neil of the class of '17. Songs and yells completed the evening.

E. G. Mason  
Secretary (April 17, 1918, p. 71)

During this period Avery's Woodlot was rented to a man named Ed Tarwater, who evidently was not only amenable to this use of his rented land, but even joined in quite often. Tarwater used the land to graze cattle. Frequent reference was made to this man throughout the minutes of the Forest Club. According to T. J. Starker, he was an ex-sailor who, "had a vocabulary that reached from here to breakfast (1978, Dec. 12, p. 37)." Starker's characterization of Tarwater's speech habits may explain terse statements in the minutes which seemed to imply ribaldry: "Unique toasts given by Tarwater to members of Forest Club (November 30, 1920, p. 126); and, "Tarwater came across with short speech and 'unique' joke (January 25, 1922, p. 176)." It
seemed to be a felicitous relationship, however, for in 1922 Tarwater donated a pig which was subsequently fattened for a year, cooked, and consumed at one of the club bonfire meetings. The minutes for April 18, 1923 noted that the grateful members gave, "nine rahs for Tarwater, the donor (p. 207)." Some of this goodwill may have been engendered by the cooperative approach used by forestry teachers and students. Starker, for example, often took his classes to the Woodlot for practical forestry exercises during the 1920's:

One of the reasons, of course, that I was in his good graces is that one of the exercises I had down there was divide the students up into groups of about five, and they were supposed to pick out the most defective tree in their particular plot, and then we felled that tree and bucked it up into four foot lengths and gave the wood to Tarwater. Of course, that got us in good graces with Mr. Tarwater (1978, p. 36).

Several years later in 1937, it was to be T. J. Starker and another long-time Corvallis resident and business man, Charles Whiteside, who would be instrumental in securing Avery's Woodlot for a park. The Averys had intended to sell the Douglas fir to a piling contractor, but through the efforts of these two far-sighted gentlemen, it was instead purchased by the City of Corvallis for $6,000 and designated as a 73.3 acre public park. (Higgs, 1977.)

Thus, the earliest outdoor laboratories for the School of Forestry were Avery's Woodlot, Camp Reserve near Mt. Jefferson, and the City of Corvallis' watershed on Marys Peak. According to T. J. Starker, the first forestry field trip was an outing to the Clark-Wilson logging operations near Goble (1977, p. 18). As previously mentioned, Harold D. Gill also of the first graduating class of foresters in 1910, remembered field trips to Marys Peak and, "... along the River Bank
to study White Fir and Cottonwood (1956, p. 4)."

The Campus Arboretum

By 1915 the Department of Forestry was occupying two rooms and an office on the top floor of the Chemistry Building ("The heaventh floor of the Chem Shack" as T. J. often called it). It was rapidly becoming obvious that this facility was not adequate for the growing program. Through the efforts of George Cornwell of "The Timberman," a bill was passed in the Oregon Legislature appropriating $50,000 to build and equip a forestry building at Oregon Agricultural College (The Forest Club, 1926, p. 59). In the spring of 1916 ground was broken for the new building, and it was first occupied the following fall.

At the rear of the new Forestry Building was a small parcel of land consisting of less than one acre; this was planted over the years with a variety of tree and shrub species. The small arboretum, which according to one source was not referred to as "the arboretum," because of possible confusion with the later-acquired Peavy Arboretum, served as a teaching facility for tree identification (Bever, 1980). In recent times it has been informally designated as the "Campus Arboretum" and continues to be used for tree identification class instruction for forestry as well as by landscape architecture students. There are presently more than 120 species of trees and shrubs, from all over the world, including such exotics as the European birch, Manchurian fir, and Canary Island pine (Bever, 1980). The Campus Arboretum has been slightly diminished in size because of the construction of Dixon Recreation Center in the mid-1970's.
George W. Peavy:
Photograph of Painting

The Dean and His "Boys"
1920
Although this facility was useful for some forestry instruction at the time, it obviously did not meet the needs for field experiences. Nevertheless, the School was quite pleased with the improved facilities as noted in the Annual Catalogue of Oregon Agricultural College for 1917-1918:

The School of Forestry is now provided with suitable space in which to do its work. A three story building, eighty feet wide and one hundred and twenty-six feet long, has been constructed to house the work of the School. The building contains roomy laboratories for work in silviculture, dendrology, mensuration, forestry practice, timber technology, drafting, timber grading, and logging devices and equipment. Through the kindness of the manufacturers of logging equipment and lumber manufacturing concerns much valuable material has been assembled for demonstration purposes (p. 275).

The minutes of the Forest Club for May 24, 1916, provide an interesting historical footnote about the new building then under construction. Peavy made reference to a parchment containing the students' names that would be placed in the cornerstone of the edifice. Subsequent minutes do not elaborate on this idea and it is unclear to the writer as to whether or not this was carried out.

Field Experiences

George Peavy was singularly dedicated to teaching his students the elements of practical forestry, and to this end he stressed field experiences as an essential part of the forester's education. Peavy attended most meetings of the Forest Club during this early period and often reported on this part of the curriculum. The minutes offer a glimpse of these activities:

Campfire meeting at Breitenbush hot springs (April 23, 1915, p. 13).

The meeting was turned over to Dean Peavy, and he showed
some slides of the foresters at work, and on the trip to Breitenbush Springs last spring (March 22, 1916, p. 25).

Dean Peavy made a short talk on the trip to be made to the woods near Hoover on May 5 (March 22, 1916, p. 25).

Peavy explained that the Forest Service would pay the expenses of the men on the Santiam trip if it was possible (May 3, 1916, p. 32).

Foresters Camp
Rock Creek
May 15, 1920

Dean Peavy spoke on the happenings of the previous ten days in camp and expressed his belief that the spring field trip was one of the most successful in the history of the School of Forestry. A resolution of thanks to the Military Dept. at O.A.C. for their cooperation in furnishing transportation and camp equipment was unanimously (sic) adopted . . . (p. 118).

Dean Peavy told us that the trip to Dallas . . . had fallen through because of condition of roads--that they would most likely have to go to Marys. Peak again (April 27, 1921, p. 145).

Dean Peavy announced that the spring trip would be on forest service land near Oakridge (April 16, 1924, p. 233).

Spaulding Tract

Until 1921 the School of Forestry owned no land other than the Campus Arboretum; on December 23, 1921 the Charles K. Spaulding Logging Company gave 160 acres to the School. Spaulding Wood, as it was called at the time, consisted of 160 acres of forest land located on the north slope of Marys Peak (the west half of the southeast quarter and the east half of the southwest quarter of Section twelve, Township 12 south, Range 7 west, Willamette Meridian). (Cannavina, 1923, p. 21).
The minutes of the Forest Club recorded this first acquisition of forest land by the School of Forestry:

Dean Peavy announced that the Spaulding Logging Co. through the efforts of Mr. Leadbetter, has donated 160 acres of cut-over land on the north slope of Mary's Peak where practical work will be done by future U. S. Foresters (November 30, 1921, p. 170).

After having time to inspect the tract Dean Peavy reported that the "Spaulding land was better than expected (January 11, 1922, p. 112)."

The land could only be reached via wagon road that was impassable for part of the year, therefore, fall and winter classes in silviculture could not take advantage of it for field trips. According to a description of Spaulding Wood written in 1923 approximately 70 acres were in second-growth Douglas fir, which had about 30,000 board feet per acre; the remaining 90 acres were cutover stump land. The site conditions were considered to be ideal for intensive silvicultural studies (Cannavina, 1923, p. 21). Mr. Leadbetter of Salem was also involved during this time, in the donation to the School of a $10,000 miniature paper mill, "complete in every respect, and capable of turning out paper of any desired quality . . . (The Forest Club, 1922, p. 39)."

George Peavy's Model: No Lounge Lizards

Dean Peavy not only prescribed ample doses of "hands-on" forestry for the novice foresters in his charge, but he also "took the medicine himself" by accompanying the students to the field for the duration of the experience. An excerpt from a description of the Spring Cruise of 1921 indicates the relationship Peavy had with his students (The Forest Club):
We knew it was coming and all our talking, bulling and such amounted to nil. The Dean had decided that he would have no lounge lizards or campus rats in his school, and the only way to rid it of such was to take a nice little spring cruise in the vicinity of Mary's Peak. There, he said, would be no co-eds to keep the boys awake at night, no nice grass to lie on, no sidewalks to spit tobacco juice on, and above all, no rat dances to go to (p. 40).

George Peavy, who was often described as a small man with a booming voice (Starker, 1978; McDaniel, 1978), established a milieu for the School of Forestry that was an admixture of sternness, masculinity, high principles, hard work, camaraderie, and dedication to the furtherance of forestry. Some insight can be gained from an essay Peavy wrote for the 1928 Annual Cruise in which he answered his self-addressed question, "Who should study forestry?"

... how is the young man, fresh from the high school and interested in forestry, to decide whether or not he should begin the study of this profession? ... First of all the young forester must meet the boy scout requirement of being physically fit. The forester's work is a man's work. At times it is exacting ... He simply must be in condition for any reasonable demand upon his strength and endurance.

The forester must find happiness in the open. He must have the spirit of the forester who, caught in a cold rain while going through a dense forest, could sit down under a dripping bush and sing, "It's always fair weather, when good fellows get together." He must accept as part pay for his work, the songs of birds, the flash of a buck across the trail, the grandeur of the view from the mountain top, the brilliant painting of a sunset sky, the rush of a mountain torrent and the spiritual uplift which comes from communion in one of God's first temples.

The forester must have a sense of duty and responsibility so inborn that he will be as faithful to his task when alone in the heart of the forest as when he is under the eye of his boss ... the forester must be a "square-shooter," both with himself and with his profession (p. 34).
The statement was vintage Peavy: high physical and moral principles coupled with idealism and a call to unselfishly serve in a mission that enjoyed divine association, i.e., the forest as God's own holy place. The Transcendentalist influence (God is nature) so evident in the Dean's statement was characteristic of the period. T. T. Munger, in dedicating Peavy Arboretum to, "the father of forestry education in Oregon (p. 9)," expounded similar views freighted with Arcadian overtones:

"The Groves were God's first temples." Is it profane to say, in the same breath, that the woods are the forester's real laboratory? Every live son of Adam, be he countryman or city bred, gets inspiration, refreshment, spiritual exhilaration from the woods. . . . If he be of a reflective turn of mind, he will find as Shakespeare did, -- "tongues in trees, books in the running brooks, sermons in stones." (Munger, 1926, p. 5).

The Spring Trip

Peavy as mentor was relentless in carrying out his program to produce foresters consistent with his expectations. In pursuit of acquiring practical forestry skills, the Dean often accompanied "his boys," as he called them, on regular weekly field trips as well as on extended spring cruises. Vern McDaniel, class of 1925, remembered spring trips as events that usually occurred around May 1st and that involved the whole School of Forestry, unless excused from participation for good reason. "We stayed about 14 to 15 days and woe be unto the man that took a razor with him (1978, p. 3)." The flavor of these early expeditions can be gained from the accounts written for the Annual Cruises in the 1920's. E. M. Pryse, class of 1921, described the process in an article appropriately titled, "With the Forest School in the Coast Range Mountains" (1920):
The Dean started it, and the whole crew saw him through. One morning in May a big army truck rolled up to the Forestry Building and our camping equipment and field instruments, except razors, were quickly loaded and held down by fifty foresters and loggers, armed with everything from pistols to German Mausers. "Hi" Woods even had a bottle in his hip pocket—but who likes the taste of iodine?

Leaving the old town... the big truck rolled westward, pausing just long enough in Philomath for the bunch to buy out the town supply of Climax (chewing tobacco). At the mouth of Rock Creek Canyon, we were met by an army escort wagon with two good mules on the pulling end.... It was necessary to pack our supplies and equipment over the last half mile of our journey. This brought us to a good camping site on the forks of Rock Creek at the east base of Mary's Peak.

The next day being Sunday, the Dean kindly let us sleep until 5:00 a.m. After a spirited hot-cake contest, the methods of cruising, mapping, and appraising to be employed were outlined (p. 74).

In the following eight days the foresters cruised the merchantable timber, tallied defective stock, studied reproduction on sample plots, examined moisture conditions and determined grazing possibilities. Days were not completely absorbed with seriousness, one can imagine, because the spontaneous boisterousness and good-natured joshing must have been irrepressible. Evenings were given over to lively conversation around the fire, practical joking, and early retirement for the weary foresters, to the tents that distinguished their "hobo camp," as they called it. The evenings spent around the campfire provided many opportunities for philosophical discourse, and other social interchange that bound the group together. Pryse (1921) pointed out that discussion included such topics as, "... religion (revealed) in its true light; mistakes made in the world war were criticized, science was laid bare, and personal experiences related which will always bring a smile (p. 77)." On the morning of the eighth day the group broke camp
SAWING LOGS WITH
COMPRESSED AIR

FIELD TRIP
SANTIAM NATIONAL FOREST
Detroit - 1915
and started back for civilization and all of the amenities they had forsaken:

As very little "chuck" was left, our packs were as light as our hearts and even Sam did not grumble when he found a ten pound rock stored in his packsack—"for Sam was going back to the "movies." Our truck met on the main road and as the sun was setting behind Marys Peak we pull up before the Forestry Building, a dusty, be-whiskered, but happy crew, ready for "chow," a bath, and a good razor . . . (P. 77).

The evidence of these early field trips in the 1920's to Spaulding Tract could still be seen as recently as the early 1960's. Marvin Rowley (1980) found the site of an oft-used camp; old stove lids for cooking and other remnants of campcraft were still in place after about forty years. The camp was approximately 5½ miles west of Philomath in Spaulding Tract on Old Peak Road, in a meadow bordered by an oak grove and near a spring.

Spaulding Wood was only one of the many destinations that the neophyte foresters went to in pursuit of field experiences during the 1920's. On November 20, 1920, Dean Peavy announced that all upper-class loggers were to go to the camp of the Corvallis Lumber Company near Dawson and make a survey for a logging railroad (Luebke, 1920, p. 11). Professor Buol was in charge and the group was to travel by train (caboose as usual) to the camp. The evening before returning to Corvallis, at the end of the second day, "the door opened and in came 'Shorty' Daniels with a pack nearly as large as himself. He had left Corvallis that morning with his bicycle and after riding fourteen miles, a blowout forced him to hoof it the last ten miles (p. 12)."

The 1922 Spring Trip was to the headwaters of the Siletz River where the students were to cruise and map some timber for Cobb-Mitchell Lumber Company. The group embarked at Corvallis on the Southern
Pacific, changed trains at Independence, and finally arrived at Valsetz. Next, it was a hike to a lake where the Company transported them and their considerable store of gear and food across on what they called "freight gondolas." Although two horses were standing ready to carry the accumulated possessions the last leg of the journey, the Dean decreed that each was to be his own mule, and so it was. After several days of rigorous cruising and mapping, the high point came when the students got to see an "electrified log cutter" - a large modern sawmill. One student of poetic bent penned the following to express his satisfaction with the spring cruise:

In the morning the Dean awakes us  
With his loud, jolly (?) call of "Ro-oil out!"  
(Though of real, sincere joy in that warble  
The most of us have a great doubt!)

Thus pass the days in the forest  
'Till our cruise at least is o'er  
Then we begin our return to the city  
Back to civilization once more.

As the shaggy bears of the Foresters  
Are viewed along Jefferson street,  
The co-eds aren't keen to approach us,  
For they fear these wild men to meet.

But we claim the rights of our campus  
And we pity the men of our town,  
For the hardy life of a Forester  
Is the happiest life we've found.

H. W. Stevenson, Ex-'23

The spring trip of 1923 found the Dean and "his boys" on the south side of Marys Peak where they set themselves the task of cruising and mapping two sections. After about a week of this activity the Dean initiated a whisker contest; the grizzly gang was lined up and judges made selections resulting in a "dirty dozen." From this odiferous and hirsute group was selected a "filthy five," and finally
one contestant, who was the perfect embodiment of the attributes being judged, was acclaimed "king hobo." The Kangaroo Court that year had to deal with one offense that was very serious.

A prominent member of the club deliberately and maliciously broke an old tradition—that of shaving while in camp. A speedy trial found "Phil" Begue guilty for the evidence was right on his face. . . . Phil had to take a public bath in the frog pond (Benedict, 1924, p. 67).

The banks of the Salmon River near Oak Ridge was the locale of the Spring Cruise of 1924. The students and professors travelled in two army trucks to Lowell, where they caught a train to their ultimate destination; the group camped one night enroute. Earl Mason, who was to become the Acting Dean of the School of Forestry in the early 1940's, was one of the faculty who participated in this field experience. In 1925 the School's annual outing was to Fall Creek in what was then Cascade National Forest, about 14 miles northeast of Lowell. Professor Patterson, who was to play a large role in the School's instructional program, was included in this group. Patterson's bean-hole beans were to become standard fare at School functions for many years. The work done was similar to that of previous spring trips. A 20% cruise and maps were made of about 10 sections with the work being supervised by the U. S. Forest Service to ensure that the data could be used for timber sales. In 1926 Fall Creek was again the location of the annual spring trip; 1927 found the foresters back on Mary's Peak pushing "Two-Bits" (the forestry truck) up the hills in the mud.

The Arboretum

An Arboretum for the School of Forestry—an outdoor laboratory in which experiments with various tree species and silvicultural practices could be conducted, and a "botanical
"garden" of trees--has been long dreamed of and planned for by the faculty and students of the school. Definite action toward the realization of this dream is one of the most noteworthy of the achievements of this year (The Forest Club, 1924, p. 68).

This optimistic statement was prompted by the work of the Arboretum Committee which had been appointed by Dean Peavy in 1923 to raise money for the acquisition of land for use in the School's educational programs. The Committee consisted of representatives from the alumni, Forest Club, faculty, and the honorary forestry fraternity. Earl Mason and S. A. Wilson represented the alumni; T. J. Starker, the faculty; James Mielke, Xi Sigma Pi; and Clayton Morse, the Forest Club (The Forest Club, 1924, p. 57). Alumni, faculty, students, and friends of the school were exhorted by letters and personal contacts to support the money-raising campaign. Late in the same year that the Committee was formed, a report was given during the Forest Club meeting that, "... Professor Starker and Wilson, an alumnus, managed to collect pledges amounting to $465 (November 7, 1923, p. 218)." T. J. Starker, (1978) remembered that Peavy donated $50 and that he (T. J.) gave $25 to support the cause. The minutes for the same meeting (November 7, 1923) also noted that the Committee was considering the purchase of a tract of land two miles from the campus and 110 acres in extent, which was valued at $10,000 (p. 219). No further mention of this particular piece of land was found.

The Committee's progress was not always encouraging as noted by a student writing in the 1924 Annual Cruise:

But a small portion of the necessary funds has been raised... The response among students has been especially gratifying, many of who are barely able to finance their college education having pledged to the hurting point. It is regrettable, however, that many of the alumni who are best able to pay have not pledged a dollar (p. 68).
The dream finally became a reality in 1925 when the Board of Regents of the College appropriated funds to purchase 80 acres (the Moffatt Tract) for the sum of $1,563.50. This purchase price provided the School with 80 acres for about $19.50 per acre—"a bargain in contemporary terms, but probably close to market value in its day. The land was located about 7½ miles north of Corvallis and one-half mile west of Highway 99W (Township 10 S, Range 5 W, the E one-half, NE one-fourth, Section 36). In the same year an additional 12.51 acres were purchased, using funds collected by the Arboretum Committee, in order to connect the Arboretum tract with the highway (Township 10 S, Range 4 S, a fractional part of the NW one-fourth, SW one-fourth, Section 31).

Thus, the protracted yearning for an outdoor laboratory for the rapidly developing School of Forestry was at last requitted, or at least for the moment. As will be seen, this initial step was only the first of many land acquisitions in a larger program of School forest expansion. T. J. Starker hailed the achievement as, "... the greatest forward step the School has attained since the establishment of the School in its own building in 1917 (The Forest Club, 1925, p. 57)."

If T. J.'s assessment of the event tended toward hyperbole, he was certainly not alone; faculty, students, and supporters of the School had long expressed the desire. The official dedication on January 23, 1926 of the newly designated George W. Peavy Arboretum and the recently completed Forestry Club Cabin, provided the occasion for T. T. Munger to reiterate the forester's relationship to the woods:

The foresters can do no practicing of forestry without forests. Equally necessary are forests to the forest students or the forest investigator. Woods are to the forester what fields are to the farmer, congregations are to ministers, or hospitals are to medical schools. The
man who tries to understand silviculture without keeping his eyes on the woods is sure to go astray (1926, p. 6).

Acquisition of Peavy Arboretum was a signal event in the history of the School of Forestry that merits special note; its symbolic as well as utilitarian implications were considerable. Symbolically it represented professional parity with other schools of forestry that were well established and enjoyed high prestige. For example, writing in 1926, T. J. Starker equated it with the outdoor laboratory owned by another well-known institution:

I was impressed in regard to the similarity in many respects between the great Arnold Arboretum and our own humble start. Arnold Arboretum is five miles from Boston; ours is seven miles from Corvallis. Arnold Arboretum is attached to an educational institution, Harvard University; ours to the Oregon State College (p. 15).

The analogy suggests a mutual respect and common level of professional significance that would have been heartwarming to the Fernhopper. T. J. Starker was never accused of holding a limited or unnecessarily circumscribed view of the School's place in the world of forestry. The Arboretum, therefore, did much to dispel any lingering feeling of inferiority about the adequacy of the School's programs. The feeling was well expressed by one source: "No longer can O.A.C. be considered backward in not providing an area of land and timber for experimental work (The Forest Club, 1925, p. 57)."

The Arboretum became the essential nexus between the forest and the student and faculty foresters; it served as the "mother lode" for the emergent School forest system which was not completed until the early 1960's; it became the locus of the School's educational and social activities, many of which were associated with the Forestry Club Cabin;
it provided the locale for such noteworthy federal programs as the Clarke-McNary Nursery and Camp Arboretum, a CCC installation; and, today it continues as an important hub in the research, teaching and management activities in the School Forests. In significance, therefore, acquisition of the Arboretum represented far more than simply adding 80 acres to the 160 acre Spaulding Tract that was already in School ownership.

Other Selected Events Up To 1925

Before moving on to a discussion of the School's chief benefactress--Mary J. L. McDonald--and the formative period of McDonald Forest, a succinct summary of selected events up to 1925 would be useful in gaining historical perspective. Several developments occurred in the late teens and early twenties that were significant in the School's history.

Entry of the United States into the World War, as it was called at the time in the spring of 1917, had an impact on the School of Forestry. Harry Nettleton (1960) well summarized the events:

When the United States entered World War I . . . a Club meeting was held around a bonfire in Avery Woodlot. Almost half of the forestry student body (and Forestry Club) (49.5%) voted to enter the Armed Forces. Seniors were guaranteed their diplomas in absentia. Three gave their lives, namely Earl B. Blackden, Owen Johnson, and Richard K. Wilmot (p. 2).

In the fall of 1924 the Forestry Club planted and dedicated three scarlet oaks at the southeast corner of the Forestry Building. The trees were registered with the American Forestry Association as memorial trees, and the certificates were hung in the school library. A bronze plaque set in rock was placed with the trees; today the commemorative tablet is located in the courtyard of Peavy Hall.

Nineteen-twenty saw the publication of the first Annual Cruise.
(first called O.A.C. Forest Club Annual) which came to be an important source for chronicling the School's history. The minutes of the Forest Club for September 23, 1920 made note of this historic event and its reception: "E. G. Mason reads letter of congratulations from the president of the college upon the success of the first forestry annual (p. 121)." It also provided a valuable link with the alumni, being well received from the outset:

It is a pleasure to have this opportunity of obtaining another "Annual Cruise." If it is better than the last one it will be worth considerably more than the price, for I have never yet regretted the dollar I put into the "Annual Cruise."

E. A. Hartley, Ex-'17 (1923, p. 44).

The forestry annual was continually published from 1920 until the mid-1970's when publication was suspended for lack of interest.

Another important thread of historical continuity in the School's past has been Xi Sigma Pi, which continues to function today. Zeta Chapter of this honorary forestry fraternity was established at OAC on June 11, 1921; among its 24 members in 1923 were George W. Peavy, H. S. Newins, H. R. Patterson, T. J. Starker, George Cornwall, Earl Mason, and Harry Nettleton. Thus, like the Forest Club, it constituted one of the several vehicles of the School's activities.

A tradition that grew up during these years was the annual football game between "the lowly muckers" of the School of Mines and the Fernhoppers. All accounts of these contests suggest that physical prowess rather than gridiron tactics carried the day. The 1923 Annual Cruise characterized the game as the "only submarine football game known in history (p. 12)" due to the hip deep mud and continual rain. An article
OREGON AGRICULTURAL
COLLEGE FORESTRY
STUDENTS
in the 1925 Annual Cruise modestly reported the outcome:

Once more the mighty sons of Paul Bunyan romped home with the bacon, this time in the form of a humiliating defeat administered to the meweling muckers in the annual football classic. . . . Once more, as in years gone by, the muckers were forced to bow to the lusty loggers and swallow the bitter pill of defeat (p. 74).

These events no doubt served as a valuable source of group solidarity and identification. Nettleton (1960) pointed out that the annual game provided a means of unifying two factions which had developed a schism—the students in General Forestry and those in Logging Engineering. The former, according to Nettleton, looked down upon the latter as, "a lower form of 'homo sapiens', given to profanity and snooze chewing and entirely lacking in any appreciation of trees in any form except logs. (p. 2)." The loggers saw their rivals as "... a bunch of panty-waist idealists who were not 'men enough to chew snooze without getting green around the gills' (p. 2)." Their arch-rivals, the Muckers, provided a common enemy that encouraged a united front.

During these years another tradition evolved that served an important socialization purpose—the famous "Peavy Hop." The Forestry Club sponsored an annual dance on the first floor of the Forestry Building, and in later years as it became a campus-wide event, in the Memorial Union Ballroom. These events became known as the "Foresters' Ball" and were eagerly anticipated by Fernhoppers and other QAC students alike.

Several other events that will be discussed in the subsequent chapter were commenced by 1925: Ground was broken for the Forestry Club Cabin at the Arboretum; initial work was undertaken in the establishment of the Clarke-McNary Nursery; and, a dowager's lawyer initiated corres-
ondence from San Francisco with officials at Oregon Agricultural College.

By 1925 Forestry at O.A.C. had come a long way from its humble beginnings in V. Moses Craig's botany course. With an enrollment of well over 100 students, a modern building, loyal alumni support, eager students, and the long-desired outdoor laboratory in hand, George Peavy was clearly on the way toward achieving his goals. Mary J. L. McDonald was interested in helping him.
Chapter 4

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Oregon Agricultural College
(January 11) Corvallis, Ore.

The Forest Club
1922
Minutes of the Forest Club.
Oregon Agricultural College
(January 25) Corvallis, Ore.

The Forest Club
1923
"Alumni Section." The Annual Cruise.
Oregon State Agricultural College.
Corvallis, Ore.

The Forest Club
1923
"Football." The Annual Cruise.
Oregon State Agricultural College.
Corvallis, Ore.

The Forest Club
1923
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The Forest Club
1923
Minutes of the Forest Club.
Oregon State Agricultural College
(November 7) Corvallis, Ore.

The Forest Club
1924
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The Forest Club
1924
Minutes of the Forest Club.
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The Forest Club
1925
"Fernhoppers Win Annual Game."

The Forest Club
1925
"School Arboretum Purchased For Experimental Work."

The Forest Club
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The George W. Peavy Arboretum."
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1926

Nettleton, H. I.  "History of the Forestry Club at Oregon
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1917

Peavy, George W.  "Who Should Study Forestry?"
The Annual Cruise.
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1928

Pryse, E. M.  "With the Forest School in the Coast
Range Mountains." The Annual Cruise:
Oregon Agricultural College. Corvallis, Ore.
1921

Rowley, Marvin  Personal interview with Royal Jackson.
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University (March 31) Corvallis, Ore.
1980

Starker, T. J.  "Silvicultural Work on the George W. Peavy
Arboretum--Past and Future." The Annual
Cruise. Oregon State Agricultural College.
Corvallis, Ore.
1926
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<tr>
<td>Starker, T. J.</td>
<td>Personal interview with Royal Jackson and Jennifer Lee (December 12) Corvallis, Ore.</td>
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CHAPTER 5

MARY MCDONALD'S BENEFACIONS AND THE BUILDING
OF A SCHOOL FOREST SYSTEM

A client of mine is contemplating making a bequest, by
way of will, and I am writing to inquire as to the full
and correct corporate name, and also whether, in a case
of this kind, the bequest should be made to the governing
body of the institution, and if so the proper name or
designation (Redington, 1922).

Mary J.L. McDonald: Life and Times

From the initial interest expressed through her lawyer in 1922
until her death in 1935, Mary J.L. McDonald provided benefactions that
greatly furthered the study of forestry at Oregon State University. In the course of
her relationship with the adopted College, she donated thousands of
dollars in lands, rare books, scholarship funds, and outright gifts
of money to an institution of higher learning that she never attended
and hardly knew. Who was this woman? What were her motives for such
magnanimity? The following summary was prepared from a biographical
sketch by Claudia Walker (1949) and other information from the OSU
Foundation at Oregon State University.

Mary Julia Ledlie McDonald was born at Springfield, Illinois on
January 26, 1848 to Frank and Julia Wynn Ledlie. In 1865, at the
close of the Civil War, the Ledlie family moved to the vicinity of
Marysville, California where Frank Ledlie worked on a small river
boat. Mary Ledlie was about 20 years old at the time. The owner of
the boat that operated between San Francisco and Marysville, was Captain James Monroe McDonald. Mary's father died a short time thereafter and she began teaching school; her mother operated a boarding house where they both lived. Captain McDonald became a boarder in her mother's house. It is thought that sometime during the mid-1880's Mary Ledlie made a trip to Corvallis, Oregon. Nothing about the circumstances of this journey could be learned by the researcher. About 1896 she purchased a ranch near Elsinore where she made her home with her mother. About 1898 she married Captain James McDonald in a Methodist Church in Los Angeles, California. She was then 60 years old and he was 73. The couple resided at his home at 912 Union Street, San Francisco.

Captain McDonald liquidated some mining interests he held in Nevada and used the proceeds to purchase the assets of the defunct Pacific Bank. Around the turn of the century he made heavy investments in timber lands in Northern California and Southern Oregon. One source described him as, "the man who invented the glass insulators for telephone and power wires (Jensen, 1922, p. 1)." No other mention of this achievement was found that could corroborate this claim.

The 1906 earthquake in San Francisco caused the military authorities to dynamite the McDonald house to prevent fire from spreading. Mrs. McDonald was at the Elsinore Ranch at the time the disaster occurred. After the death of her husband on June 7, 1907, Mary McDonald managed the estate for 26 years with the help of the Crocker First Federal Trust Company in San Francisco. Because of the large number of fractional heirs, it was deemed advisable to hold the vast estate
together for management purposes. Walker (1949) described the estate of Captain James Monroe McDonald:

... the large number of properties which extended from the Mexican border in Oregon, and included cattle properties in San Luis Obispo County, Sacramento River delta land on McDonald Island, and many pieces of property in Southern California counties, in Marin and San Francisco, in addition to timber holdings in Northern California and Southern Oregon (p. 2).

During the period of her administration of the estate Mrs. McDonald personally purchased some of the heirships which she returned to the heirs in her will. As a businesswoman, she was active in promoting various endeavors: she went into the wheat business in San Luis Obispo County; the New Almaden Quicksilver Mine was one of her projects; and she provided the U.S. Air Force with spruce from her Oregon holdings for aircraft construction. She was described as "extremely wealthy" by one source who went on to point out that she probably did not even know the true extent of her fortune (Jensen, 1922).

During the years following the death of her husband she made her home in San Francisco where she pursued various activities in addition to business interests:

... she occupied her time by attending lectures and plays and reading. She gave personal financial assistance to five young people and financed two of them through the University of California. She assisted in the financing of an orphanage in San Francisco, made a valuable gift of the Panama-Pacific Exposition in 1915, she was one of the group hostesses who did much toward entertaining and making it comfortable for visitors (p. 2).

Later she purchased a home in Palo Alto in order to enjoy the warmer climate of the Peninsula where she continued to administer the estate until she reached 85 years of age and was in ill health. The Crocker First Federal Trust Company assumed administration of the
McDonald Estate on March 27, 1933. Mary J.L. McDonald's final years were lived at St. Francis Hotel, which she partly owned. She died August 25, 1935 at age 87.

What were the motives that caused Mary J.L. McDonald to so generously endow Oregon Agricultural College? According to one source, her altruism stemmed from the emerging conservation movement:

Mrs. McDonald became deeply interested in western agricultural and forestry work at the time Theodore Roosevelt began promoting the idea of conservation of resources. Having no children of her own, she wanted to help the youth of the future and since she was interested more deeply in forestry than anything else, it was logical that she made her gifts to this institution (Carlson, 1949).

W.A. Jensen, in a memorandum written August 2, 1922, noted that even though Mrs. McDonald had never been to O.A.C., she was favorably inclined toward the institution:

She has become interested, however, from readings and reports of what she considers the splendid service O.A.C. is rendering to its constituency, and thinks it would be fair and right that the College in its good work should be recognized by her in the distribution of her wealth.

One source claims that Mary McDonald first met George Peavy about 1928 when he was called to consult with the Department of Agriculture on the Russian Thistle problem on McDonald lands in San Luis Obispo County, California (The Forestry Club, 1953). This could not be confirmed by the researcher. The record is not even clear on whether or not she ever visited Corvallis. If her first-hand knowledge of the College and the town was limited, the same could not be said of her philanthropy.

Mary J.L. McDonald: Benefactress

Mary McDonald's interest in supporting the College's programs
was initially indicated to O.A.C. officials by Miss M. Ruth Dickey, a personal friend and a home economics teacher in Pasadena, California. In August of 1922, Miss Dickey visited the campus to attend a convention of the National Home Economics Association, and while in Corvallis contacted W.A. Jensen, Executive Secretary. She told of Mrs. McDonald's interest in supporting the agricultural industry of the country, and her particular faith in the Pacific Northwest as a leader in this general field. In order to fully inform Miss Dickey about the College's programs, Jensen arranged for Dean Cordley and Director Jardine to meet with the two of them. Miss Dickey expressed criticism of the University of California in failing to meet the challenges in agriculture and further stated that:

... the University is losing, and will lose, many large gifts and opportunities for service through their failure to sense their great opportunity in the development of a strong and efficient department of Agriculture ... and only one of the losses which the University of California will suffer is the loss of the gift which Mrs. McDonald proposes for O.A.C. (Jensen, 1922, p. 3).

Mrs. McDonald must have had a change of mind in this regard, however, because in 1926 her lawyer mentioned in a letter to President Kerr that Mrs. McDonald was, "a very philanthropical old lady and is very much in love with forestry and agriculture and has done considerable in the way of endowing chairs in the University of Berkeley and the University of Southern California (Adelsperger, 1926, p. 1)." Her Last Will And Testament dated August 3, 1927 bequeathed part of her estate to the Regents of the University of California with directions to establish six scholarships to be known as the "James Monroe McDonald Scholarships." These were to be in electrical engineering,
special study in metal bearing ores, agriculture, and geology. The rest of this part of her estate was to be used for the study of grains and grasses for the arid lands of California (McDonald, 1927). The fifth provision of her will gave, "all lands situated in the State of Oregon belonging to me at my death, or in which I may at my death retain an interest," to Oregon State Agriculture College (McDonald, 1927).

The Prospect Tract

In the same letter, dated November 6, 1925 and posted from Marshfield, Oregon, Mr. A.E. Adelsperger stated that Mrs. McDonald owned a section of timber land in Jackson County (Township 33S, Range 4E, Section 16) that she might be willing to donate to the College. Her lawyer further stated that it was listed on the tax rolls with a value of $8,000 and that even though there was not much timber remaining on the tract, it might be useful to either the Department of Forestry or Agriculture. "This land is located surrounded by Forest Reserve lands. It is in the pine area although my impression is that there is not very much pine on this Section. It is East of Medford towards Crater Lake (p. 2)." President Kerr queried Dean Peavy about this opportunity and was told that the tract was too remote from the School of Forestry to be used for experimental work. Peavy advised that if it were conveyed to the College, that it should be sold and the proceeds devoted to the support of the forestry program (Peavy, 1925). In a later correspondence with President Kerr, Mr. Adelsperger suggested that the College might effect a trade, "with the Forestry Service or the Department of the Interior for five or six thousand
acres of O. & C. lands close to the college (December 28, 1926)."
All questions were evidently resolved by March 14, 1927 for on that
date W.A. Jensen, Executive Secretary, sent Dean Peavy a terse note
in which he stated that the deed from Mrs. Mary J.L. McDonald to
The Board of Regents had been sent to the business office for filing
in the College vaults (Jensen, 1927). Several references in the
correspondence dealing with acquisition of the Prospect Tract, state
that this occurred in 1925. One can assume that the negotiations
were completed earlier, but the records indicate that the College
did not file the deed until 1927.

Thus, the first of many gifts was made to the College by Mary
McDonald. The tract of land came to be called the Prospect Tract,
because it was near Prospect, Oregon; it would be held by the School
of Forestry until 1949. An historical glimpse of the School's assoc-
iation with the Prospect Tract can be derived from selected excerpts
from School of Forestry records:

The forest is a mixture of sugar and ponderosa pine and
Douglas fir. No logging has been done on this tract. A
rough cruise shows a volume of 33,000,000 feet. About
2/3 is low grade fir (Peavy, 1942, p. 2).

This tract carries a mixed pine-fir stand and according
to a conservative estimate, has a current value of $30
per acre, or a total of $19,200. This tract should be
sold as soon as conditions are favorable, and the pro-
cceeds invested in forest lands adjacent to the McDonald
Forest (Peavy, 1944, p. 1).

To arrange for the immediate disposal of the Prospect
Tract (land and timber) by advertised sealed bid sale
or auction with provisions requiring the execution of
good forest practices in the harvesting operations, and
that the residual land and timber be incorporated in a
certified tree farm or in the Rogue River National For-
est (State Board of Higher Education, 1948, p. 2).

The State Board of Higher Education . . . approved the
policy of consolidation of forest land holdings administered by the School of Forestry in the McDonald Forest area. This policy carried the approval to dispose of the 640-acre Prospect Tract. Since a negotiated sale or exchange either with a private operator or the federal government was not advisable. The decision was reached to sell the entire property to a private operator. Two bids were received, one of $171,495.00 and the other $60,000, with the higher bidder being the Timber Conservation Company of Medford, Oregon. I recommend that the offer of the Timber Conservation Company be accepted (Dunn, 1949, p. 1).

School of Forestry records for the Prospect Tract show that the total income from the sale was $176,248.40 by the end of 1953, when all payments had been made.

Due to the remoteness of the Prospect Tract, and the availability of outdoor learning resources such as the Arboretum and McDonald Forest closer at hand, Mary McDonald's first gift did not have a significant place in the School's programs. Rather, its significance stems from being the first benefaction of one who would become a staunch friend of forestry at Oregon Agricultural College.

The Mary J.L. McDonald Forest Fellowship

On December 21, 1928 Mrs. McDonald made a second gift to the President and Board of Regents of Oregon Agricultural College:

It is now my pleasure and privilege to hand to you, through the medium of my friend, Mr. A.E. Adelsperger of Marshfield, Oregon, my personal check in the sum of $10,000, as a present gift from me to your institution. ... I would suggest that the funds be devoted ... to the purchasing of equipment as may be found advisable for augmenting your facilities for the instruction of the youth; for acquiring garden lands in the vicinity of the College for use in experimental planting; or for acquiring more distant lands for purposes of re-forestation (McDonald, 1928).

Dean Peavy and James T. Jardine were appointed as a committee to study
possible uses of the money; their recommendation was to acquire lands adjoining the Arboretum in order to expand the tract to a workable forest. It was determined that at that time it was not possible to purchase the desired land to add to the 380 acres the School owned, therefore, President Kerr recommended that a "Mary J.L. McDonald Forest Fellowship" be established (Kerr, 1929). The objective was to provide financial support for selected forestry students from the trust fund's income. The plan met with Mrs. McDonald's hearty approval. Initially investments were made in Canadian National Railway bonds, but in 1935 President Peavy pointed out that these were providing low yields (4.22%); he suggested that the $10,000 be transferred into Oregon State College dormitory bonds (Peavy, 1935).

Over the years the scholarships varied in number and amount. For the 1935-1936 academic year no scholarships were offered because, according to the Comptroller of the State System of Higher Education, the fund was "in the red" or overdrawn (Kerr, 1934). In 1942 over $34,000 was deposited in the fund, being the proceeds from the Umpqua Timber Mortgage; this amount was added to the existing funds producing a balance in excess of $45,000 (Mason, 1942). There were three scholarships of $540 each awarded during the 1946-1947 school year. Awards over the years have varied due to differing returns on the endowment. For example, $1000 was spent in 1974-1975, $2350 in 1976-1977; and, none has been awarded since 1977. (The reason for this was not clear to School of Forestry personnel.) (Irving, 1980). In April 1980 there was an endowment balance of about $37,500 and slightly more than $9500 in the earnings fund from which scholarship awards are drawn.
(Varah, 1980). The Oregon Investment Council continues to manage the fund along with many others in its "endowment pool". It would be accurate to say that Mary McDonald has accomplished her goal of aiding youth to learn about forestry.

Building A School Forest System

During October 1929 Arthur Redington, Mrs. McDonald's San Francisco lawyer, visited Corvallis and the O.A.C. campus. The favorable report to Mrs. McDonald of the visits with President Kerr, Dean Peavy and others, and the visit to the Arboretum, were pleasing to her. During the course of the visit Peavy had stressed the importance of expanding the Arboretum through purchase of adjoining tracts, and this was conveyed to Mrs. McDonald. "Upon my suggestion to her in that behalf, she immediately acceded to the plan and instructed me to send you the within check of $3000 (Redington, 1929)." The intent was to provide money for the purchase of five forty acre tracts adjoining the Arboretum, and according to Mr. Redington, "if you should find it appropriate so to do, the name of Mary J.L. McDonald might, in some way, be associated as a record of the donor."

From this auspicious beginning Mary J.L. McDonald became the financial pillar upon which a School forest system would be built. Upon receipt of a proposal from Dean Peavy outlining the School's needs, she instructed him to proceed with the acquisition of forest lands to create a School forest. "Naturally, since Mrs. McDonald was Scotch, she admonished that the price be right and then 'if she had the funds,' a check covering the purchase price would be forwarded
(Peavy, 1944, p. 2)." The records show that all requests were promptly agreed to and satisfied.

At first checks were made payable directly to the College; Mrs. McDonald thought that this placed the College in the position of being a land buyer. She decided it would be advantageous to designate George Peavy as her agent, thus avoiding the possibility of elevated land prices due to owners thinking that more could be extracted from the State. This arrangement was questioned in 1933 by Auditor S.H. Rondeau. As usual, George Peavy's response was direct and immediate:

It appears to be quite satisfactory to Mrs. McDonald for me to act for her in the capacity indicated. She is well advised legally. To attempt to suggest to her how she should proceed in making her benefactions would be as much lacking in good taste as "looking a gift horse in the mouth." (Peavy, 1933).

Therefore, Dean Peavy acted as her agent, but it was T.J. Starker who did much of the field work in locating and evaluating potential School lands. In response to a question in 1978 about the high points of his long and active forestry career, Starker responded:

Oh, the fact that we got McDonald Forest which was a laboratory. I don't think its exceeded in value in any other forestry school in the U.S. as far as quality is concerned. I had lots of fun putting all those pieces of land together, because I bought them from forty acres to three hundred twenty acres, at times (1978, p. 22).

T.J. may have gained some experience and learned some valuable lessons in dealing with these potential sellers, that contributed to his own success in acquiring the lands now owned by Starker Forests. He recollected that one principle he learned was the importance of "earnest money":

I remember I'd been out to ... right where the nursery is, there was a man that lived there. His name has slipped me, ... but I made a deal with him one day and I said,
"Well, I'll have to go back and see Dean Peavy to get the okay on spending this money." So I went back the next night, and he said, "Well, my son came over last night, and said he'd like to keep this piece of property." So I learned a lesson buying property. Maybe I left out the fact that I offered to give him a down payment, but he didn't want to take it the night before. But, in two or three years after that we did buy that particular piece of property, and then we kept adding to it and adding to it (1978, p. 23).

The donations from Mrs. McDonald provided a continuous source of funds to promote forestry education and systematically purchase lands. In 1933 Mr. Rondeau, Auditor for the State Board of Higher Education, noted that the records in his office showed the following gifts:

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<tr>
<td>February 13, 1929</td>
<td>$10,000</td>
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<td>December 9, 1929</td>
<td>3,000</td>
<td>for the purchase of land</td>
</tr>
<tr>
<td>March 19, 1930</td>
<td>600</td>
<td>for the purchase of land</td>
</tr>
<tr>
<td>September 26, 1930</td>
<td>500</td>
<td>for the purchase of land</td>
</tr>
<tr>
<td>June 2, 1931</td>
<td>1,000</td>
<td>for the purchase of land</td>
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</table>

The name of O.S. C.'s benefactress was officially connected to her good works on December 7, 1931 when the State Board of Higher Education approved the recommendation that the lands donated by Mrs. Mary J.L. McDonald be designated as, "The McDonald Forest (Hull, 1931)."

In 1934 Mrs. McDonald's name was again permanently associated with the Oregon State College when she provided $2880 for housing the books she had donated over a period of time, to the College's library. Doris V. Rushing, her personal secretary and business manager for twelve years, had visited the campus and determined that a suitable setting was needed to properly care for the books. The result was the McDonald Room that continues to operate today in Kerr Library. In the same year, according to one source, she donated a valuable set of books valued at $4800, to commemorate the appointment of George
Peavy as Acting President of O S C (O S U Archives, 1934). The set was an illustrated edition of the *Complete Works of Abraham Lincoln* in 24 volumes, each with hand-tooled cover and binding. This Gettysburg edition, edited by J.B. Nicolay and John Hay, had been made to order for the one from whom Mrs. McDonald purchased it. According to Mrs. Rushing, the gift had been made partly because, "... she hoped to set an example for wealthy Oregonians to do likewise. She had the feeling that a good library raised the standing of the college (Rushing, 1936)." The donation of this special edition was not an isolated act:

This is merely the latest of many rare and valuable sets of books given to the library here by Mrs. McDonald since early in 1932. Her gifts of books now constitute more than one thousand volumes valued at above $10,000 (O S U Archives, 1934).

**The McDonald Bequest**

FIFTH: I give and devise to Oregon State Agricultural College, which is situated in Corvallis, Oregon, all lands situated in the State of Oregon belonging to me at my death, or in which I may then have under any lease or any such property, or under any contract or contracts for the sale of such property or of the timber thereon. Said gift or devise shall carry with it the right to have, take and receive all unpaid rentals under any such lease, and all unpaid installments under any such contract. . . . It is the desire that these lands and the funds derived therefrom may be applied, as far as practicable, to agricultural research work (McDonald, 1927).

Except for some individual bequests, Mary McDonald willed her real and personal property in California to the University of California and her real property in Oregon to the Oregon State College. The wording of the fifth section, however, raised a question as to the intent of the bequest, particularly as it referred to "agricultural research work". In 1936 Peavy prepared a statement, at the
request of E.C. Sammons, that enunciated his interpretation of Mrs. McDonald's intent:

By definition, agriculture deals with the use of the soil. Strictly speaking, forestry is a part of agriculture. At the University of California, where Mrs. McDonald made her first gifts and to which institution she bequeathed the major portion of her estate, forestry is placed in the School of Agriculture. (Peavy, 1936).

Dean Peavy wrote to Doris Rushing requesting an interpretation; her response of January 2, 1936 unequivocably supported the position that promotion of forestry was the benefactress' intent with the bequest. Mrs. Rushing pointed out that in reviewing the letters conveying the checks for additional tracts, almost every letter repeated the same thought:

Mrs. McDonald was happy to do this for the School of Forestry because she wanted to give back, by way of reforestation or improvement of methods of conservation, the State of Oregon, some of what she had taken from Oregon because of cutting of her timber. Each time I repeated this because Mrs. McDonald insisted on the reiteration. . . . I hope that the legal interpretation of a few words will not divert the bequest from the channel Mrs. McDonald intended (Rushing, 1936).

Furthermore, Mrs. McDonald had purchased several forty acre tracts of land for McDonald Forest which she retained in her own name. This had occurred, according to Mrs. Rushing, while she (Mrs. McDonald) was in the hospital with a broken leg; the reason given was that she might build a little house that could be used as a retreat. "Several times afterward I urged her to make the deeds over to Oregon State and finally she told me that that would be taken care of in her will--then everything she had in Oregon would eventually go to Oregon State College." Thus, the bequest's intent was clear: "Never, at any time, did she ever mention applying any funds to any other school in the
in the College (Rushing, 1936, p. 3)."

Another complication of a more serious nature dealt with a legal dispute between the Board of Regents of the University of California and the Oregon State Board of Higher Education, with regard to what was called, "The Umpqua Timber Company Mortgage." A short time before the death of Mary McDonald she decided to acquire the timber holdings covered by a mortgage she held on the Umpqua Timber Company. She owned a note in the principal sum of $40,000, which was secured by a first mortgage on timber lands located in Coos County, Oregon, and belonging to the Umpqua Timber Company. She offered to purchase these lands, a price was agreed upon by the majority stock holders (by adoption of a resolution at a meeting of the stockholders on August 8, 1935), the deed was prepared in Coos County and a messenger was dispatched to San Francisco with the papers. Mrs. McDonald died before receiving the messenger. Since the transaction had not been completed, the University of California claimed the mortgage, "notwithstanding the clear intent of Mrs. McDonald to acquire the property covered by the mortgage (Peavy, 1944, p. 3)." Peavy pointed out that had the transaction been completed, property valued at more than $75,000 would have gone to the School of Forestry.

A conference was held in Corvallis that included Mr. Marks, Mrs. Sackett, and Mr. Finseth representing the Board, Attorney-General Van Winkle, and an attorney representing the Board of Regents of the University of California. After lengthy deliberations it became apparent that agreement could not be reached and prolonged litigation was likely. The Californian representative had been instructed to
offer a one-half division of the property in question (State Board of Higher Education, 1936). This met with the approval of the State Board of Higher Education and such a resolution was adopted as shown in the minutes of the Board for January 27, 1936. The liquidation of the mortgage resulted in a yield of over $34,000 to the School of Forestry (Peavy, 1944).

Two thousand acres of pine land near Lakeview, Oregon in Lake County were also included in the Oregon realty portion of the bequest. In a memorandum written in December 1936 the remaining stumpage was estimated at 8,861,167 feet, appraised at $2.00 per thousand; the logged off-land was appraised at $1.00 per acre. These amounts, together with a sum of cash ($4,356.96) that was forthcoming from a timber sale on the land, totaled an estimated value of $24,079.29 (O.S.U., Archives, 1936).

In June of 1937 a timber sale contract was drawn with Fred Anderson of Lakeview, Oregon in which he agreed to pay $2.25 per thousand feet. In January of 1942 the Comptroller for the Oregon State System of Higher Education forwarded a check for $5,550 to be deposited in the McDonald Bequest Property Account (Bork, 1942). By 1944 the land had been transferred to the U.S. Forest Service.

The McDonald Legacy

From the first expression of interest in 1922 until her death in 1935, Mary J.L. McDonald actively promoted her adopted cause—forestry at Oregon Agricultural College. Overall, her contributions to the School of Forestry and the College have been formidable and
enduring; in death her good works have lived on as well. Her legacy included an endowed forestry education scholarship program, large tracts of timber land, rare books and library facilities, outright gifts of cash for land acquisition, and other forms of financial support resulting from her bequest. All of her philanthropy has had a significant impact on the course of events, but perhaps the most timely role was played in the creation of a School forest system. The record of School forest land acquisition shown on the following table ("The School Forests") indicates the extent of Mary McDonald's legacy. Contemporary Fernhoppers owe a large debt of gratitude to their benefactress, whose original intentions were to, "... acquire garden lands in the vicinity of the college for use in experimental planting, or... for reforestation (Redington, 1928)."
### The School Forests

<table>
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<tr>
<th>Year Acquired (County Records)</th>
<th>Sec.</th>
<th>Twp.</th>
<th>R.</th>
<th>Acreage</th>
<th>Cost</th>
<th>Source of Funds</th>
</tr>
</thead>
</table>
| 1. **Spaulding Tract**
  1921 C.K. Spaulding Logging Co. | 12   | 12S  | 7W | 160     | none | ---            |
| 2. **Blodgett Tract**
  1928 Blodgett Co. Ltd. | 17;19;20; | 29;29;30 | 7W | 5W | 2400 | none |
| 3. **George W. Peavy Arboretum**
  1930 G.W. Peavy
    (1925-J.W. Moffatt) | 36   | 10S  | 5W | 50     | $1,563.50 | Board of Regents |
  1932 G.C. Read | 36   | 10S  | 5W | 64.54  | 975.00  | Mrs. McDonald |
  1934 Commerce Mfg. Co.
    (1925-34 I. Harris) | 31   | 10S  | 4S | 36.45  | 2,010.00 | Arboretum Com. & Board |
| 4. **McDonald Forest**
  1927 W.R. Elliot | 35;36 | 10S  | 5W | 261.79 | 3,500.00 | Board of Regents |
  1930 T.J. Starker | 35   | 10S  | 5W | 40     | 480.25  | Arboretum Com. |
  1930 J. Carnegie | 36   | 10S  | 5W | 80     | 1,200.00 | Mrs. McDonald |
  1930 H. Auld | 36   | 10S  | 5W | 40     | 800.00  | Mrs. McDonald |
  1931 G. & W. Read | 36   | 10S  | 5W | 40     | 600.00  | Mrs. McDonald |
  1931 R.C. Thompson | 35;36 | 10S  | 5W | 140    | 1,500.00 | Mrs. McDonald |
  1931 S. Smith | 34;35 | 10S  | 5W | 320    | 1,000.00 | Mrs. McDonald |
  1932 S. Garde | 3    | 11S  | 5W | 165.51 | 662.00  | Mrs. McDonald |
  1932 R. Davenport | 3    | 11S  | 5W | 160    | 800.00  | Mrs. McDonald |
  1932 P. Carlson | 3;10 | 11S  | 5W | 195    | 935.00  | Mrs. McDonald |
  1933 Albany State Park | 9    | 11S  | 5W | 309.02 | 1,862.07 | Mrs. McDonald |
  1934 J. Carnegie | 25   | 10S  | 5W | 160    | 1,600.00 | Mrs. McDonald |
  1934 P. Harwood | 2    | 11S  | 5W | 76.38  | 419.19  | Mrs. McDonald |
  1934 C. Lawrens | 25   | 10S  | 5W | 80     | 800.00  | Mrs. McDonald |
  1935 A. Stevenson | 4;9  | 11S  | 5W | 240    | 3,600.00 | Mrs. McDonald |
  1937 F. Vincent | 4    | 11S  | 5W | 80     | 1,000.00 | McDonald Estate |
  1938 F. Vincent et al | 5    | 11S  | 5W | 120    | 1,800.00 | McDonald Estate |
  1938 M. Rantski | 4    | 11S  | 5W | 40     | 600.00  | McDonald Estate |
  1938 Coersham Estate | 17;18; | 19;20 | 11S  | 5W | 800    | 4,400.00 | McDonald Estate |
  1938 Jackson Estate | 8;9;17; | 15;16 | 11S  | 5W | 1,160.56 | 7,500.00 | McDonald Estate |
  1938 E & T. Owens | 9    | 11S  | 5W | 10.98  | 32.49  | McDonald Estate |
  1939 H. C. Auld | 7    | 11S  | 5W | 200    | 1,890.00 | McDonald Estate |
  1939 Baker Estate | 5    | 11S  | 5W | 80     | 2,000.00 | McDonald Estate |
  1939 M.B. Wilcox | 8    | 11S  | 5W | 2.62   | 189.97  | McDonald Estate |
  1946 E.A. Blake | 25   | 10S  | 5W | 80     | 1,200.00 | McDonald Estate |
  1946 Ben Ellis | 7;18 | 11S  | 5W | 320    | 1,500.00 | McDonald Estate |
  1948 Caffal Bros. | 5;6;7;8 | 11S  | 5W | 1120   | 7,840.00 | Exch. McDonald Tbr. |
  1949 J.S. Stuart | 26   | 10S  | 5W | 150    | 1,950.00 | McDonald Estate |
  1949 U.S.A. | 30   | 10S  | 5W | 89.43  | gift | U.S.A. |
  1951 Ben Ellis | 9    | 11S  | 5W | 40     | 12,200.00 | Exch. Adair Tbr. |
  1953 E.A. Blake | 30   | 10S  | 4W | 79.68  | 2,000.00 | McDonald Estate |
  1954 Stanley Wilt | 7    | 11S  | 5W | 80     | 800.00  | Exch. McDonald Tbr. |
  1954 F.E.M. Robinson | 9    | 11S  | 5W | 40     | 2,000.00 | McDonald Forest |
| 5. **Adair Tract (Paul Dunn Forest)**
  1948 U.S.A. | 10S-11S | 5-6W*4073.80 | 1,826.35 | McDonald Forest |

**TOTAL: SCHOOL LANDS**

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<td>4. McDonald Forest</td>
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<td>68,760.97</td>
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<td>5. Adair Tract (Paul Dunn Forest)</td>
<td>4073.80</td>
<td>1,826.35</td>
<td>McDonald Forest</td>
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**Summary**: 13615.75 $75,135.82

*Adair Tract also includes forest lands under jurisdiction of School of Agriculture, but managed under agreement with School of Forestry. Dunn Forest consists of the following tracts and parcels:

- West Fork Berry Creek Tract: 1143.60 acres
- South Fork Berry Creek Tract: 1573.10 acres
- Forest Peak Tract: 1357.18 acres
- Soap Creek Farm forest land: 346 acres
- Berry Creek Farm forest land: 270 acres

**TOTAL**: 381,884.32 acres
Chapter 5

REFERENCES

<table>
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<th>Author(s)</th>
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<tr>
<td>Adelsperger, A.E.</td>
<td>Personal letter to W.J. Kerr, President. Oregon State Agricultural College (November 6) Corvallis, Ore.</td>
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<td>Dunn, Paul M.</td>
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<td>Personal letter to Dean G.W. Peavy. Oregon State College (December 8) Corvallis, Ore.</td>
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<td>Personal letter to Dean G.W. Peavy. Oregon State College (March 14) Corvallis, Ore.</td>
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<td>Kerr, W.J.</td>
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<td>Personal letter to The President, Oregon State Agricultural College</td>
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1942

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1922

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Rondeau, S.H. Personal letter to W.A. Jensen, Executive Secretary. Oregon State College (October 25) Corvallis, Ore.
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1936

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1980

1949
CHAPTER 6

GOVERNMENT CONSERVATION PROGRAMS IN THE SCHOOL FORESTS

PART I:

CONSERVATION, THE DEPRESSION AND CLARKE-MCNARY

The period between World War I and the New Deal was significant in natural resource management history, as these years mark the beginning of many contemporary programs. Many battles over federal forest policy had been fought, Pinchot's crusade for national forests was meeting success, and foresters, having achieved their initial goals, needed new fields to conquer (Dana and Fairfax, 1980). Forestry as a field had greatly matured, and the concept of national forests was on a firm footing; the stage was now set for the next period of development which would see an internal debate that would test the carefully forged solidarity of the forestry profession. The issue hinged on the government regulation of private lands management, or more specifically, to what extent should the Forest Service bring scientific forestry to the private forest lands? Pinchot and his followers advocated a strong role for the government in regulating private forest practices. Chief of the Forest Service William B. Greeley (1920 - 1929) and his supporters, were frequently on the opposite side of the argument, tending to favor state and private cooperation with federal leadership, in the drive to prevent destructive private practices. The debate that ensued in earnest in 1919 was destined to continue into the early 1950's. Extreme statements were made on all sides. "One lumberman raged that the Soci-
ety of American Foresters should be 'annihilated' (p. 176)." Pinchot made a frontal attack on the lumber industry with his article in the *Journal of Forestry*, which carried the ominous title, "Forest Deva-
station: A National Danger and A Plan to Meet It (Steen, 1976, p. 176)."

The national debate engaged the passions of others as well, such as the Society of American Foresters, the National Association of State Foresters, and individuals and organizations associated with the lumber and wood-products industry. The industry formed a new group to combat the unsettling menace of federal regulation; representatives from such organizations as American Newspaper Publishers Association, American Paper and Pulp Association, Association of Wood-Using Industries, National Lumber Manufacturers Association and others met to form the National Forestry Program Committee.

The scope of this research does not permit a full treatment of this important period of conservation history. Suffice it to say that several pieces of legislation that emerged from the fray have had a significant impact on forestry in general, and on the School Forests in particular. Earlier in the century in 1911, the Weeks Law had established a new national policy of purchasing forest lands necessary to the protection of the flow of navigable streams. More important, for the purposes of this research, it also established a program of federal-state cooperation in fire protection (USDA, 1976). On June 7, 1924 William Greeley saw the capstone of his career set in place when the Clarke-McNary Act was passed: "It was a great thrill to be in at the kill--even if the victory was bloodless (Steen, 1976, p. 173)."

The Clarke-McNary (McNary was an Oregon Senator) Act extended the
federal land purchase policy under the Weeks Law of 1911; land necessary for timber production as well as for the protection of navigation, could be purchased. Section 2 of the Act authorized the Secretary of Agriculture to enter into cooperative agreements with the states for the protection of state and private forests against fire. Other sections dealt with forest taxation, cooperative work in farm forestry extension, and cooperation with the states in the production and distribution of forest planting stock for farm woodlands, shelterbelts, and windbreaks. The law greatly expanded federal-state cooperation and served to promote the establishment of state forestry agencies. Steen (1976) well summarized the Act and its implications:

The Clarke-McNary Act, in sum, substantially expanded Weeks Law programs and added others. Cooperation and incentives—and, significantly, not force—would be used to improve conditions on private forest land. Fire and taxes, believed the two worst deterrents to good forestry, would be faced together by the federal, state, and private sectors. It was hoped that reducing risks would prompt landowners to adopt less destructive cutting practices, because then they could better afford timber for future use (p. 173).

The issue of private forest regulation was left unresolved, because Greeley had sought to sidestep regulation in favor of concentrating on obtaining favorable action on cooperative programs.

Nonetheless, the bill is undoubtedly the major accomplishment of a period of unprecedented congressional creativity in the forest management area. Three major features of the legislation continue to be vital parts of our national forestry program: fire control, reforestation and education, and land acquisition (Dana and Fairfax, 1980, p. 127).

Several other acts were passed during this period that should at least be mentioned, as they formed the backbone of contemporary forestry programs at the state and federal levels. The McSweeney-McNary Act in 1928
focused attention and federal dollars on the importance of forest research for effective management and utilization. The Knutson-Vandenberg Act of June 9, 1930 established a fiscal program that promoted reforestation and improved silvicultural practices in the national forests. It was the provisions of the Clarke-McNary Act that pertained to the production and distribution of forest planting stock, however, that brings these national events to bear on the history of the School Forests.

**Vernon McDaniel and the Oregon Forest Nursery**

During the summer of 1925 Vernon McDaniel and Mary, his bride of a year, were living in a small forest camp near Saddle Mountain in Clatsop County, Oregon. McDaniel had been one of Dean Peavy's "boys" who had graduated in 1925 and gone immediately to work in the woods doing several different jobs that included forest fire inspector, fire lookout and log scaler. His marriage to Mary on August 2, 1924 had been followed immediately by a honeymoon in "hell": "I said, 'Honey, I'm going to take you down to hell.' And that's where I took her, down to Jewell, Oregon where the whole country was on fire. That was one of the worst fire years we've ever had (McDaniel, 1978, p. 3)." While working as a log-scaler that summer he received a letter from Peavy, followed by a telephone call when there was no immediate response. On the other end was George Peavy, who with characteristic directness demanded, "'Where in the hell have you been?' Well, I told him I was working. I had been so busy I couldn't answer him. Well, he said, 'You get down here,' and I said, 'Where?' He said, 'I have a job for you, and you get down
here as soon as you can; I'll tell you when you get here. If you need any money . . . let me know, and I'll fire it back" (p. 3)."
In this manner was hired the Nursery Supervisor for the Clarke-McNary Nursery to be located at Peavy Arboretum, who would direct all operations from 1925 until 1963, when it was discontinued.

The Oregon Forest Nursery thus became a thread in the history of the School Forests, that commenced in the early formative period in the mid-1920's. It can be followed through the Depression and the CCC era, into the war period, and beyond to the post-war era. Its operation was linked in the 1950's and the early 1960's with the School of Forestry, although the relationship was not an official one (students and professors visited the Nursery for lectures and demonstrations). After its abandonment in 1963, the facilities were taken over by the School of Forestry thus providing a link with the School's education and research programs. Today it serves as a research facility--the School of Forestry's Northwest Forest Genetics Nursery. Vernon McDaniel was the sole person to administer the Nursery throughout the entire period of its operation as an active nursery.

Mr. and Mrs. McDaniel arrived to the Arboretum September 15, 1925 and immediately constructed their first abode--a 14 by 16 foot tent house, i.e., a structure with a wooden floor and walls and a tent roof. Another similar structure was constructed for a wood shed. McDaniel remembered that his wife adapted well to the primitive conditions:

So we landed up in the brush, and there the "Mrs." made good of it. She was very happy. She could shoot a .22,
VERNON E. McDANIEL
IN 1979
Nurseryman: Oregon Forest Nursery
(1925 - 1963)
and had a dog. We had a lot of fun in the woods. Then later on about 2 or 3 months later we found this old house over in about quarter of a mile south of the Nursery. The State rented it to us for $5.00 a month. It was dug underneath and all wood sides and wood ceiling. Fortunately, it had an old Franklin stove in there; one of those big stoves that opens up like a fireplace. I'm sorry that I didn't swipe that when I left . . . (1978, p. 5).

So initial development work was arduous and slow to reflect progress; all work at first was done without heavy equipment such as tractors, thus requiring extensive labor. McDaniel was able to accomplish some of this through hiring local farmers—a man and his team could be employed for $5.00 per day. Everything was needed at once: the clearing of the land; construction of seed beds; structures to house people, equipment and nursery stock; irrigation systems; access roads; and, other essentials of operating a beginning nursery.

The site itself was not considered desirable by the Nursery Supervisor, due to the soils and the dense cover of second-growth Douglas fir, ash, oak, maple, chitum and wild crab apple. The soils were described as varying from "a black shot to a lighter chocolate color, with a heavy clay subsoil, from 1½ to 5 feet deep (McDaniel, 1927, p. 26). Developing the site into a workable nursery proved to be a considerable task. After all brush, trees and other cover was cut, large piles were made and these were burned. Next the "shoot-ing of the stumps" was undertaken and, "a small Kirton stump-puller was used to remove the remains of the stumps; the holes were filled in with a two-horse slip or scraper. It certainly looked good after all the hard work to see a bright plow turn the black soil under (McDaniel, 1927, p. 26)." During December of 1978 Marvin Rowley,
School Forest Manager, found the stump puller that had been used in clearing the Nursery land; it was covered with brush and in a deteriorated state, but perhaps still usable. Rowley (1979) described how it worked:

I think that it's (was) mounted on a little sled, ..., had a tongue about 6 or 8 inches in diameter, about 20-25 feet long, and the horses were tied to the end of that and walked in a circle. It was a pretty powerful little machine (p. 15).

On March 25, 1926 the first thirty seed beds were completed (4 X 12 foot beds). A water system was developed using a 1½" pipe that brought water 1528 feet to the Nursery. Seeds were obtained from various seed companies, such as the Manning Seed Company and the Roy Seed Company; over 100 beds were sown to Port Orford Cedar, Incense Cedar, Oregon Ash, Black Locust and various pines. A shipment of 40,000 transplants was received from Nebraska which consisted of hardy, dry land hardwoods such as Russian mulberry, olive box elder and green ash. By the end of the first year the Oregon Forest Nursery had 200,000 seedlings ready to be transplanted, and over 37,000 transplants ready for distribution throughout the state (McDaniel, 1927). By the spring of 1927 McDaniel reported that the Nursery: (1) had been expanded to include three and one-half acres; (2) now had for its use a building that was a combination packing shed and garage that measured 22 X 30 feet; and, (3) had three-eighths of a mile of road graded and usable. Under the close direction of Mr. McDaniel, the Oregon Forest Nursery was well on its way to a productive existence within the first couple of years.

During the summer of 1927 the dwelling that McDaniel refers to as, "the lower residence," was constructed by a private contractor;
the McDaniels occupied it in August of that year. They had previously moved from their tent house into an abandoned house, located adjacent to the Nursery. Mary McDaniel thought that the new home was a veritable "castle," after her previous residences, according to McDaniel. They lived in the lower residence from 1927 until Christmas, 1939 when the "upper residence," was completed by the CCC's (McDaniel, 1980). The initial cost of the lower residence, according to McDaniel recollecting in 1978, was about $2200 for all materials and labor. After the McDaniels moved to the upper residence, sometime during the 1940's (about 1945), an assistant and his family occupied the lower residence. Vernon and Mary McDaniel lived at the upper residence until 1964 when he retired and the couple moved into Corvallis. A more complete discussion of the structures at the Nursery and Camp Arboretum follows in a later section.

While both of the McDaniels worked long and hard ("Mary was a terrific tree-counter--up to 10,000 in a day!") in developing and managing the Nursery, there was some diversion for the couple. Mr. McDaniel remembers long walks in the surrounding woods accompanied by their dog, teaching Mary how to shoot her .22 caliber rifle, and driving into Corvallis occasionally. "In 1929 we used the State truck to get our groceries with. It was 1½ ton Ford; we felt as good in that as riding in a Cadillac in those days (McDaniel, 1978, p. 8)." Sometimes he "took the lil' Mrs. out to dinner" at local restaurants such as the Golden Pheasant.

Once in awhile they desired a "big-city" experience and would ride the Red Electric to Portland for a day of shopping. McDaniel fondly remembers those trips:
CCC SHUTTER DESIGN
Upper Residence
And we all loved those old trains. Oh, as the automobile got coming and you could make Portland in two hours or so. . . . we used to go to Portland in the car a lot of times. But a lot of times we went on train. . . . we could go to Lewisburg and leave our car and go out there and sit in that little building across the road and put up the red flag. The Red Electric left Corvallis . . . at 7:00 in the morning, and it was out to Lewisburg . . . from seven to eight minutes after it left Corvallis. It would stop, pick us up, sell us our ticket, and then we'd go to Portland, mainly Meier and Frank. The Mrs. would shop all day and me tagging along, and by 6:00 that night we'd be back home again (McDaniel, 1978, p. 12).

The Depression years proved to be less difficult for Mr. and Mrs. McDaniel than they were for most. Although his salary was lowered, they paid no rent and many of their food needs were met through the cultivation of a large garden (50 X 300 feet). McDaniel remembers that they were able to feed four or five families in the immediate area from this abundant garden plot.

It was "The Great Depression" as it came to be called, that provided the impetus for the next significant era in the story of the School Forests. The Oregon Forest Nursery and its historical niche is interwoven with another federal program that came to be extremely significant in U.S. conservation history. Of the multitude of "alphabet-soup" governmental agencies set in motion by Franklin D. Roosevelt's response to the Depression, few had the success, notoriety, and public acceptance of the Civilian Conservation Corps. The discussion now turns to a brief examination of this period in American history, and the relationship of one program, the Civilian Conservation Corps, to the Oregon Forest Nursery and the School Forests.

The Great Depression and the Federal Response

The causes and effects of the Great Depression that was heralded
in on October 29, 1929 are too well known to warrant lengthy treatment here. The stock market crash ("Black Thursday"), widespread bankruptcies and bank failures, unemployment and bread lines, human suffering, and in general, the collapse of the national and worldwide economic order—these were the hallmarks of a period in American history that few who participated would quickly forget. The economic crisis was not separated from the crisis in traditional American values—hard work, industriousness, upward social mobility, rugged individualism, egalitarianism—which had a debilitating effect upon the American mind. These cherished values of American culture would also emerge from this great dislocation with certain fundamental changes. Studs Terkel writing in Hard Times, an oral history of the Depression, well summed up the feeling of shame and powerlessness:

The suddenly-idle hands blamed themselves, rather than society. True, there were hunger marches and protestations to City Hall and Washington, but the millions experienced a private kind of shame when the pink slip came. No matter that others suffered the same fate, the inner voice whispered, "I'm a failure." . . . Outside forces, except to the more articulate and political rebels, were in some vague way responsible, but not really. It was a personal guilt (p. 20).

Among the most cherished beliefs about government had been the principles of individual and local responsibility, mutual self-help and a minor role for the federal government in the affairs of American social and economic life. President Hoover's concept of government precluded an adequate federal response to the crisis; it was to be Franklin Roosevelt who took the helm in 1932 that instituted reforms fundamentally altering the governmental framework. Among the many measures taken by Roosevelt to quickly bring action to bear on the nation's problems, was Executive Order #6101 on April 5, 1933—the
official creation of the Civilian Conservation Corps. Roosevelt's creation of the CCC reflected his interest in conserving the nation's natural heritage, and developing its valuable human resources:

Of a family and social class steeped in the philosophy of the Hudson River School, and in the tenets propounded by Emerson and Thoreau, Franklin D. Roosevelt was inclined, from an early age, to espouse the spiritual and physical values inherent in Nature. At the same time, he was exposed to the doctrines of conservation, developing the long-held conviction that conservation of the nation's natural resources was essential to continued progress. The idea of the Civilian Conservation Corps embodied these two fundamental beliefs. The Corps would act as a catalyst, bringing together two wasting national assets, natural resources and idle young men, in an attempt to reclaim both (Throop, 1979, p. 8).

F.D.R.'s undertaking was formidable; the legacy of unregulated plunder of American's natural resources was evident on all sides. Salmond (1967) described the generations of waste and ill-usage and the effect upon the American landscape:

Forests had once covered 800,000,000 acres of the continental United States, but by 1933 there were a mere 100,000,000 acres of virgin timber left. Much of the nation's timber resources had thus been brutally squandered. Moreover, wanton forest destruction had compounded the crucial problem of soil erosion. Each year water washed three billion tons of the best soil away from American fields and pastures, and wind accounted for a like amount. Indeed, by 1934, more than 300,000,000 acres—a sixth of the continent—had gone, or was going. Deserts of dust were replacing the grasslands of the Great Plains... (p. 4).

The passage and implementation of the Act represents what must be a remarkable record for the Federal Government—the first camp in George Washington National Forest in Virginia (Camp Roosevelt), was occupied five days after the authorizing statute was passed, and actual work in the woods commenced twelve days later (Dana and Fairfax, 1980). By contemporary standards of national congressional per-
formance, this represents an awe-inspiring achievement.

The Act authorized the President to employ unemployed Americans on public works projects for the purpose of relieving the acute unemployment; it was to be in effect two years after which it was continued by annual appropriations until 1937. On June 28, 1937 it was formally given a three-year life. Once the program was established as a successful undertaking, there were efforts—Director Fechner, F.D.R., and others encouraged this step—to make it a permanent agency. It was destined to go out of existence by 1943 when World War II solved the unemployment problem in the U.S.

The agency that was created by the Act was officially called Emergency Conservation Work (ECW), but it was the Civilian Conservation Corps, as referred to by Roosevelt, that caught the public imagination and endured. It was administered by several cooperating agencies. The Department of Labor selected the men; the War Department saw to their enrollment, conditioning, clothing, housing, transportation and, medical needs; and the Departments of Interior and Agriculture selected work projects and supervised them. The agencies most involved in CCC programs were the Forest Service, National Park Service, Soil Conservation Service and various other bureaus to a lesser degree.

The population to whom initial recruitment efforts were directed was unmarried men between the ages of seventeen and twenty-three, who were unemployed and whose families were on Relief Rolls. The program was expanded with the inclusion of war veterans, Indians (10,000 were authorized), territorials (young male residents of the Territories of Alaska and Hawaii and the possessions of Puerto Rico and the Virgin Islands), and local experienced men. Black companies were organized,
but were not allowed to travel outside of their own state due to re-
sistence by local communities. In spite of the spirit and letter of
legislation creating the CCC program that guaranteed freedom from
discrimination, racial prejudice was widely in evidence. According
to Salmond (1967) only about 200,000 blacks were enrolled, out of a
total of 2,500,000 men, during the nine-year life of the program.
Statistically, the average CCC enrollee was 20 years old and from a
family of six; he had an eighth grade education and had been unemployed
for at least nine months, as had his father. After passing military
tests for health and "discipline", the enrollee was assigned to one
of several thousand work camps where he lived in a wooden barracks,
worked on conservation projects, ate healthfully, play hardily, and
had ample doses of "self-improvement" in the form of educational pro-
grams of various types ("subversive" literature such as The New Re-
public and Nation were carefully excluded from camp libraries). Com-
pliance with this regimen was rewarded with room and board, and $30
per month, most of which was obligated to dependents (Steen, 1976).

The CCC camps were located primarily on state and federal lands
but some were on private property. The programs were comprehensive--
more than 150 types of work were categorized under such headings as
reforestation, forest improvement and protection, recreation develop-
ments, soil erosion, wildlife, range rehabilitation and flood control.
In forestry alone, it was estimated that more than 730,000 person-
hours were expended in fire fighting, timber stand improvement, tree
planting, and the building of bridges, roads, trails, towers and simi-
lar improvements (Dana and Fairfax, 1980).
Enrollment peaked in 1935 with over one-half million men assigned to over 2600 camps throughout the U.S. Over the entire life of the CCC three million men participated improving the nation's landscape and natural heritage, as well as salvaging something from their lives during a desperate era. Salmond (1967) summarized the program that was known by some as "Roosevelt's Treepanners":

It is almost a cliche to describe the Roosevelt revolution as experimental, anti-ideological, essentially pragmatic, and, above all, humanitarian. Certainly, this was true of the CCC. It was frankly experimental, it had no real precedent to follow and no long-term goals to be reached. Its organization was essentially a make-shift response to the immediate problem of unemployed youth. Further, in its profound concern for the well-being of its enrollees, the CCC shared in the broadly humanitarian trends of the era, and this underlying principle was with it until the end (p. 221).

Overall, the Depression marked the transformation of an America that was primarily agrarian in mentality, decentralized, moralistic, and isolationist, to and industrial, urban, and morally liberalized nation involved in foreign affairs in spite of itself (Leuchtenburg, 1958). Although its hallmark was failure when viewed in terms of the collapse of the existing social and economic order, it served as an important catalyst for some movements already underway. In giving impulse to the growing parks, recreation and conservation movement in the U.S., it was of primary importance. Many of the individuals who have subsequently participated in major resource management decisions, have had their views colored by their earlier experiences in the CCC. In conception, it was the precursor of many contemporary programs that have attempted to deal with similar problems.

The discussion now turns to the CCC program in Oregon, with primary emphasis on Camp Arboretum and its role in the history of the
School Forests. A summary of the activities of the Oregon Forest Nursery and related conservation programs is also included in Part II.
PART II:

THE CIVILIAN CONSERVATION CORPS, CAMP ARBRETUM, THE OREGON FOREST
NURSERY AND OTHER CONSERVATION PROGRAMS

The CCC Program in Oregon

The CCC program was operating in Oregon as early as the winter
of 1933-1934. Some of the earliest camps were located in the national
forests--the Willamette, Siuslaw, Umpqua, Rogue River, Siskiyou, and
Mt. Hood National Forests all had camps during this period. In April
of 1934 Director Robert Fechner announced the locations of forty camps
in Oregon: 27 were to be in the national forests, 3 on private forest
land, 1 in a state forest, 4 on federal land grants, 2 in national parks,
and 3 in state parks. It was estimated at that time that it would re-
quire about 6,800 men to carry out the program of construction, fire
hazard reduction, and rodent control (Emergency Conservation Work, 1934).

By May 1935 the program in Oregon had doubled--36 new camps were
added to the 39 then located in the State--and the number of men had
increased to about 16,000, of which about 5,000 were Oregon residents.
These camps were again situated on federal, state and private property
in a variety of settings: national forests, land grants, biological
survey stations, reclamation projects, state parks, military reserv-

Thus, by 1935 the pattern of federal and state cooperation in the
carrying out of a broadscale conservation program was well launched.
A summary prepared for the Twenty-Fifth Annual Report of the State
Forester for the Governor in 1936 listed an impressive number of accom-
plishments for the 1933-1936 period, by camps administered by the State. Among other work done there was shown 1100 miles of truck trails constructed, 145 miles of firebreaks, 11 dwellings, 16 lookout towers and 42,955 man-days of fire fighting (p. 85). These accomplish- ments were those reported only for state camps.

Oregon's participation in the Civilian Conservation Corps pro- gram spanned the period from April, 1933 to June, 1942 when the CCC officially ceased operation in conformity with Public Law 647 of the Seventy-Seventh Congress. Throughout the nine years and three months, the Corps worked with seven federal agencies and the state conservation authorities in implementing a broad program of conservation. According to an official summary prepared by the Director's Office of the CCC, enrollees worked more than 680,000 man days fighting forest fires, and controlling tree diseases. Over 50 million new trees were planted; roads, trails, fire towers, fire breaks and telephone lines were con- structed; grazing areas were improved by the construction of stock trails and the development of water holes; irrigation systems were developed and restored; and, wildlife enhancement was achieved through development of the Malheur and Hart Mountain Refuges. In carrying out this program 34,609 Oregon men were given employment (out of a total of 86,775). The average number of camps operated in Oregon through- out the nine years was 51 (McEntee, 1942). Frank Sargent, recently retired Deputy State Forester and an ex-CCC enrollee who worked in various Oregon camps, prepared the following summary of CCC camps located on state and private lands from 1933-1942:
CCC Camps

State and Private Lands in Oregon
April, 1933 - June, 1942 (9 Years)

1. Loon Lake (Coos) - 1933 - Moved to Camp Walker October 1, 1933
2. Silverton (Clackamas) - 1933 - Abandoned October 1, 1933
3. Hamlet (Clatsop) - 1933 - Abandoned October 1, 1933
4. Wilark (Columbia) - 1933 - Moved to Arboretum 1934
5. Coquille (Coos) - 1933 - Abandoned April 1, 1934
6. Wendling (Lane) - 1933 - Abandoned October 1, 1934
7. Bly (Klamath) - 1933 - Abandoned October 1, 1933
8. Mist (Clatsop) - 1933 - Abandoned April 1, 1934
9. Walker (Coos) - Moved from Loon Lake October 1, 1933; To Reedsport 1937
10. Boyington (Clatsop) - Added October 1, 1933; Abandoned 1935
11. Reehers (Washington) - Added April 1, 1934; Abandoned June, 1936
12. Wimer (Jackson) - Added by October, 1934; Vacated August, 1941
13. Mill City (Marion) - Added by October, 1934; Abandoned June, 1936
14. Arboretum (Benton) - Moved from Wilark 1934; Vacated June, 1942
15. Hilgard (Union) - 1935 - Abandoned 1938
16. Crabtree (Linn) - 1935 - Moved to Mill City 1937
17. Black Rock (Polk) - 1935 - Moved to Reehers 1937
18. Trask (Tillamook) - 1935 - Vacated May, 1941
19. Nehalem (Tillamook) - 1935 - Vacated June, 1942
20. Triangle Lake (Lane) - 1935 - Vacated March, 1941
21. Bradford - Added from O & C April, 1936; Abandoned June, 1936
22. Counter - Added from O & C April, 1936; Abandoned December, 1937
23. Sitkum - Added from O & C April, 1936; Abandoned July 1, 1938
24. McKinley - Added from O & C April, 1936; Abandoned July 1, 1938
25. Reedsport - Moved from Walker, 1937; Vacated June, 1942
26. Mill City - Moved from Crabtree 1937; Vacated May, 1941
27. Reehers - Moved from Black Rock 1937; Vacated August, 1941
28. Elgin - 1939-1940 - Vacated July, 1941

There was a total of 28 camps, with two being repeated (Mill City, Reehers). There was a low of five and a high of 14 camps that were operational during any one reporting period; of the first eight camps, three were abandoned after three to four months of operation, and two were moved. The final three camps were Arboretum, Nehalem and Reedsport—these were closed June 30, 1942 (Sargent, 1979).

Camp Aboretum


The occasion the Corvallis Gazette-Times was headlining was a luncheon meeting of the Chamber of Commerce held at Hotel Benton in Corvallis during April 1935; the spokesman being quoted was State Forester Cronemiller. His praise was not based on the cost-effectiveness of the operation, but instead the physical and moral character-building qualities of the CCC program:

... from a dollar and cents standpoint it does not pay, but in man building its value cannot be estimated, as it takes young men 18-25 off the streets and develops patriotism and initiative. ... the attitude of the boys is normal. ... in the Ninth Corps their weight increased over 9 pounds per man in six months time. There is no communism in the camps and the boys are not even interested. (p. 1).
CAMP ARBORETUM
1935 - 1942
Camp Arboretum, S-220 officially came into existence on June 26, 1933. The camps were classified according to the nature of the principal work that was done. For example, "F" camps were those on the national forests, "S" camps were located on state forest lands, and "P" camps were situated on privately-owned forest lands. The designation, therefore, of Camp Arboretum was "S" and the number "220" was its identifying number in the system and the permanent number associated with the camp. Companies of men moved through the camp and each of these had its own identifying number. The area of jurisdiction for Camp Arboretum was the northern half of Oregon and a small fringe of southern Washington. It was under the jurisdiction of the Ninth Corps Area, Vancouver Barracks, U.S. Army.

Although there was much local talk in 1935 about the impending new CCC camp, it had actually been underway since 1933 when a 50-man veterans side camp had been dispatched to the site 7½ miles north of Corvallis. The completion of their labors was trumpeted by an enthusiastic Corvallis Gazette-Times article on May 16, 1935 that reported, "The largest CCC camp ever to be erected in this country is to be completed on the Peavy Arboretum within the next two weeks... (p. 1)." The article further described the yet-to-be completed camp as, "... one of the most up-to-date camps to be found and when completed, will be a model unit (p. 1)." The somewhat hyperbolic claim suggests Chamber of Commerce puffery rather than fact.

Camp Arboretum functioned under the supervision of the U.S. Forest Service's North Pacific Region until October 27, 1934. From that date until its termination, it was operated by the State Department of Forestry, in cooperation with the War Department. The Oregon
Forest Nursery also worked closely with the camp's personnel, from 1935 until 1942.

On May 21, 1935 the *Corvallis Gazette-Times* noted the arrival of Camp Arboretum's first men:


The article went on to say that the men, who were moved from Camp Willard near St. Helens, were commanded by Captain Elmer H. Stembough, infantry reserve. Prior to their arrival, construction of the Camp had been under the direction of Captain Byron O. Garrett; command would be turned over to Stembough on May 26. Captain Stembough stated that he greatly appreciated the cooperation of the local citizenry in establishment of the camp, and that he already had located an area to build a baseball diamond and golf course. Subsequent contact between the camp's enrollees and the community of Corvallis, was to be generally harmonious with a few exceptions.

**Camp Arboretum's Enrollees**

Over the seven year period of the camp's operation there were four distinct groups in residence. The companies, state origins of the men, types of camp and arrival dates to Camp Arboretum were as follows:

<table>
<thead>
<tr>
<th>Company</th>
<th>Origin of Men</th>
<th>Type of Camp</th>
<th>Arrival Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co. No. 697</td>
<td>Ill., Ore.</td>
<td>Junior Camp</td>
<td>May 18, 1935</td>
</tr>
<tr>
<td>Co. No. 1922</td>
<td>Cal., Ida., Ore.</td>
<td>Veterans Camp</td>
<td>June 5, 1936</td>
</tr>
<tr>
<td>Co. No. 3503</td>
<td>Ken., Ind., Ohio</td>
<td>Junior Camp</td>
<td>Dec. 20, 1937</td>
</tr>
<tr>
<td>Co. No. 6418</td>
<td>Info. unavailable</td>
<td>Junior Camp</td>
<td>July 12, 1940</td>
</tr>
</tbody>
</table>
Nurseryman McDaniel had various crews of CCC men who worked in the Oregon Forest Nursery throughout the period of the camp's operation. He remembers the four groups as having distinct characteristics. The first group, Company No. 697, was a junior camp made up mostly of boys from Illinois who came to call themselves the "Chicago Alley Rats." They were primarily from urban areas and more accustomed to city life than the hardy life of a "Tree-trooper." McDaniel pointed out that there was a lot of petty thievery, arguments and resort to fighting to solve disputes. Many of the boys carried switchblades which were threateningly wielded on occasion.

... these kids were tough. ... They knew how to fight the alley way. They knew how to fight when you're down and when you're up, and especially when you're down. They would kick you and do anything to get the best of you. That's the type of fighters they were (1978. p. 8).

Nevertheless, McDaniel remembers the "Alley Rats" as good workers who with supervision, provided useful service to the Nursery. The occasional incorrigible was assigned to duty on the rock crushing crew, crushing rock for the roads, and "that took a lot of sap out of them (p. 8)." Another solution to fighting among the enrollees was to schedule them for the "square-ring"--a boxing arena just north of the camp that was built for resolving disputes among the men.

During May, 1936 the Company was moved to Ft. Missoula CCC District, Montana.

Company No. 1922, the veterans camp, arrived to Camp Arboretum on June 5, 1936. This group consisted of men who were veterans of the First World War, and a few who saw service during the Spanish-American War (1898). This group was much older, more skillful in
general work abilities, and somewhat of a problem from the standpoint of their social behavior--they enjoyed John Barleycorn. The average age of the veteran in this camp was 44 years--quite a change from the previous group in age and outlook. McDaniel remembered them as good workers, who regularly got into trouble on payday:

... the War Vets were causing disturbance because after payday they'd sit down across the road, and they'd get drunk. One incident was with two fellows. They were coming home, and ... were speeding and having a good time "hootin' n' hollering." Some way or another they got a hold of the state policeman, and they took his gun. And one fellow started riding him ... He was drunk ... with beer and wine. That policeman, oh, he was mad and furious, but he didn't bring any charges. He just laughed ... Everybody laughed (1979, p. 6).

In December of 1937 the veterans camp was ordered to move to Camp Kilpack near Vancouver, Washington. This action left Oregon without a veterans camp which caused vigorous protest by the state commander of the American Legion, John R. Snellstrom. Senator McNary was contacted and there were promises of correcting this deficiency (Washington and California already had several veterans camps). Company No. 1922 which was one of the earliest CCC camps organized in Oregon (organized at Camp Pistol River in Curry County in June, 1933) was disbanded on March 31, 1938. In July of 1938 the veteran group was reconstituted from the nucleus of Oregon enrollees, and returned to Oregon being stationed at Silver Falls State Park (The Forest Log, 1938).

The camp that replaced the veterans was Company No. 3503, a junior camp, made up of boys from Kentucky, Indiana, and Ohio. The event was reported in The Forest Log (1938):

Fifth Corps Enrollees Greeted By Oregon Mist

A total of 171 Fifth corps enrollees, accompanied by two
CCC ENROLLEE
OREGON FOREST NURSERY
1935 - 1942
officers, received their baptism of Oregon mist on December 20, when they moved into their new home at Camp Arboretum, formerly occupied by Veterans Co. 1922. The majority of these enrollees, 154, are from Ohio, while 17 hail from the Hoosier state of Indiana. Company 3505, a Fifth corps outfit, was stationed at Le Roy, Illinois ... (January, p. 3).

McDaniel remembers this group as "the Southern Boys", who were very likable and dependable help in the Nursery. They worked slower than had the previous junior camp ("the Alley Rats"), but were more systematic and thorough; they often sang songs together as they built fences or weeded in the Nursery. These boys "had a code" according to McDaniel, and it included injunctives against blacks rising above their station and insulting decent ladies. On one occasion they, "cut the britches off from two or three boys, one a negro, down at the skating rink ... (1978, p. 11)", and on another occasion went in search of a truck full of forestry students who had passed through the Nursery, whistled and made suggestive remarks to Mrs. McDaniel. "Where'd that truck stop? Where'd those boys go? ... They insulted your 'Mrs.'", and down in our country, Mr. Mac, we don't allow that (1978, p. 11)." Fortunately, the two groups of potential adversaries did not meet on that occasion.

Company 6418 arrived to Camp Arboretum on July 12, 1940; they were the final group to occupy the camp before it was disbanded in 1942. The records obtained from the National Archives in Washington, D.C. were incomplete with regard to the state origins of these men. One of the more newsworthy developments from this group was the jailing of six men by the Company Commander, for their refusal to work in the rain. The lack of enthusiasm was not limited to a few, if the official report dated March 5, 1941, to the Adjutant General,
Washington, D.C. is an indication:

Upon assuming command of Company 6418, on January 3, 1941, Company Commander Finley found a feeling of dissatisfaction throughout the company with everything in general, and with particular emphasis on the weather and the country. The feeling of dissatisfaction had developed during the command of the previous company commander. . . . On the morning of February 24th, seven enrollees refused to work in the rain, despite the fact that they were all equipped with water repellent clothing . . . (White, p. 1).

The men were lodged in jail in Corvallis, fined $3 each, and an investigation was undertaken. One man responded that he, "had never worked in the rain before and wasn't aiming to now." Another stated that he had been wanting to go home anyway and, "I'd just as soon go for not working as any other way." A.W. Stockman (1941) Special Investigator, CCC was to later state in his final report that "Company Commander Finley used poor judgment in having six enrollees committed to jail for temporary detention in order to exert intimidation, even though his objectives were accomplished (p. 3)." Stockman concluded, however, by noting that there was not widespread dissatisfaction with Finley's administration, that he had a "splendid record," and that the camp was operated in a "highly satisfactory" manner.

Camp Arboretum's Administration and Operation

The administration of Camp Arboretum and similar CCC camps was bifurcated: the military authorities were in charge of all aspects of organization and administration of the camp itself, and the federal and state agencies administered the work program. This division of responsibility, therefore, allowed for a Company Commander who was usually a Lieutenant, and a Project Supervisor, who was an employee of the re-
source-managing agency. In the case of Camp Arboretum, it was initially the Forest Service which served in the latter role, then in 1934 the State Department of Forestry assumed this responsibility. The camp always had a Camp Doctor, who was a military man and an officer, as well as other officers and enlisted men who carried out the military's responsibilities. There were usually an Educational Advisor, several levels of foreman, machine operators, mechanics and other skilled workers. Project Leaders were often CCC enrollees who were elevated to a position of more responsibility and given slightly more remuneration. The Camp Reports for 1937, midway through the life of the camp, provide an overview of the typical organization of Camp Arboretum:

1937

Company Commander: C.A. Hebert Capt. Inf.-Res.
Project Supervisor: Harry D. Haley
Other: Russie H. Vincent 1st Lt. Inf.-Res.

Co. No. 1922
Present Strength: 185
Arrived June 5, 1936
Veterans: Cal., Ore., Ida.

Forestry Personnel (February)

Harry D. Haley Supervisor
Clarence J. Jubb Foreman
W.W. Brown Foreman
Vern R. Shaw Mach. Operator Pr.
T.H. Rainwater Skilled Workman
G.C. Christiansen Skilled Workman
G.S. Sarty Mach. Operator
G.F. Wegner Skilled Workman
R.F. Clark Jr. Skilled Workman
C.E. Hanan Foreman
T.M. Steenson Foreman

Technical Personnel (January)

Bryson M. McKelvey Principal Foreman
Harry Brown Junior Foreman
George C. Melum Senior Foreman
Fred W. Mespelt Junior Foreman
Technical Personnel (January) continued

Roy E. Pollard  Junior Foreman
Wesley W. Brown  Mechanic
Elbert F. Kelley  Mechanic Operator
Albert C. Files  Skilled Workman
Glenden I. Wegner  Skilled Workman
Colby J. Harden  Engineer Aid-Civil
Charles Brechtel  Skilled Workman
David T. Cagle  Skilled Workman

Excerpts from the Camp Report to Director Fechner, Civilian Conservation Corps, Washington, D.C. dated December 9, 1937 provide a succinct summary of camp activities for the report period:

Health: One Vet. in hospital, three in quarters, and two venereal disease cases the past year. Superior type infirmary--dispensary.

Religion: Services held in camp weekly, transportation, Sundays.

Educational: Plenty of daily papers, magazines, and camp library.

Recreation: Not interested in outdoor games during winter season, but checkers, cards, etc. are principal indoor past-times.

Work Projects: Technical personnel are well satisfied with the Veterans. Powder is stored in a Standard Forest magazine, isolated, and bullet proof, all powder work supervised by experienced men. Meals, excellent. Cooperation, excellent.

All Veterans are well supplied with clothing, and foot wear. Each Vet. has a steel cot, cotton mattress, sheets, pillow, pillow-case, china dishes, locker, and an issue of clean sheets . . . Fresh pasturized milk is served daily. Flush toilets throughout camp. There is not subversive activities in the camp. The camp is also free from bed-bugs, and all other vermin.

General Work Projects

The conservation activities of the camp were typical of those at most forest camps, except that there was usually a contingent of
12 to 15 men who worked under the supervision of Vern McDaniel in the Oregon Forest Nursery. For example, the Work Project Report submitted to the Director's office on September 24, 1941 stated the status of the various projects:

Present Work: Construction of truck trails, buildings (Guard Station), boundary fences, and sign markers and monuments. Timber stand improvement. Forest Nursery work. Boundary survey.


One of the most common activities of the CCC camps was fighting fires. For example, during the fire season of 1935 the CCC men of the six state and private camps under the administration of the State Forester, worked 15,276 man-days; 3,686 were attributed to Camp Arboretum (The Forest Log, 1935, p. 4). The men fought fires over a wide area, and sometimes there were injuries. Two CCC enrollees from Camp Arboretum were injured by a rolling log while fighting a fire in eastern Lane County in July, 1935. The routine nature of this CCC activity can be noted by an announcement in The Forest Log:

ARBORETUM ENROLLEES GET FIRST FIRE CALL

Camp Arboretum - The camp opened the 1938 fire season with its first fire call on May 16. George Mellum, district warden for the Lincoln County Fire Patrol Association, called the camp at 2 a.m., and requested 29 men. They left camp at 4 a.m., and were back by three in the afternoon. A second call was placed by Mr. Mellum on the following morning and the men left the camp at the same time and returned at the same time as on the previous day's call. Both the fires were in the vicinity of Eddyville. This was the first fire fighting experience for some of the enrollees (p. 5).
Roads In The School Forests

Much of the preliminary work on the road system that presently exists in McDonald Forest, particularly in the general vicinity of the Arboretum, was performed by CCC crews. Marv Rowley (1979) recalled that:

... the road system was basically what was left from the old logging (days), or the CCC's had built. ... There was a battalion of men stationed there who worked in ten or twelve locations all around this general area, all the way out to Siletz and Valsetz area, and down toward Newport. They constructed the lookouts and built trails and fisheries, and of course during that time they built the main road across the ridge from Peavy Arboretum over across where it crosses the Lewisburg Saddle and on over to Oak Creek. That was the main road through the Forest up to that time (p. 11).

The Forest Log for May, 1936 reported the dedication of the road built by the men from Camp Arboretum:

The new road through McDonald forest at the Peavy Arboretum was dedicated to the memory of Fred J. Schreiner, late member of the forestry school staff, at ceremonies recently included as part of the annual Arboretum day by more than 300 students and faculty members of the school. The road, built by CCC workers, was named in honor of Schreiner, who died here in 1934, and a bronze plaque inscribed with his name was placed (p. 2).

According to the same source, enrollees from the camp during January, 1938, installed a native stone monument with a bronze plaque dedicated to Fred Schreiner, to mark the road carrying his name (p. 7). Since this event took place about 20 months after the original dedication, it must be assumed that the bronze plaque was moved from its previous site, or that it was not actually placed as noted earlier. The native stone monument presently marks Schreiner Road near the Forestry Club Cabin in the Arboretum.

In a list of "work completed on the McDonald Forest," written
FRED J. SCHREINER
School of Forestry
1927 - 1935

SCHREINER MONUMENT
Schreiner Road
CCC ROAD IMPROVEMENTS
by Earl Mason in 1941, he noted the following road improvements carried out by the CCC's (p. 4).

<table>
<thead>
<tr>
<th>Gravelled roads</th>
<th>11 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dirt Roads</td>
<td>3 miles</td>
</tr>
<tr>
<td>Skid Roads</td>
<td>3 miles</td>
</tr>
<tr>
<td>Trails</td>
<td>8 miles</td>
</tr>
</tbody>
</table>

Dean Dunn (1954) pointed out that:

A 10½-mile gravelled road extends lengthwise of the forest along the ridge from Highway 99-W to Tower Oak Creek. This road and a cross road, currently connecting the Lewisburg area with Soap Creek, were built by CCC labor. The latter right-of-way was deeded October 15, 1949 to Benton County (p. 4).

The CCC's built many miles of roads in the forest, thus establishing the basis for the contemporary system.

**Oak Creek Guard Station**

Several other CCC work accomplishments that continue to provide useful service today are Oak Creek Guard Station, Cronemiller Lake, and many of the remaining structures located in the Arboretum and Forest Genetics Nursery.

Sources do not agree about the completion date of the Oak Creek Guard Station; some believe that it was as early as 1936 (Seim, 1979), while others such as Paul Dunn (1954) hold that the completion occurred in 1943. Reports of work completed at Camp Arboretum mention a "Guard Station" as a completed project by September, 1941. Dunn, writing in 1954, described the Guard Station as, "an excellent one-story residence with 5 rooms, bath, full basement, attic, double garage, and an adjacent barn." During that year (1954) it was rented to a forestry staff member for $30 per month. Nettleton (1961) stated that the original purpose for the facility was to provide housing for a summer fire
guard and watchman. Implicit in the "guard station" approach was the custodial concept of resource management, or locking it up to protect it.

One of the earliest occupants of Oak Creek Guard Station was F. LeRoy Sprague, who with his wife and two small children, lived there during the 1942-1943 school year. Sprague, who was a student of forestry at that time (now retired from the Forest Service and living in Arizona), remembered that there had been two different married students who lived there prior to his occupancy. Sprague thought that the structure now known as the "Horse Barn" was already on the property when the School acquired that piece. Others (Rowley, Dunn) think that it too, was built by the CCC.

Mr. Sprague remembered that the early 1940's were still hard times eventhough the Depression was ending:

Money was hard to come by those days and the guard station was only sparsely furnished. Furnishings consisted of an old wood burning kitchen range, an old dining table and a set of springs and mattress sans bedstead. These were passed on from one occupant to the next by payment of five dollars cash from the incoming to the outgoing. . . . In payment for rent I was to work at such chores as posting boundary and by our presence there, discourage vandalism and unchecked ingress and egress to the McDonald Forest (Sprague, 1979).

For Sprague, the highlight of that year was the holding of the annual Xi Sigma Pi banquet in the living room of the Guard Station, where he served turkey cooked on the wood stove.

Some of the others who lived there, with their families, after the Spragues were: Walter Williams, Lloyd Hayes, Ray Yoder, Russell "Gene" Ellis, and Dave Long. All of these individuals were connected with Oregon State in a student or faculty capacity. Rowley (1979) re-
members volunteering to help the Yoders (Hal, Mrs. Yoder and two children) move their furniture into the new home. Yoder paid $25 per month rent, and provided a general "presence" at this entry to McDonald Forest. Since the location was isolated, Mrs. Yoder was always delighted to see the forestry students coming past her house on a field trip:

This was the south access point for the McDonald Forest... and a lot of the field trips that students made were made with this as a stopping point. They were about the only ones my wife saw in the way of outside people for several months, and being this kind of gal that likes to fraternize, she was always delighted to see these forestry students come on by. Some of the people in town took pity upon us and came out from time to time to visit... (p. 2).

The Ellis family (Gene, Ruth and two children) lived at the Guard Station from June 1950 until November or December 1952. Ellis is presently on the faculty in the Department of Landscape Architecture at O.S.U. Ellis simply paid rent, and had no duties related to management of the Forest.

Dave and Beverley Long and their two children moved in in 1952 and remained until 1955, while Mr. Long was doing graduate work in Agricultural Engineering at O.S.C. Long (1979) remembers that they were issued a key to the gate and were instructed to open it with an appropriate authorizing note, or a telephone call from someone in the School of Forestry. At that time, according to the Longs, there were two gates--one just before arriving to the Guard Station, and a second one where the present gate is now located. Usually, only the second gate was kept locked.

All of the ex-occupants who could be interviewed remembered the
bucolic setting, abundant wildlife (the deer regularly ate all attempts at a garden), the pure water from the spring that supplied the house, and very few management problems related to living at a primary access point to the Forest. During the late 1950's the decision was made by Dean McCulloch to lease the Guard Station and 30 acres of land to the Department of Fisheries and Wildlife, to be used as a research facility. This arrangement continues today. The original residence has been modified (see Cultural Resource Inventory for complete details on the physical description of the Guard Station complex), but the Horse Barn and the carefully placed rockwork bear the distinctive hallmark of the CCC's.

Cronemiller Lake

Dam Nearing Completion

Camp Arboretum—Excellent progress is being made with the Calloway dam project which is to furnish water for the irrigation of the Oregon Forest Nursery. The dam proper has been completed and tests show that it is holding the water. When filled it will form an artificial lake of about three acres in extent. Work is going ahead at the present time on the main pipe line from the reservoir to the nursery. Plans call for the installation of an overhead sprinkling system (1938, p. 7).

The "Calloway dam project" mentioned in the State Board of Forestry's monthly publication, is one of the more obvious legacies from the CCC era in the School Forests. The construction of this earthen reservoir in 1937 was accomplished in about six months, with the labor of 30 to 40 veterans (McDaniel, 1979). There was quite a difference between the projected capacity and accounts written shortly after its construction. Mason, in 1941, described the diversion dam
as containing 21 acre feet of water or 7 million gallons. The disagreement about its eventual capacity, however, was insignificant in comparison with the initial discussions about where it should be located. According to Vern McDaniel, who was a participant in the decision and who viewed the daily progress of the construction, he was the one that recommended the site that was selected. Certain others, unnamed by McDaniel but who were professors in the School, argued for another site. Eventually Dean Peavy, Lynn Cronemiller (State Forester), several engineers and other undisclosed individuals held a meeting to discuss all opinions. One other site suggested was just north of the Nursery on a beaver pond where an old sawmill had once operated.

It was Dean Peavy, Cronemiller . . . that made the decision. Especially Dean Peavy. He heard all the pros. Mr. Cronemiller came up and gave his reasons, recommended a lot of things I recommended to him, and we knew the difference of the fall of the lake. How much fall we had to give us for gravity flow rather than a pump system . . . So Dean Peavy says, "Well, gentlemen, it's up to me to decide, isn't it?" . . . "I agree with Mr. Cronemiller and Mac. The matter is settled." (McDaniel, 1979, p. 16).

According to McDaniel the site where the reservoir was eventually built was naturally bowl-shaped and a sump that had accumulated vast quantities of sediment over the years; the bones of deer, cows and horses were surfaced when the site was dredged. The lake bottom is 220 feet wide and it contains a concrete core 48" that runs through the dam. McDaniel also described six concrete "wings" that sustain the earthen dam walls. It was filled gradually by letting in about two feet of water, then shutting the source off, then again allowing two feet more to accumulate; this was done until the reservoir was filled.
According to McDaniel, the name "Cronemiller" was selected by a "certain gentlemen in town" who had argued against the State Forester during the deliberations on location. The selection was made, without the consent of others, when this individual placed an order with the Sign Shop at Camp Arboretum using the name "Cronemiller".

He got the idea that it should be Cronemiller Lake. But he was one of the guys who had argued against "Cronie". The 3C Camp was taking recommendations for signs. . . . so that recommendation for Cronemiller Lake went in on the sign shop. All the 3-C boys objected (1979, p. 13).

No other first-hand informant could be found to get an additional explanation of these events. McDaniel stated that the CCC boys wanted the lake to be named "McDaniel Lake."

Cronemiller Lake has served over the years as a source of water for the Nursery, and as a recreation resource for certain limited activities, mostly related to School programs. Some experiments were carried out by the Department of Fish and Wildlife, and some illegal swimming and fishing have regularly occurred. McDaniel noted that one of the worst offenders had been professors from the College, who had clandestinely fished. Photographs from the Camp Arboretum days show a low tower and walkway, that were probably located in the lake, and used for swimming.

Other Work Projects

During the last couple of years of the camp's operation in 1940 and 1941 some improvements were made at the Sulphur Springs site. Picnic tables, pit toilets, a garbage depository (hole in the ground) and similar improvements were carried out, with the objective of creating a recreation facility. Mason, in 1941, described this pro-
LYNN F. CRONEMILLER
SIGN SHOP

RESIDENCE
State Department of Forestry
Recreation development program on the McDonald Forest has been confined largely to the construction of a "model" picnic grounds at Sulphur Springs, a mineral springs at the head of Soap Creek. This area of 20 acres has been fenced for fire prevention purposes on the sides adjacent to the forest. Within the area trails wind around trees, cross and recross Soap Creek, and weave through scenic areas. The pattern designed to satisfy the camper and yet confine him to an area of less fire risk than the McDonald forest property (p. 6).

During the 1950's these improvements were so badly vandalized that all remaining facilities were removed; large rocks and other barriers have since been put in place and erected (by the Forest Manager, Marv Rowley) to discourage illegal entry into the Forest. The area continues to attract recreationists who wish to enter the Forest with their two-and four-wheel vehicles.

During the Depression the Federal Emergency Relief Administration (FERA) provided funds for the employment of youth. The National Youth Administration, which was created by Executive Order No. 7086 on June 26, 1935, also supported youth programs. Various projects were carried out in the School Forests under the aegis of these. One legacy of these alphabet-soup agencies stemming from the New Deal that can still be seen in the School Forests, is the complex of three shelters that were built near the Jackson Place. The date of construction of these three-sided log structures built in the distinctive rustic architectural style so widely employed in federal projects, is not well-documented. An entry in the Corvallis Gazette-Times for February 21, 1941 might provide a clue to their origins. The sub-heading reads: "36 Men Wanted To Build 10 Big Log Cabins In Arboretum." The project was to be a joint undertaking of the
LOG SHELTER
Jackson Place
LOG SHELTERS
Jackson Place
State NYA and the School of Forestry; George Schroeder of O.S.C. was slated to be in charge of the job. The intent was to employ unemployed youth between the ages of 17 and 24 (high school and college students) in the erection of 10 log cabins. Tasks, according to the article, were to include falling, bucking, cleaning logs and similar duties. These structures were to be designed to be portable, so that they could be moved by truck to other locations. "The cabins will be used for summer NYA camp in development of the College Arboretum and State forest. These men are also available for forest fire fighting, being sort of a specially trained crew."

The article also noted that the cabins were to be about 18 X 24 feet in size. There are three structures that still remain; two are badly deteriorated and the third is "melting" into the forest floor. The outside measurements are about 16 X 26, and they are three-sided shelters, rather than cabins. Nevertheless, there may be a relationship between these remaining structures and the project described in the article written in 1941. Today, they are only infrequently used by occasional day-hikers, hunters and horse riders.

The Corvallis Gazette-Times for April 21, 1941 reported another activity that was an outgrowth of the NYA's presence in the School Forests. The headlines read: "Peavy Arboretum To Be Headquarters for Forest Fire Fighters. Bruno Berselli Will Be NYA Supervisor of the Red Hats." The summer forest fire suppression activities would include 200 young men from all parts of the U.S., who were to work under the supervision of George H. Schroeder, O.S.C. Assistant Professor of Forestry. It was also noted that a portable saw mill was being obtained from the CCC to be used by the Red Hats in cutting
lumber for construction of camp buildings and facilities.

An indication of the NYA's activities is also reflected in the pages of *The Annual Cruises* for the mid-1930's. Carl Raynor, a sophomore in Technical Forestry, noted in 1936 that:

Throughout the past school year thirty to forty forestry students endeavoring to work their way through college have been assigned to the School of Forestry under the auspices of the National Youth Administration. Time allotted to each student ranged from thirty to forty hours each month, netting an average income of $14.00 per student per month. . . . The largest of these projects is that of taking inventory on the McDonald Forest and Peavy Arboretum and making a growth study of second-growth Douglas fir. Under the supervision of Professor R.S. Kearns, twenty-eight men worked weekends and holidays in the field securing necessary data from which to compile type, base, topog, site and timber estimate maps to be used as basic records for future management . . . (p. 38).

One of the students who was employed to help with this inventory was Alan Berg, present-day mayor of Corvallis and Professor of Forest Science at Oregon State University. Some students were also involved in the program to eradicate Ribes--a blister rust (*Cronartium ribicola*)--that was discovered in the Arboretum in 1936.

Other tangible remnants of the work of Camp Arboretum's "tree-troopers" is a standing powder house and the foundation of another larger structure that was used for the same purpose. These are located near the junction of Roads 560, 500 and 580 at a low spot between two hills that has come to be known as Powderhouse Saddle. The smaller structure that still stands was not actually a powder house, but rather the facility for storing caps--law requires that dynamite and caps be stored separately. The Cap House, a 10 by 14 feet building with sand-filled walls, today exists exactly as it did in the late 1930's when it was constructed. The only modification has been
a repaired door (insertion of a steel strap) due to vandalism that occurred when someone hooked on to the door with a four-wheel drive vehicle, to force it open. The door was damaged several times in attempts to gain entry, therefore, in 1974 Marv Rowley removed all materials and left the door unlocked.

The building design was standard for storage of explosives: sand-filled walls; a one-fourth inch steel plated door faced on the inside with solid wood; 1" X 6" Douglas fir "select-structured" tongue and groove on the inside walls; ceiling and floor constructed of 1" X 4" tongue and groove wood; galvanized tin roof; and, a locking mechanism that required two keys, one of which was screwed in. This particular building had no vent.

The Powder House, which no longer remains except for the foundation, was used until 1970 for the storage of explosives, by Forest Manager Rowley and by State Forestry Department personnel. After World War II a large supply of substance Rowley described as "firebomb material" was obtained for use in burning slash. It was found to be unsatisfactory for that purpose, because it would re-ignite when rained upon; five or six barrels were left in the Powder House. Other explosives related to forestry work were also stored in the structure, but because partial supplies were left over a dangerous situation was created. With age nitroglycerin tends to separate and concentrate, thus being susceptible to detonation with the blow of a hammer or another similar action (Rowley, 1979). The building was repeatedly vandalized, often in attempts to gain entry. The door was pried off on one occasion using a four-wheel vehicle, and on
another attempt the vent in the roof was kicked out and the ceiling boards broken to gain entry from above. Signs warning, "Explosives" were amply posted about the structure.

There must have been another powder house located in the School forest during this period, as noted by Earl Mason in 1941: "... three powder houses constructed by the CCC are used as a storage place for dynamite (storage capacity 40 tons) for the entire state forestry system (p. 4)." (Later in the same summary of activity in McDonald Forest, he noted that eight "Red Hat shelters" were still unfinished. The shelters near the Jackson Place may have been a part of this project.)

In 1974 the Powder House was razed and Marv Rowley disposed of all remaining materials. Attempts to determine the ownership of the structure were not successful. Today, the 17 X 22 feet concrete foundation is all that remains on the site where the Powder House once stood.

Camp Life and Community Relations

The typical CCC enrollee at Camp Arboretum traveled to Oregon by troop train, arriving to Albany where he was met by camp officials. Frank Harriman was living in Akron, Ohio when he decided to join the Civilian Conservation Corps in 1936. He remembers that period of his life very well:

You asked why did I join the 3-C's? That was back in the days of the Depression and there really was not any work to be had, especially for a young individual such as I was at the time. ... It was advertised in the paper and on the radio and I went downtown, looked up somebody and signed up. ... You were outfitted with
clothes . . . and so forth, and then one bright sunny day which I will always remember, they posted lists on the bulletin board, telling you where you were going. I was going to Corvallis, Oregon. Well, I had never heard of it before, had no idea in the world where it was (1980, p. 3).

The enrollees were placed on a special troop train that slowly moved across the country toward Albany, Oregon where Camp Arboretum officials would welcome them. Harriman remembers the train being side-tracked periodically to allow other trains to pass. Occasionally the men were ordered to get out during the delay, and do calisthenics. Time aboard was spent in playing poker, blackjack, and shooting craps.

They were met at the Albany train station, given a short address welcoming them to Oregon and then loaded in Army trucks for the trip to Camp Arboretum. Once ensconced at their new residence, the men quickly merged into the rhythm of the camp. What was the daily round of activities for an enrollee at Camp Arboretum? Edward Sekermestrovich (1980), who arrived to Oregon with Company 3503 in December, 1937 and who still lives in Corvallis, remembers the routine. A bugle at 5:30 called the boys from their beds, and they were expected to be in formation for roll call at 6:00. After revelee and roll call, everyone went to the mess hall for breakfast. Next it was to the barracks to arrange their personal living quarters, then an inspection prior to reporting for work. By 8:00 the enrollees were with their assigned crews of 20 to 25 men, and ready to commence work for the day.

Sekermestrovich was a driver, therefore, he would usually transport the crew to its destination and then spend the day "loafing" as
he put it, waiting to return them to camp. This was particularly
the pattern when Camp Aboretum's crews were working on the Capitol
building complex in Salem, Oregon. (There were three side camps--
Salem, Toledo and Valsetz--over the period of operation.) While in
the field, cooks from the camp would bring hot food to the work site;
Sekermestrovich remembers the food as being generally good, and there
was always plenty of it. Around 3:00 or 4:00 in the afternoon the
men would return to camp, clean up, fall out for roll call, then go
to the mess hall for dinner. The rest of the day was free; with a
pass one could leave the camp, but passes were not available for travel
away from the camp every night.

Harriman (1980) remembered the general layout of the camp:

As far as a list of buildings, there were barracks,
and what we referred to as the Army office. The captain
in charge and his lieutenants and the First Sergeant had
their offices in the middle of the horse-shoe affair,
barracks on both sides, across the top of the horseshoe
was the mess hall. At the foot of the horseshoe was the
recreation hall where we had a canteen and a couple of
pool tables. In the evenings you could sit around and
read, shoot pool or play cards or whatever you felt like
doing. On the south end of the Camp away from the high-
way, were the Forest Service garages where we parked the
trucks, and warehouses where they kept the tools we used
... (p. 6).

Although many of the buildings that Harriman refers to have been
torn down or removed, there are still several at the Arboretum that
have survived intact from this period. The Cultural Resource Inven-
tory gives details about the remaining structures built by the CCC's.
Suffice it to say that there were about 39 structures built at Camp
Arboretum and that some of these are still used today.

Recreation at the camp usually consisted of various indoor past-
times such as card playing, table games and pool. Sometimes spontan-
eous "water-fights" between two or more barracks would erupt, that caused the military some concern about order and the protection of the camp property. For all of the concern about subversive activities (this was often mentioned in camp reports to Washington, D.C.), there seemed to be little political activity. "The only time we had any discussion (political) was when we had a fire hose fight. And got the Captain in on it . . . and he got wet, soaking wet, and he was mad then (Sekermestrovich, 1980, p. 19)."

Occasionally a dance was held at Camp Arboretum, and ladies were recruited from Corvallis and the surrounding area. Margaret Sandoz (1980), who was an O.S.C. college student in 1937, remembers being asked to go with a group of other women to the camp. She recalled riding to the Arboretum in a bus over a very rough road, and arriving to what she thought was the dining hall. Chairs and tables had been cleared away, and the music of the Big Band era was playing. ". . . but most of the 3-Ć boys were a little awed with the number of college girls and they stood in the corners (p. 1)." She pointed out that in those days girls often danced with each other at dances, but in this case they didn't know whether this was appropriate or not. "I don't think any of us felt it was the greatest success story of the year (p. 2)."

The camp had a well-stocked library--no "subversive" material--that included popular periodical literature, fiction and non-fiction, and other standard library fare. Many materials were contributed by other institutions and organizations such as the O.S.C. Library. In November, 1940 approximately 125 books were donated by Kerr Library to Camp Arboretum (O.S.U. Archives). A notation in The Forest Log
for October, 1939 commended a Miss Harriet C. Long, librarian for
the Oregon State Library, who had contributed to the educational
programs of CCC camps in Oregon.

Each camp had an educational advisor whose duty it was to provide
a well-rounded program of education opportunities for the enrollees.
Excerpts from "Report of Education and Recreation At Camp Arboretum,"
by H.M. Broadbent, Educational Advisor for Company 3503 provide an
overview of the scope of activities (January 3, 1938):

Company 3503 has the best equipped woodworking shop in
the Vancouver Barracks District. A W.P.A. teacher has
been employed to give full time teaching in woodworking.

Courses in Business Arithmetic, Current Events, and Ag-
riculture have been started ... Courses in Northwest History, Typing, and Nature Study will be started soon.

The Forestry Department has begun classes in Forestry
Conservation, Welding and Rustic Sign Making.

A basketball team and a boxing team has been organized ... 

Field trips to the Coast and logging camps, lumber mills
and paper mills are being planned.

The library is opened and books are being checked out.

There are no illiterates in the Company. There is one
college graduate ... 

We are trying our utmost to keep the boys busy all the
time to prevent too much home sickness.

Class offerings included a wide variety of applied and academic
subjects. For example, the Corvallis Gazette-Times printed an article
on March 29, 1939 stating that classes that encompassed the following
content were being offered at Camp Arboretum: Civics and citizenship;
the use of heavy equipment; rock crushing machinery; the use of powder
to remove stumps and rocks; jack hammers and air compressors; falling
and bucking timber; carpentry; cement work; surveying; auto mechanics;
operation of short wave radio; and, various culinary skills. Training for radio operators was carried out in conjunction with Oregon State College. Other classes both at the camp and on the O.S.C. campus included woodworking, leathercraft, archery, first aid and classes that focused on basic reading and writing skills.

There was usually a "recreation truck" that travelled to Corvallis on Friday and Saturday evenings. Riders were left in front of the Julian Hotel on Second Street; at a predetermined hour later in the evening, it returned to camp. Those who did not arrive back in time to catch the truck either walked or "hitch-hiked" to camp, sometimes in an inebriated condition. On at least one occasion an enrollee was killed as he walked back along the highway. Harriman recalled that many of the boys visited the pool halls and beer parlors, then bought a bottle of liquor to take back to camp. Although drinking was officially forbidden in the camp, it happened with some regularity according to the first-hand informants. Some companies were more prone to consumption of alcoholic beverages than others--the veterans group was probably the heaviest user according to informants.

There were other activities, besides drinking, that were engaged in by the CCC's when they came to Corvallis. There was a regular "church truck" each Sunday that came to town. Harriman pointed out that many congregated at Kessler's Ice Cream Store. Some enrollees played on Corvallis athletic teams during the summers, and conditioned in a gymnasium during the winters. The movie theaters offered some diversion.

Relations with Corvallis and the wider community were not always harmonious. Paul Francis (1980), another ex-Camp Arboretum enrollee,
remembers going to the Lake Park Roller Rink in Corvallis and getting into fights with the college students; the skating rink was a central node of socialization in that day. Sometimes the strife between the town and camp stemmed from racial prejudice. Sekermestrovich (1980) stated that a black man skating with a white woman caused some CCC boys to react:

We had one colored fellow in Corvallis at that time. They kinda didn't think it was right for him to skate with a white woman . . . and they might pick a fight with him or something.

Then it would get out of hand, you know (p. 9).

In reminiscing about the skating rink just north of town, Vern McDaniel (1979) recalled that one night was particularly discordant:

... they got into quite a few brawls down there. It was usually the high school boys that started it, most of them.
... I know there was one night they sent 50 down there, and they got into a squabble. There were probably a couple of hundred ("town boys"). ... some kid got loose and went to a telephone and called camp. The old Camp Commander he just cleaned camp right now. Every boy went--a hundred and fifty more of them went down there. Officers, even the forestry foreman . . . went down to help break it up (p. 8).

Concern about certain shortcomings in camp life were periodically expressed, as would be expected. One disenchanted enrollee wrote an anonymous letter that prompted an investigation:

We the veterans are being treated like cattle down here. We are fed on swill from the garbage can. ... There is no discipline of any kind here. This is a mad house. Our Capt. don't care what happens to the camp. ... We fought for our country. What do we get. Swill food. This camp is jail to us. ... The camp is full of crooks and drunks. We had a stabbing affair here a few days ago. It was a fright. Men go to Corvallis and get drunk and come back to camp . . . (April 16, 1937).

The investigation of the allegations made in the anonymous letter surfaced some of the complaints of the men. Two veterans were arrested
FOUNDATIONS
Camp Arboretum
(near Sign Shop)
FOUNDATIONS
Camp Arboretum
(near Peavy Lodge)
by the Corvallis Police, but not held, in a stabbing episode. Others were incarcerated for being drunk and disorderly; mention was made of David S. Brown, who was killed as he walked along Highway 99 toward the camp. At one point the men went on a sit-down strike because they did not want to work in the rain. Several deaths occurred in the course of the camp’s operation. A supervisor was killed in a truck wreck; an enrollee was critically injured by a falling snag; while "blowing a stump" a worker died. Perhaps the most ubiquitous health problem was the abundant poison oak that is found in the School Forests.

Paul Francis’ (1980) assessment of his period of service at Camp Arboretum probably well summarizes the experience of many enrollees:

I guess the work was more interesting than anything as far as memories are concerned. I don’t think we did anything outstanding, set any kind of records or anything. When we had work to do, we did it (p. 15).

The Oregon Forest Nursery and Other Conservation Programs

The Oregon Forest Nursery was under the supervision of the Dean of the School of Forestry, George W. Peavy from its creation in 1925 until November 1, 1935 (The Forest Log, p. 3). Peavy’s assumption of duties as President of the College necessitated that he be relieved from this responsibility. The actual operation of the Nursery, however, was in the hands of Vernon McDaniel throughout the entire period of operation until it was discontinued in 1963, and its function incorporated into the State nursery at Elkton, Oregon.

By 1930 the Nursery was shipping more than 200,000 trees to farmers in the state; the major species distributed in that year were Black lo-
STORAGE SHED
cust (50,800), green ash (16,000), Russian mulberry (9,200), Chinese
elm (33,200), western yellow pine (36,000), Scotch pine (8,000), and
lesser quantities of western red cedar, Maritime pine, box elder,
redwood, Norway spruce and Austrian pine (State of Oregon, 1931).
By 1936 the demand for trees and the general success of the Oregon
Forest Nursery made necessary an expansion program:

With this in view the State Board of Forestry has purchased
an additional ten-acre tract which is being cleared . . .
In addition to this the improvement program calls for the
construction of a storage reservoir to provide water for
irrigation purposes; and for a new residence, garage, crew
house and combined cold storage and packing house . . .
it will be possible to bring the annual production of the
nursery up to several million trees within a few years
(State of Oregon, 1937, p. 25).

Thus, the plans were made for the construction of many of the facili-
ties that still exist in the Nursery today. The reservoir that is
mentioned, is of course, Cronemiller Lake; the Upper Residence,
Office, and other large processing structures (Cold Storage,
Warehouse, etc.) were added during this expansion program.

By 1941 an option had been taken on an additional 44 acres of
land lying immediately adjacent to the Nursery. In the same year
the State undertook the first large scale planting on state forests--
approximately 250,000 seedlings were set out on Lincoln State Forest,
Tillamook State Forest, and Hamlet State Experimental Forest. A
very significant contribution of the CCC, WPA and NYA during this
period, was the construction of the State Forestry Headquarters
buildings in Salem. These were completed by the spring of 1939.

With the abandonment of the CCC camps in 1942 the State Forestry
Department had to increase its financial contribution to certain pro-
grams. Camp Arboretum had provided the necessary labor to meet the federal requirements for the 50-50 state and federal division as provided in the Clarke-McNary act. If the contributions of Camp Arboretum had not been adequately realized up to that date, they were certainly brought into focus with the termination of the CCC program.

One important outcome of this development, however, was that the State could then modify the policy covering distribution of trees and extend the services of the Nursery to all timberland owners. Prior to this, by the provisions of the act, the distribution was restricted to farmers and others who wanted to establish woodlands, shelterbelts and windbreaks (State of Oregon, 1942).

The Nursery continued to expand during the 1940's. Plans were made for the development of an additional 15 acres to be devoted to seed production; an improved system of overhead irrigation was added; the mechanization of planting and weeding was implemented, and, other innovations were made in the last half of 1940. By 1957 the State Department of Forestry could report that production at the Oregon Forest Nursery reached 12,500,000 during the previous biennium (State of Oregon, 1956). This was indeed an enviable record when viewed from the standpoint of Vern and Mary McDaniel's beginning "out in the brush at the Arboretum" in 1925. The Oregon Forest Nursery had come a long way from its origins, and the role of the CCC in carrying out this program was a key one.

The Nursery was discontinued in 1963, its role being taken over by the State nursery at Elkton, Oregon. On April 11, 1964 Vernon McDaniel moved to town with his wife, who was very ill and debilitated—she suffered from diabetes. He retired in August, 1964; Mary McDaniel
died December 10, 1977. In 1980 Mr. McDaniel relocated to an elderly patient care facility in Longview, Washington where he lives today. Although he is over 80 years old, he would still prefer to be out in the woods, working as he has always done. "This ain't no place for a woodsman," was his terse summation. Vernon McDaniel left his indelible impress on a significant chapter in the history of the School forests.

Other Programs

After the departure of the CCC's some of the buildings were used by the Polk-Benton Fire Protection District to house "red hat" crews. The program, which was under the jurisdiction of the State Department of Forestry, employed high school youth. These young men were trained in fire-fighting techniques while stationed at the Arboretum during the summer. Marvin Rowley (1980) recalled that the "red hat" appellation originated with the red felt hats, which were worn by crew members as their "trademark."

Present day Peavy Lodge was a crew house that was taken over after the abandonment of Camp Arboretum. It has been remodeled considerably, which may have been prompted by a fire. Vernon McDaniel (1980) remembered that one of the crews allowed a hot stove pipe to catch a building on fire. "I don't know what they were doing but . . . one fellow opened up the crawl space and 'whoosh' it went, from one end of that big building to the other. Just exploded . . . they might have saved it if they had (not) opened it up (p. 16)."

The Polk-Benton Fire Protection Association was administered from the District office in Dallas, but an assistant warden resided at the
STATE DEPARTMENT OF FORESTRY OFFICE - Philomath (formerly located at Camp Arboretum)
Arboretum throughout the year. One of the activities that the red
hats engaged in was the building of practice fire trails. Rowley
remembered encountering these in the vicinity of the Arboretum. A
couple of individuals who lived on site to administer this program
was Don Helm and Red Lloyd. Helm, who had been the fire inspector
for the Association before becoming assistant warden, had crews operat-
ing from this location until the early 1960's. In 1964 the Polk-
Benton Fire Protection Association office was moved to Philomath,
Oregon where it continues to operate today.

After 1964 the School of Forestry assumed the management of the
Nursery complex, converting it to a research facility—the Northwest
Forest Genetics Nursery. Most of the equipment was moved to Elkton
and to other locations by the State Department of Forestry. According
to Rowley (1980), the exact relationship between the School and the
State Department of Forestry is unclear. Some buildings are owned
by the State, but are located on School land; some buildings are
owned by the School, but are located on State land. Some land is
leased from the State on a long-term basis. One of the recommendations
from this research is that this relationship be more closely examined.

**Conclusion**

These then have been the major conservation programs in the lands
owned by the School of Forestry (excluding Spaulding and Blodgett
Tracts). The broadscale efforts by local, state and federal govern-
ment to renew the natural environment were, and are, a part of a na-
tional conservation movement. Starting with 1925 when ground was
broken for the Clarke-McNary Nursery (Oregon Forest Nursery), the history of the School Forests has been interwoven with the larger story. The story, through the activities of the School of Forestry on these lands, continues today.
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CHAPTER 7
THE HUMAN USES OF Mc Donald - Dunn FOR ESTS
PART I: SETTLEMENT AND HARVEST ACTIVITIES

One approach to gaining an understanding of the human uses of
McDonald-Dunn Forests is to trace the dominant activities within an
historical thematic framework. For the purpose of this research, these
themes were selected as representing the major threads of historical
development: (1) Settlement, (2) Harvest Activities, (3) Education, (4)
Research, (5) Conservation, (6) Recreation, (7) Military. As would be
expected, not all themes are represented equally. Some human activity has
been of greater duration, and some has had significance to the Forests' history out of proportion to the amount of time that it endured—the CCC
era (Conservation theme) is an example of the latter. These themes, taken
as an integrated whole, constitute the sinews of the historical framework
within which the story unfolds. Chapter 6 dealt with the Conservation
theme in some depth, therefore it is not again discussed in this chapter.
The chapter is divided into two parts: Part I contains a discussion of
the Settlement and Harvest Activities themes; Part II is made up of the
Education, Research, Recreation, and Military themes.

1. SETTLEMENT

You perhaps would wish to know how I like the country. I
like it well. It is an easy place to make a living. You
can raise as many cattle as you please and not cost you a
cent, for the grass is green the whole winter . . . . The
land you get is sufficient to pay you for your trouble
. . . . The people all look hearty and healthy here --
from a letter written in 1846 by Mariah King, Kings Valley.

The journey of Nahum King and his family (four children and wife)
over the Oregon Trail in 1845 was a typical pioneer experience in the
initial settlement period. They crossed the plains, arrived to The Dalles, loaded thirteen wagons and all of the cattle on rafts, and rafted down the Columbia River to a point near Tualatin Plains, near present-day Forest Grove. There the family camped for the winter; the next spring they moved south and took up residence in what was to become King's Valley. At that time two or three hundred Klickitats were camped in the valley. To the query from an Indian, "What do you want here?" Nahum King sounded the prophetic note that was to signal the beginning of the settlement period in earnest and the demise of the Indians: "We have come to settle down and farm and make homes for ourselves," replied my father. "Well" said the Indian, "you can if you don't meddle with us; we won't hurt you (Fagan, 1885, p. 329)." Unfortunately for the Klickitats and other Indians of the Valley, the good will was not reciprocated.

By 1847, the Oregon Territorial Legislature decided that there was sufficient population in Oregon to warrant further political subdivision. On December 23, 1847, an act was passed organizing Benton County from a part of Polk County. The county was named in honor of Thomas Hart Benton, a tireless promoter of the Oregon Country, and a senator in the Missouri Legislature. The area encompassed in the new county included all of Oregon south of Polk County and west of the Willamette River to the California border—4,076,000 acres. This enormous political entity was to be subsequently divided several times to create the counties of Lincoln, Lane, Douglas, Coos, Curry, Josephine, and Jackson.

The first land claims to be filed in the vicinity of present-day Corvallis were those of James L. Mulkey and his brother, John Mulkey, Haman C. Lewis, and J. C. Avery. These individuals had filed their land
claims by the fall of 1845. In ensuing years the number of claims increased rapidly, until there was a general decline and loss of population prompted by the onset of the gold rush in California in 1849. Many of these disenchanted gold miners returned to Oregon from California, however, and more immigrants continued to arrive to stake claims. By 1870 the Census showed the population to be 4,584 persons; by 1880 there were 6,403 residing in the county (U.S. Department of Commerce, 1850-1934).

Initially the farthest claim from Corvallis was that of Haman C. Lewis which was three miles north of town. The next few years saw considerable land being taken up in the foothills, even more than on the flood plains of the Willamette River (Longwood, 1940). As Bowen (1978) and others have pointed out, many of the immigrants were from states bordering the Mississippi River and had experienced periodic flooding of lands adjoining the river. There was also the association of these lands with malaria and other diseases prevalent in swampy areas. Longwood stated that locating in the foothills also situated one closer to the Oregon-California Pack Trail, and thus provided an advantage for commerce and access to mountain springs and streams. Marvin Rowley (1979) discovered an axe mark in a tree that was felled just north of Lewisburg Saddle, thus indicating a human presence in the foothills as early as 1825. The axe mark was visible in the undercut, and the date was derived through counting rings back to the blaze.

By 1860 the foothills and valley were dotted with homesteads, 159,375 acres being allocated to 365 farms; about one-half of the homesteads were located in the foothills (U.S. Department of Commerce, 1850-1935). By 1880 nearly all of the readily accessible range and farm land had been taken in Benton County, aided by the passage of the Donation
Land Act and the Homestead Law.

The lands now included in the McDonald-Dunn Forests were penetrated during the period from 1845-1885, and sprinkled with settlements. (See "Donation Land Claims" maps.)

Agriculture and Livestock Raising

The first settlers in Benton County found ideal conditions for farming. Longwood (1940) described the physical environment:

The valley and hillsides were clothed with a profuse growth of grass, broken occasionally by small areas of oak saplings. Along the banks of rivers and smaller streams there were hardwoods, mostly cottonwood, and if the banks were high enough, scattered conifers, mostly fir. In the foothills along protected waterways there were stands of conifers, and on the open hillsides scattered areas of conifers and hardwoods, and areas of hardwoods predominating, due to the frequent fires started by Indians (p. 38).

Little difficulty was encountered in clearing the land; the only limitation was the scarcity of farm implements. Wheat became a widespread crop which even served as hard currency in the absence of money. As early as 1847 Mariah King was pointing out that, "everyone sows wheat." By 1850 there were 5,589 acres of improved farm land in the county, it being evaluated at $74,545 (U.S. Department of Commerce, 1850-1935). Other crops that were widely grown were barley, corn, potatoes, and Timothy hay, but by 1880 the county was principally a wheat-growing area. By 1890 the Corvallis Board of Trade was touting the area's wheat: "Second on the list of the world's productions in the Liverpool market, the wheat from southern Australia alone being preferable and commanding a higher price (p. 7)." The Benton County Citizen's League in a 1901 publication described the agriculture in superlative terms:

The agricultural possibilities of the county can scarcely be surpassed by any section. The broad, level valleys of deep rich soil, the hillside and bench lands of brown and
red loam invite the farmer to put forth his best efforts to secure the abundant crops which await the well directed efforts of the husbandman (p. 11). Subsequent excerpts noted that, "the cereals grow here to phenomenal perfection," "hops of the finest quality are grown," "the clover and grasses grow remarkably well," "potatoes grow to perfection," and, "there are but few agricultural districts . . . where the properly directed energies of the agriculturist will be more liberally rewarded (p. 15)." Although the above can be attributed to Chamber of Commerce puffery, the agricultural promise of the county was undeniable. Wallis Nash, renowned English promoter of Benton County and future Regent of Oregon Agricultural College, saw a vision of the future in 1877:

It did not need a very strong spirit of prophecy to foresee a not distant future, when a farm-house would overlook each of these fertile glens, and herds of cows would range these now silent hill-sides . . . (where) each and all find homes, round which their cattle would graze in peace all the year round, and a heavier yield of butter and cheese would each year be sent from these cool hills to the hot and dry mining towns and manufacturing cities of California (p. 120).

Equally important and complementary to agriculture, was the livestock raising activity that was a part of each settler's homesteading operation. Usually, the settler arrived with a small herd of livestock which was turned loose at once to graze the surrounding valley and hill-sides. This practice of untended herds had its drawbacks in that predators, both human and animal, were known to prey on them. Bowen (1978) pointed out that the better farmers built sheds and barns of hewn logs to protect their animals from the dangers of the wilderness and the winter. Cattle, horses, sheep, pigs, and goats alike needed some protection from these elements.

Pigs, like the Spanish cattle that were brought into the Valley, were ideal animals for the frontier. They were among the first animals to
be introduced into the area (swine were taken to Astoria and inland to Fort Vancouver), and the least has been said about their role in the frontier economy. Bowen calls attention to this lowly beast's superior qualities:

They were hardy creatures that demanded little attention, and although they lacked the defensive capabilities of the long horns, they often made up for this with sheer pugnacity. Hogs were excellent gang fighters, ready to rush to the assistance of a herd member in distress. Furthermore they produced such large litters that their numbers rapidly multiplied. Versatility was the hog's outstanding virtue. No other domestic animal exhibited such facility and prowess in foraging for the necessities of life. If there was nothing to eat above ground, it would root up food from beneath the soil or even from under water. Swine hardly ever died from starvation (p. 87).

By 1850 there were 2,771 head of beef cattle, 111 milk cows, 629 sheep, 3,586 swine, 675 horses, 26 asses and mules, and 665 working oxen in the valley and foothills of Benton County. By 1860 the number of beef cattle, sheep, and swine had each passed the 6,000 mark; there were over 3,000 horses (U.S. Department of Commerce, 1850-1935). The practice of these early settlers was to allow their herds to graze over their own land, that of their neighbors, and if possible, over government land as well. By 1880 fencing of farms was becoming more common, thus restricting the movement of livestock.

The first settlers were attracted to Benton County because of the vast quantities of forage, abundant wildlife, fertile soil and sufficient timber to serve their building needs. Upon their arrival they began using the land in the way that was most expedient--grafting livestock on the profuse growth of grass in the valley and in the foothills. Longwood (1940) described the inter-relationships that the first settlers worked out:
Grass was turned into beef, beef was converted into money, and the money exchanged for farm machinery and other implements which were needed to place the land under cultivation. The land placed under cultivation with the farm machinery soon was able to produce enough surplus to begin paying for railroads and other avenues of transportation into the area. A reasonable theory, then, would be that all development up to the advent of the railroads was attained at the expense of the natural resources, i.e., the land and its interior and exterior qualities (p. 64).

By 1900 there was relatively little land of a desirable character open to settlement in the immediate valley floor in Benton County. The foothills were sprinkled with settlement, but the pattern was one of settlement, abandonment, and then repeated settlement. Many of the settlement sites identified in the McDonald-Dunn Forests reflect this pattern. By 1900 the population of the county was 6,706 persons, which was not a great increase over that of 1880. Farming was becoming more diversified i.e., more emphasis on crops other than wheat, and especially more land given over to the burgeoning fruit industry. As early as 1890 the Corvallis Board of Trade was touting the potential of the fruit industry in Benton County:

The whole valley will in time become an orchard, because its climate and soil especially adapt it for that purpose. All varieties of apples grow thriftily. Pears of the finest flavor and the largest size are raised. Prunes, plums, peaches, cherries, and small fruits, strawberries, blackberries, reward the orchardist for his care . . . .

This industry has not been prosecuted until recently; but an impulse has been given it by the completion, in the last few years, of railroads to that great fruitless country east of the backbone of western mountains . . . . The orchardist is getting to be one of the great wealth-producers. One of the departments of the State Agricultural College is devoted to the science of horticulture (p. 8).

As will be recalled from Chapter 3, Edward Lake was instrumental in establishing the prune industry in Corvallis during this period. Lake was president and manager of the Corvallis and Benton County Prune
Company in 1894. The fruit industry touches upon the history of the School Forests in another respect. Phillip Ritz arrived to Oregon in 1850 and took out a donation land claim on August 1, 1853. The claim, which included 320 acres in sections of 21 and 22 of Township 11S, Range 5W, was close to the School's property in the Oak Creek area. Ritz established a fruit nursery on this property, which was one of the first enterprises of its kind in Benton County, according to local historian Harriet Moore (1979).

Transportation

The first routes of transportation in Benton County, as was the case in most regions settled, were the trails and streams of the Indians. Long before the appearance of the Euro-American in the Oregon Country these avenues of movement had been continuously used. The first explorers used this network of transportation; subsequent trappers, stockman, miners, and others improved upon them; ultimately, pioneers made wagon roads of them. The primary Indian trails in the study area led from Yaquina Bay and Alsea Bay through low saddles in the Coast Range and into the Willamette Valley. Dicken (1971) summarized the process in describing how settlers came to the Oregon Coast:

... the prospective settlers often wished to travel long distances along the shore, so the Indian trails were modified and new trails and routes were established, more or less by trial and error, changing with the times, as new settlements were founded and old ones abandoned. Unused trails soon disappeared under the rapid growth of shrubs and trees, and only faint traces remain today. Many trails were obliterated later by the construction of roads which followed the same routes (p. 1).

There was no single route of movement through the Willamette Valley, but there were distinct travel patterns that were regularly followed. Generally, the objective of the early traveler was to avoid
the middle of the Valley, where it was likely to be marshy and impede movement, and to seek the edge of the foothills where the travel was easier. Both the east and west sides of the Willamette Valley were travelled throughout the settlement period, and the route became known by various names as time progressed.

The trappers of the Hudson's Bay Company made an annual journey in the 1820's with their furs from the Sacramento to the Columbia. One of the earliest documented journeys along this route was that of Alexander McLeod, who reached the Sacramento Valley in the summer of 1829 (Oregon Historical Records Survey, 1942). Several years prior to this, however, trappers of the North West Company and the Pacific Fur Company had been passing through what is now Benton County. In 1834, Hall Jackson Kelly (the inveterate and sometimes unappreciated promoter of Oregon), Ewing Young (famous mountain man), five men, and about 100 horses travelled northward from California along the west side of the Valley on their way to a ranch on the Chehalem. Early references to the route as "the Hudson's Bay Pack Trail," are common in the historical accounts of the early period.

This route was used in the 1840's by immigrants driving cattle from California, which furthered the establishment of the trail. There was also considerable southward movement of pioneers as the settlement period progressed; Lindsay Applegate in 1846 organized to explore a road from the upper Willamette Valley through Southern Oregon, then eastward toward Fört Hall on the Oregon Trail. In Oregon the north-south trail was often called the "Old California Trail," but there were also other California trails.

The route to California became widened to a passable wagon road
with the discovery of gold in California in 1848 and the ensuing rush in 1849. Corvallis came to play a role in supplying the suddenly increased population to the south—it became a staging point for pack trains that carried meat, cheese, flour, and other staples to the gold miners. One designation that was used during this period was, "the Old Oregon-California Pack Trail", which was more precisely descriptive and inclusive than previous designations. There were many routes that were used to move in, north-south direction, however, and some of these were known as distinctive trails. For example, the Molalla trail according to Ken Munford (1979), served as a north-south corridor for those not wishing to go all the way to the Falls of the Willamette at Oregon City:

... but wanted to enter the Willamette Valley farther south followed the old Molalla Indian trail from Eagle Creek, passing the present sites of Estacada, Colton, Molalla, Scotts Mills, and Silverton. Graded, straightened, often relocated over shorter or more convenient routes, the trail eventually became a wagon road that linked the Barlow Road with the eastside road along the foothills of the Cascades. It went south from Silverton... to Spore's Ferry on the McKenzie (north of Springfield) (p. 4).

In 1846 the Territorial government passed an act approving the construction of a territorial road from Portland to the mouth of the Marys River in Polk County. In 1851 another act was passed to establish a road "commencing at or near Thomas Reed's (sic) and terminating by the way Herbert's Mill at the southern boundary of Benton County (Oregon Historical Records Survey, 1942)." These, and several other roads that were approved, at one time or another carried the label, "The Territorial Road."

The Old Hudson's Bay Company Pack Trail gradually became a wagon road; eventually it became known as the Portland and Umpqua Valley Wagon Road. Today this route is closely approximated by Highway 99W, which
borders the School Forests. Thus, the lands contained in McDonald-
Dunn Forests laying adjacent to this important artery are tied in with
the larger story of the settlement of the Willamette Valley. An important
cultural resource that is on the border of the Forests and that dates
from that formative period in settlement history, is the Thomas Read
House.

The Thomas Read House

Mr. and Mrs. Thomas Read, who were the original owners of Benton
County's oldest frame house still in use, arrived to Oregon in 1845.
Read met his future wife while travelling across the plains in the same
wagon train, but she was then married to Zachariah Hawkins. Mr. Hawkins
was lost during the crossing (disappeared during a hunting trip);
Nancy Hawkins married Thomas Read about a year later after she had given
up on her husband ever returning. Read staked out a provisional land
claim about 8 miles north of J. C. Avery's claim, which was located at
the mouth of the Marys River. In November, 1846 Mr. and Mrs. Reed with
five children from Nancy Read's previous family moved into their newly
built cabin. Thomas and Nancy Read subsequently had six more children
of their own. In 1854, under the direction of master carpenter Bushrod
Washington Wilson (a notable figure himself in Oregon history), the
Reads completed their house that was located on the southwest corner of
their donation land claim. The house stood on the hillside overlooking
the Hudson's Bay Pack Trail (Munford, 1979). Bushrod Wilson had a varied
career that included building houses and railroads (he supported the
construction of the Oregon & California Railroad), holding political
office for 30 years, and engaging in an assortment of other business
and civic affairs. After his death in Corvallis March 4, 1900, at the age of seventy-six, he was described by one as, "a man who had left his impress upon the history of the northwest and its upbuilding (Carey 1922, p. 206).

Thomas Read, who lived to be 80, became a prosperous cattle raiser and farmer in Benton County. He subsequently acquired additional property adjacent to what became Camp Adair during World War II. Thomas Read died in 1892, followed by his wife who died in 1895; both are buried in Locke Cemetery at Lewisburg. According to Ken Munford, the Read House continues to stand on 23 acres of the original land claim. It is presently owned by Dr. and Mrs. Jerry Bowman. Considerable restoration and remodeling have been carried out on the Thomas Read House, but much of the original fabric remains.

An additional historical note can be added to the Thomas Read story. T. J. Starker, on November 14, 1933, made the following notation:

These two maples at the entrance of the Peavy Arboretum were planted in 1876 by Tom Read. They were not planted as trees, however, but as posts in a "stake and rider" fence. Many of these small maple posts grew and became trees which were later cut as fuel or because of interfering with the highway. These trees are now 30" in diameter and both lean to the westward.

During the mid-1930's Vern McDaniel became interested in the two maples and decided to ask some of the "old-timers" in the area about them.

He was told that 65 years ago a farmer had put a hay stack at that spot and had placed green maple posts at each end to which had been attached ropes to keep the wind from blowing the top of the stack away. These posts took root and formed the two trees (The Forest Log, 1937, p. 7).

Nettleton (1961) also noted the two big leaf maples and related that they were put in place by the grandfather of Kenneth Read (Thomas
TWO BIGLEAF MAPLES
Read) a forestry student in 1942. Kenneth Read was killed in Salerno, Italy during World War II, while serving as a Captain in the U.S. Army. Today, the trees still stand, but have suffered some from the woodpeckers and the general ravages of age (a large limb recently broke on one).

The Legend of the Gold-Filled Boot On Calloway Creek

Dame Rumor has it that an honest, law abiding citizen of the Soap Creek district was wending his weary way homeward from what is now our fair city of Corvallis. As he approached Calloway Creek, he heard strange sounds and determined to investigate. He came upon three men diligently digging as if in search of something. As he stood watching the strange episode, he swears he saw a miner's boot uncovered and that this boot was full of gold dust (Mason 1926, p. 12).

One of the persistent stories that surfaces from the historical record of the School Forests, is a legend of a miner who buried a gold-filled boot somewhere near Calloway Creek, in the present day Arboretum. The legend relates to the Settlement and Transportation themes, therefore, a capsule follows of the alleged events. In 1855 or 1856 a miner from the gold fields of California stopped at a Corvallis saloon to fortify himself for the remainder of the journey to Salem, where he was to visit his sweetheart. After imbibing he began to brag about his successes; on leaving the saloon he proceeded toward the now non-existent town of Tampico. The route to Tampico was along an old road that passed by Calloway Creek ("about a mile and a half from Tampico and within a few hundred feet of the northeast corner of our arboretum tract," according to Mason). Fearing that he was being followed, he placed the gold dust inside a boot and buried it.

The miner was never heard of again, according to the legend, and three
men in Corvallis--Hale, Livingstone, and Zimmerman--began to greatly prosper shortly thereafter. The passerby who happened upon the three men digging for something was seen: "Immediately steps were taken on the part of the former diggers to 'shovel out the brains' of the onlooker, who was able to save his head only through a forceful and rapid use of his pedal extremities... (Mason, 1926, p. 12)."

No evidence was found by the researcher to support this story. According to Harriet Moore (1979) there is a similar story that is associated with Silverton, Oregon. She suggested that both are probably un-supportable. Marvin Rowley once encountered a man in the Forest near Calloway Creek who was looking for the location of an old road. On questioning him, he disclosed to Rowley that he had a map that located the site of the gold-filled boot. Rowley did not ask to see the map, and nothing more was heard about that particular individual.

Mason's summary, written in 1926, of the gold-filled boot legend, included reference to Oregon's first telegraph line that followed the old turnpike. No other information could be found that shed additional light on this claim. Mason described it as follows:

"... the thoughts that sped along Oregon's first telegraph line which passed by Calloway Creek and followed political doings, and the myriad activities of human endeavor gladdened or saddened the people of that early day as does the telegraph of today... The only existence of this early activity, partly grown over staples, can still be seen on some of the trees along the route.

With the development of rail transportation and the building of the West Side Highway in the Valley, came the decadence of Tampico and the once oft traveled road became useless. The telegraph line fell into disrepair and the well-worn ruts gradually filled, leaving only a faint line along the hillside where once an important road directed the steps of sturdy pioneers to and from Corvallis and Portland (p. 13)."
No other reference to such a telegraph line was found; none of the informants interviewed for this research had heard this claim.

Tampico

Oregon is a pleasant place
    For dancing, fun and folly,
But you may search it o'er and o'er,
    You'll find no place like Tampico.

Hurrah, hurrah for Tampico,
    Three cheers for our town Tampico,
Corvallis never can take the shine.
    To it we never will resign.

One of the towns in Benton County that has gained notoriety over the years is the now non-existent town of Tampico that was located 10 miles east of Fort Hoskins on the road from Corvallis to Dallas (T 10S, R5W, Section 24). As the poem indicates, Tampico was considered to be a bustling little town that provided more than its share of entertainment (Sommer, 1976). According to some sources, it was a complex of saloons, race tracks, stores, dance halls, and other buildings that drew settlers from miles around, who came for general revelry and for ordinary business. It was a stage station and a trading post on the old Territorial route (Portland and Umpqua Valley Road) during the early days. The plat for the town was filed with the county clerk on November 16, 1857, but the town was probably laid out several years earlier. According to the courthouse records, the town site came into the possession of Green Berry Smith, by whom the plat was annulled and cancelled on January 23, 1860. The cause for this action has been the subject of some speculation on the part of historians.

In the 1940's the WPA initiated an historical records survey project to compile information on the historical records of counties. As a part of that project research on the various small Oregon towns was completed, one of which was Tampico. The following capsule of Tampico's history is
TAMPICO
Thought to be last building on townsite. Area to left was racetrack.

T. J. STARKER
Oaks felled to feed livestock in severe winter of 1881 - 1882
drawn from that research. In 1853, David D. Davis started a store and stage station beside a spring among the oak trees. At that place during the following year a post office, under the name of Soap Creek, was established. Davis was appointed as the postmaster. Another source states that William S. Crouch was the first postmaster at Soap Creek (Payne, 1959, p. 486). The name of the post office was changed to Tampico, and the community began to prosper. Twice a week the stage brought freight, mail, and passengers to Tampico. James O'Neal and William Beatty ran the first boarding house and livery stable; wild horses were broken at $1 a head in a corral attached to the stable. William Griffith was the first blacksmith; he also taught singing, conducted debates and directed other gatherings in the nearby school house. A Mr. Roberts ran a tavern at the south end of town; McDavis operated a carpentry enterprise; Crouch and Roberts were merchants who brought silk and satin to the pioneer community; Davis, who gave Tampico its name, ran a variety store; William Bowers operated the Arcade Saloon.

According to this account, people travelled from miles around to gather at Tampico for news, mail, recreation, business and related matters. People would come there from all directions on Saturday to hear the news. Some would have letters from the East, and any bits of news was passed around. Then some diversions were always planned, or at least something diverting happened. One day there would be a horse race. Another time there would be a shooting match with, perhaps, a pig for a prize. Sometimes when men had serious differences of opinions they would arrange to settle it at Tampico on Saturday afternoon. Many were the fistic encounters on the green at Tampico (Oregon Historical Records Survey, 1942, p. 35).

This account was recorded by Mrs. Annie Brown, a resident of Suver, Oregon during that time (1940's). It was also noted that Tampico had the principal race tract in that part of the Willamette Valley, where some
of the finest horses in the country raced. The general portrait of the community: a raucous, bustling community given to abundant revelry, that rivaled Corvallis in many respects. Some have assumed that Green Berry Smith acquired the property upon which the town was located, in order to end its legal existence. There are other opinions about the major outlines of Tampico's history.

Local historian and ex-O.S.U. Archivist Harriet Moore, believes that the reputation of Tampico is exaggerated. According to Mrs. Moore's research, the stories of boisterous behavior at the town are not in any way associated with Green Berry Smith. Smith, who often made loans to the citizens of Benton County, was a respected farmer and state legislator. She speculates that Smith may have acquired the tract by a foreclosure on a debt, because most of his property was located in the southern part of the County at that time.

Mrs. Moore also questioned that a stage passed through Tampico, because stage coaches between McMinnville and Corvallis did not travel on the west side of the river:

You had a stage coach between Portland and Lafayette, you had one between Lafayette and McMinnville on the west side, but the stages otherwise came down to Salem and crossed the river. They came to Albany down through Jefferson and Albany, and crossed the river on Rainwater's Ferry, and came on to Corvallis. They didn't hit Tampico.

I've gone through the way bills (p.8).

Moore pointed out that there was mail service, and that Mrs. Avery's brother, EdmondMarsh, was the mail carrier and worked from Dallas. Marsh travelled by mule, however, as they were not using stages for mail delivery at that time (1860).

Another point of disagreement stems from the belief that the soldiers from Fort Hoskins partook of Tampico's revelry:
The saloon was a favorite gathering place for soldiers stationed at Fort Hoskins in Kings Valley west of Tampico. They came into town to drink, fight, and race horses. Gamblers boarded in Tampico for weeks and even months to participate in the town's sprees (Sommer, 1976, p. 2).

Moore pointed out that there were no roads from Fort Hoskins to Tampico in that time, that the soldiers did not have horses for their use—they would have had to walk the distance. Also, there was a road built from Hoskins over to Siletz and she believes that any liquor purchased would have come from a settler store outside the blockhouse at that location. As for the general social environment of Tampico, Harriet Moore noted that:

... I can't see how they could have even had three saloons. You hear that they had three saloons and that they had a race track. I feel quite certain that there is authenticity about a race track out there.... Race tracks come up all over the country. That seemed to be the practice.... We know that there was a track out here at Fairplay.... We know there was some kind of a race track out here south of town (p. 7).

By 1885 David Fagan was already designating Tampico as a "has-been" in the county -- gone, except for a few remains, but not forgotten:

Who of the "old-timers" is there that does not remember Tampico, situated just south of the old Soap Creek crossing on the old pack trail. A quarter of century ago this was a place of considerable importance and famous for the "high jinks" held within the bar-rooms. But the glory of Tampico has departed, and for years past it has been a pasture for browsing cattle and nibbling sheep; only a few delapidated houses remain (p. 455).

Therefore, Tampico's past--mundane or ribald--is not agreed upon, but it is known that the town existed at that location and that Green Berry Smith, for whatever reason he may have had, annulled it in 1860. Marvin Rowley (1979) remembers a school house that was still at the townsite as late as the 1960's. It was used for storage at that time.
The Ed Blake Home Site

Another site that represents the early settlement era in the School Forests is the Ed Blake homesite (T 10S, R 4W, Section 30) which dates from the 1850's. The Blake property in the more recent times (1940's) was located across the road (Highway 99W) from Adair Military Base. According to a widely circulated story, two young ladies rode their horses to visit the Blakes, stuck their black locust riding whips into the ground upon their arrival, and failed to remove them on leaving. These in time sprouted and today are large trees still standing on the site. According to Harriet Moore (1979) there was some relationship between the Blakes and the John Stewart family, who lived north of Corvallis; it was Mrs. Stewart and one of her girls who rode over on that day, and left the whips. Mrs. Moore talked with Ed Blake about this episode while he was still living in the house:

... she broke off this switch from the locust tree down there and used it on the way out and when they came to go home she had stuck it in the ground right close to where they had tethered the horses at the back door and they went to leave and he said, "Well you didn't get your whip," and she said, "I don't need that on the way home," and so they left it there and nobody paid any attention to it. (1979, p. 4).

Moore remembered that she measured the tree (she only remembers there being one tree) on that visit during the 1940's, and that the circumference was 10 feet at that time.

Bill Davies (1979), who was McDonald Forest Manager during this period, also remembers personally talking with Ed Blake. Davies recalled that Blake was in his eighties at the time and had realized that he could no longer live in the spacious two-story house:

Well, we were up there when we were dickering about the 40 back in there from him. He was talking about the old days, and he said the old Portland-Umpqua
Valley Highway went this side of his house, right through there. . . . He was telling me stories about the early years when he was just a little guy. He said one day two girls came riding through there on horses and they had these locust slips for their horses, and they stuck them in the ground and then I guess his folks or his wife, whoever was there with him, invited them in for tea or something, like they always did in those days, and when they left, they forgot their whips . . . and they sprouted and grew. That's his story (p. 21).

A related story associated with Ed Blake concerns the use of the old California Pack Trail to move Indians to the Siletz Reservation. According to one source (School of Forestry, 1972), Blake stood on his porch and watched the U.S. Army move the Indians from southern Oregon past his house:

Mr. Blake . . . could recall standing on the front porch and watching the Army move the Southern Oregon Indians to the Grande Ronde Reservation after the Indian uprising in 1878. They followed the Portland and Umpqua Valley Road to Fort Hoskins and then on to Siletz and Grand Ronde.

No other corroboration for this claim was found, but extensive research on Indian history for that period was not undertaken. The story has been repeated several times, but the dates do not agree among the versions. For example, Anderson (1939) noted that:

The tribes wandering in this vicinity were removed to the Grand Ronde and Siletz Reservations in 1857-1858, following the Indian Wars of 1855-1856 (p. 3). Earlier residents passed down stories of watching the Indians as they were moved over the California pack trail, bordering the Peavy Arboretum, to their reservations. This was a colorful and memorable occasion as braves, squaws, and families paraded down the trail built by settlers (p. 4).

Additional research would be necessary to clarify U.S. - Indian affairs for this period, and the movement of Indians in western Oregon.

The School acquired the Blake house in 1952 when the Hospital
Reservoir area was obtained from the Federal Government. The house was rented for a period, but it became difficult to get satisfactory tenants. When it was periodically vacant the people from Adair and elsewhere vandalized the structure, according to Davies. Davies decided to burn it in order to eliminate the management problem, but several individuals in the community protested on the basis of its historical worth. Everything of value was stolen from it--old fashioned door knobs, hinges, and doors--and it was in a general state of deterioration, so Davies ordered it burned. The fire department from Adair used it as a fire-fighting exercise about 1960.

**The Wild Goats In The School Forests**

Another legacy from the settlement period was the existence of one or more herds of wild goats, which probably originated from animals that were abandoned, or wandered away from small farms in the area. As recently as the late 1950's Bob Krahmer (Professor of Forest Products at O.S.U.) who was a graduate student in the School of Forestry at that time, remembers hearing many stories about these goats. Some were seen around Powderhouse Saddle, but they probably ranged throughout the School Forests. T. J. Starker, in a memorandum written October 19, 1933 mentioned that:

> There were approximately 50 head of goats on the Coon Tree Point bald spot, and indications that there were still some within the Stella Smith area. Noted 3 head of sheep grazing at the Carlson Area (p. 1).

Again in 1936, Starker noted: "We are still chasing goats out of the plantations and the silvicultural boys are still poisoning rodents with good results (p. 18)." Vern McDaniel (1979) recalled that they became a menace to young seedlings and other small trees and plants, and that they were periodically hunted:
I... looked all over the country to find the owners of them, nobody would claim them. Mohair was down to nothing and they didn't want to go up there and pick 40 or 50 goats. There was no brand or any kind on them or anything, so... Dunn gave the order to shoot them. They got permission from the sheriff. He said, "Well, they're on your land, aren't they?... well, shoot them (p. 29)."

McDaniel also remembers that during the "big snow of 1937" there was a herd of goats stranded on Vineyard Mountain in six or seven feet of snow. Some of the CCC enrollees were dispatched to the area of Peavy's Cabin where they scattered hay to lure the goats to them. They were loaded in trucks (about 30 to 35 according to McDaniel) and transported down to the highway (99W) where they were turned loose. In recent years there have been no reports of goats in the School Forests, but McDaniel thinks that there are probably still a few surviving.

**Settlement Sites In The Forests**

Evidence of human settlement in McDonald-Dunn Forests is abundant (see map of "Settlement Sites"). The typical homestead probably consisted of a simple wooden dwelling, a few crudely constructed structures for farm animals, an orchard of varying size, a garden plot, a garbage disposal site, and a nearby source of water. In most cases the structure has either "gone back to nature" or been intentionally destroyed by School personnel (burning, knocking walls down, etc.).

Closer inspection of the immediate environs of these sites usually surfaces relics of a bygone era--rusting stove parts; fragments of glass and wire; remnants of buckets and other implements; an occasional fender or gas tank from a 1920 vintage automobile; and, a depression in the ground where a basement or garbage pit may have existed. Many sites are marked only by the remains of an orchard, and the presence of other exotic plants, such as St. John's Wort. Taken as a whole, these sites...
are an indication that the human use of the McDonald-Dunn Forests was
typical of the general settlement pattern in the foothills.

Small scale farming, livestock raising, and fruit production were
commonly engaged in throughout this settlement epoch. Another important
economic activity was logging, or those related activities associated
with harvesting the timber resources of the study area. The discussion
now turns to a consideration of those aspects of the School Forests' past.
2. HARVEST ACTIVITIES

The abundant forest resources of the Oregon Country were an essential ingredient to success in the early penetration and settlement of the region. As early as the 1830's Hudson's Bay Company was developing a lumber industry for Company use as well as for exportation. The first sawmill in the region was built by HBC in 1828 on the Columbia River, a few miles upstream from Fort Vancouver. Many of the early loggers were Hawaiians, and much of the harvest was traded in the Sandwich Islands:

Much of the lumber was shipped to the Sandwich Islands where prices were very good, since the Islands continued as a major stopover area for crew replacements and repairs, not only for the fur trade but for whaling vessels and other shipping. Lumber production in turn involved the building and operation of sawmills.

... By 1836 the mill employed 28 Kanakas at a wage of 17 shillings per year, plus food that consisted mainly of smoked salmon and sea biscuits. The Company considered them excellent lumbermen, but later was forced to reduce their wages below that of white employees because of the latter's complaints (Duncan, 1972, p. 7).

Clark (1927) described the lumber activities of the HBC in 1839:

Here in 1839 thirty or forty Sandwich Islanders were felling timber and dragging the logs to the mill and often shifts were employed running the saws night and day. This mill cut three thousand feet of lumber every working day and the Company shipped 900,000 feet per annum to foreign markets (p. 443).

By 1849 Oregon City, which was a serious contender with Portland and Seattle for the leading city in the Northwest, had two sawmills.

Throughout the Territory there were 15 sawmills, but the domestic market was not adequate for the production. The discovery of gold in California provided an economic stimulus for Oregon's economy in general and the lumber industry enjoyed its share.

The first settlers in Benton County (1846) availed themselves of the
exhausted. Longwood (1940) described the skid roads:

Poles, six to eight inches in diameter and eight feet long, were placed at half their thickness in the ground, and at right angles to the road. The middle of these skids would be "saddled" to keep the logs in place, and crude oil or tallow used to grease the skidway (p. 49).

Conklin (1923) discussed the unique problems west of the Cascades with which the early day loggers had to contend:

The steep ground, large timber and abundant rains presented a new and more difficult problem. . . . Close to the streams on steep sidehills, trees were fallen on mats of smaller trees, which would skid them down the slope into the water. Jack screws and peavies were the chief tools used and the operators were called "Hand Loggers." . . . Along with the hand loggers came the bull teams. Skid roads were built back into the woods. These roads consisted of logs with a saddle cut in the center, laid at right angles with the traffic at short intervals along the route. Only the best logs were taken from the tree and were drawn several at a time down the road by teams of oxen. . . . The ox-teamster was the king of the camp and could swear more fluently and chew more tobacco than any man on the works. The boy who greased the skids ranked in camp as does the present-day whistle punk (p. 31).

Patterson (1925) pointed out that if the logs ran, small gravel was thrown on the skids. This technique of transporting timber caused the loggers to leave standing the "large swell butted trees." Also, there was waste in felling in that the trees were cut 12 to 16 feet off of the ground to avoid the swelled portion near the ground. Another wasteful feature, according to Patterson was the crib bridge, which was frequently 40 feet high, and always left to decay, as there was no way to get this timber into the skid road.

Much of the timber logged in this manner was dumped into small streams, necessitating a system of splash dams. These were usually placed at sites where the largest body of water could be most easily impounded. If several dams were necessary, the construction of these was done in a manner that would allow the logs to be sluiced through.
timber to build crude homes from logs cut by hand and skidded by oxen. According to Longwood (1940), virtually the only timber available in the valley at this time was on the banks of the Willamette and Marys Rivers and other smaller streams. The annual report of the Government Commissioner of Agriculture stated that Benton County had a belt of timber land about one-eighth mile wide along the Willamette River, running the length of the county (Longwood). Since the transportation network of the area was not yet developed, there was little market except for local consumption. According to Anderson (1939) the densely forested hills north of Corvallis were at one time nearly bare of tree growth. Anderson interviewed Mrs. Jerry Henkle of Philomath in 1939 about early logging practices and the landscape in Benton County. She recalled her husband's statement that, "he could jump over everything that grew on one hill adjacent to the forest, and the whole valley was referred to as a prairie country (p. 4)."

According to Mark Phinney, historian for an historical survey sponsored by the W.P.A. during the Depression, there were several mills throughout the county by 1850. He listed these as: (1) one on the Marys River, one and one-half miles above Corvallis, (2) one near Fort Hoskins in Kings Valley, (3) one on Beaver Creek near Belfountain, (4) one was near Monroe, (5) Corvallis had one mill, and (6) one was near Alpine (1938).

These mills were small, poorly equipped, and relatively primitive by today's standards. The usual procedure was to use oxen for skidding logs to the river banks, where they were floated downstream to a mill. If logs had to be skidded any distance, which was not often during this early period, skid roads were constructed. Most timber was taken from easily accessible river banks and adjacent areas, until the supply was
The springboard came into use on the coast during the 1860's; the
crosscut saw or "misery-ship" along with the ax were the established
tools for felling trees. With time, logging innovation brought the use
of steam. Conklin described the advent of steam power and use of the
"donkey":

John Dolbeer was one of the first to conceive the idea
of the donkey. He rigged up a little engine on skids
so it could be easily moved about. Instead of using
drums, the power was transmitted to the line by a spool.
A spool tender took in the line as it was hauled in. One
of the first donkeys of this type used in Oregon was a
little two-cylinder, 6½ by 9. It was 700 feet of 5/8
line and had no drums. A horse was used to haul the line
back to the woods. Water was carried to the boiler in
canvas bags by a pony. By means of a two or three block
purchase, a log was snaked out to the skid road . . . .
Donkey engines were first used to load logs, then to yard
them to the skid road, where the bull teams would take
them to the water (p. 32).

Water transportation of logs in Benton County occurred as early as
1856 as is evidenced by the appointment on April 8 of A. G. Harvey, who
was "to ascertain the practicability of making Marys River navigable for
sawlogs and lumber from Matzger's Mill . . . in Blodgett Valley (Longwood
1940, p. 48)." This procedure was done and the river was declared
navigable.

The use of flumes was another method of transporting timber from its
source to a processing site. Flumes also had uses that were unrelated to
timber as Merlin Blais (1953) pointed out:

By comparison (with white water) the man-made flume
appeared utilitarian and tame. But many a timber beast
had his fun riding fast water in a flume, only 3 or 4
feet wide and sometimes 30 feet or more above the ground
on trestles. Sometimes he did it on a dare, but in
some operations it was simply the easiest way out of the
woods . . . . Forty or 50 years ago, loggers for a number
of fluming outfits could on a Saturday evening hasten the
trip to the bright lights by going out with the lumber.
. . . . "We'd carry our fancy shoes and shirt in a sack
along over our shoulder. You had to be catty on your feet on the curves and steep places... Some places it was like water-skiing. The flume went under several small bridges, and we'd jump on top, run across and drop back on our plank again (p. 2).

At least one flume operated in McDonald Forest sometime after 1915. (More will be said about this cultural resource when specific sites are discussed).

By 1880 the timber industry was becoming more important in Oregon and Benton County. Wallis Nash, noted in 1882 that, "The timber of Oregon is of world-wide fame. It will take many years to exhaust the districts even now accessible to river, railroad, or harbor (p. 222)." In 1880 there were eleven sawmills in Benton County; the largest of these had a capacity of 10,000 board feet per day.

The early pattern of cutting was one of taking only the best trees—a skimming process involving those trees easily accessible, sound, and of high value. Much timber was derived simply from clearing land; Chinese labor was often employed because it was cheap and efficient. Sometimes the Chinese were denounced for their industriousness, as Wallis Nash wrote in Two Years In Oregon:

How vehemently have I heard denounced the yellow-faced, pig-eyed, and tailed Mongolians who were spreading like locusts over the face of the country, and ousting the poor but honest and industrious white laborer from those employments to which he is specially adapted—how they sucked the life-blood of the people in order to carry their ill-gotten gains across the seas; how their barbarous language and filthy social habits... (p. 202).

Racism as a continuing historical thread in the settlement of the Pacific Northwest is not within the scope of this research. Suffice it to say that the immigrants from the Orient played a significant role in the overall development of the region, and specifically in the timber industry.

Johansen (1967) used Dean McCulloch's Woods Words to describe the
men who worked in these early logging camps:

The logger was not fastidious; usually he was a transient, a drifter with no dependents. If he "threw a wingding" (lost his temper), "threw the rope over the top" (worked so carelessly as to endanger another's safety), or "played Arab" (not on the job when needed), or "threw the book away" (disregarded orders)—the yell "Draw your pay" from the "rawhider" (a driving boss) "tramped" him and sent him back to Portland or Seattle skid roads (p. 405).

The transient logger tied his bed roll on his back and looked for another "rat's nest" (duty camp), but there were other sorts of men who appeared in the camps throughout the Northwest. Many of these stayed to rise to higher positions; others turned to logging as a supplemental form of income beyond what they could earn farming or engaging in other activity.

In 1885 Fagan described the Soap Creek area:

At the head of Soap Creek and along the Willamette, fir timber is abundant, while on the hill sides there are still many splendid groves awaiting the woodman's ax. Most of the slopes produce an excellent quantity of oak, but unfortunately there is no saw mill in the precinct where these various kinds of wood can be manufactured into lumber, the greater portion of which, for building purposes, being obtained from King's Valley mills. Still, the precinct possesses a good mill site near the head of Soap Creek, with excellent water power, an unfailing supply of timber, and a good market (p. 454).

This must have been one of the eight privately owned sawmills operating in the county in 1890. The Corvallis Board of Trade in that year stated that of the eight lumber mills in Benton County the largest had a capacity of 18,000 feet per day, and the average for all was 8,000 feet per day.

In summarizing the period from 1885 to 1900 Longwood (1940) pointed out that cutting in Benton County's forests continued to be light (as measured against a later period), and that large areas of Douglas fir and other species were coming in. Fires were still frequent, however, as no provision for fire suppression existed. From 1883 to 1903, a total of 12,515 acres of Douglas fir came in; 240 acres of this became established
between 1883 and 1893 and 12,275 acres from 1893 to 1903 (p. 73).

After 1900 logging in Benton County rose to greater prominence. One stimulus to the industry was the need for railroad ties, largely for the Southern Pacific Railroad Company, but the demand was increased in other realms as well. Another important factor was the establishment of an equilization rate on lumber shipments made by rail. This allowed forest products from this area to be marketed in other areas of the state at a comparable price. Toward the late 1880's a large mill was built in Corvallis, located on the north end of second street. Logs were rafted down the Marys and Willamette Rivers to this mill, and to other small mills located throughout the area.

By the early 1900's the destruction caused by forest fires and a growing consciousness for the need to conserve, brought about remedial action. Individuals in the timber industry and private forest land owners began to work for the establishment of protective associations; the Booth-Kelly Lumber Co. initiated in eastern Lane County what was probably the first cooperative forest patrol in Oregon (State of Oregon, 1978). The Oregon State Legislature passed a law requiring burning permits during closed season, and authorizing county courts to appoint fire rangers. In 1907 the State Board of Forestry was created; by 1909 over 1000 citizens were enrolled as volunteers in the fire wardan program. The creation of cooperative fire associations was an important outcome of the period. The Polk County Protective Association which was formed in 1913, also protected lands in Benton County.

An indication of the importance of forestry in Benton County is seen in a report prepared by the U.S. Forest Service in 1934. It found that in 1930 approximately 15.3 percent of all persons over ten years of age
engaged in gainful employment in the county were working in forestry and forest product-related industries (U.S. Dept. of Agriculture). According to Longwood (1940) there were 40 sawmills in the County in 1936 and over 700 men were involved in logging and milling.

In summarizing the history of land-use in Benton County Frank Longwood made several points that have relevance to this research. The following selected excerpts from his conclusions offer insights that are useful in understanding the human uses of McDonald-Dunn Forests, especially with reference to harvest activities:

1. The land in Benton County has been used in an empirical manner from the arrival of the first white men to the present... The universal policy has been that of taking as much from the store of natural resources as possible and returning as little as possible. The future of the land has been considered with indifference.

2. Benton County has developed largely as a result of the exploitation of its natural resources. The presence of these resources lured the first men into this country;... the abundance brought additional settlement; subsequent development has been based on the continued exploitation of natural resources.

3. Valley and foothill land has been placed in the highest use possible under the existing conditions.

4. The elimination of annual fires (by the Indians) has proven that when nature is not hindered by unnatural conditions it will tend to establish the climax plant types... For most of Benton County this is a cover of mixed conifers and/or hardwoods, with the conifers predominating in the foothills and mountains.

5. The dearth of timber and prevalence of grass when the first settlers arrived was the direct result of annual fires set by the Calapooia Indians. (According to research reported by Sprague and Hansen (1946) ring growth studies in stumps revealed that the country was frequently burned for at least 296 years, or since 1647.)

6. A program of proper land use is needed to alleviate and to repair damage on privately owned lands of all types, including forest, grazing, and agricultural lands.

7. The present rate of forest depletion (in 1940) and the manner in which denuded forest lands are managed will lead to the decadence of the logging and milling industry unless some
abrupt change is effected. (Change was effected, and the industry is far from decadent.)

Harvest Activities and Sites in McDonald-Dunn Forests

During the winter of 1881-1882 homesteaders living along the present day eastern boundary of McDonald Forest (west of Highway 99W) were faced with the loss of large numbers of livestock due to the lack of forage.

Anderson (1939) described the events:

The prairie country of the valley was suited primarily for the raising of cattle. Stockmen relied upon the lush growth of bunch grass and low browse for year around forage, cutting no winter hay for their cattle. This practice continued for many years until 1881 when a very heavy snow covered the existing browse and brought a serious shortage in food. Cattle began to die off like flies. To provide cattle food, the farmers cut many oaks and hauled them down to feed the bums and twigs to their stock. Oak stumps remaining in the Forest are evident of this cutting. Incidentally, 1881 recorded the heaviest rainfall at the Albany station from the period 1879-1930 (p. 7).

The School of Forestry's file of historical photographs provided a look at remains of this activity. T. J. Starker, who was a faculty member at the time, is shown among the large stumps (see photograph). In more recent times Marvin Rowley has seen these same stumps, which provide an indication of some of the early uses of the Forest.

There is little written record of the early harvest activities in the Forest. The remains of logging activities--sawmills, logging roads, flumes, skid roads, splash dams, sawdust piles--do provide evidence that the McDonald-Dunn Forests were an early source of timber. One of the earliest accounts is written by Earl Mason who described, in somewhat poetic prose, the logging that occurred on the Arboretum:

In 1911... an Irishman, named Mahoney, built a six to seven thousand capacity sawmill on Calloway Creek, just east of the present arboretum. For the first time, the arboretum experienced the dull thud of the axe, the screech of the saw, the crash of falling
timber, the grunts and curses of sweating men, the slow and methodical tread of the horses as they dragged the logs along the skidroads, and the further coughs of the steam engine as it turned the shrieking saw which rent the logs and turned out ties, ties which were hauled to the Southern Pacific Railroad at Calloway Station. In 1916, this activity ceased, but eighty acres of our arboretum had lost most of its timber (1926, p. 14).

Much of the logging was done during the early decades of the twentieth century, according to Rowley (1979) and many of these sites can still be located throughout the Forests:

... we don't have any record of the real early mills, ... before 1900, but after 1900, especially the rebuilding time ... after the First World War, there were numerous mills scattered throughout the area. ... I know of three mill sites on Oak Creek itself that are on the Forest. There was probably five or six mill sites on Soap Creek, just off the Forest. ... there was a mill site just east of ... Adair Village.

Much of the timber was moved from the site by horse, and at a later date, by truck. Small portable mills were established at a water source, the surrounding area was logged, and the operation was eventually moved elsewhere. One means of transportation in McDonald Forest was by flume. Sometime after 1915 a flume was constructed that operated from the west fork of Oak Creek, down to Oak Creek, and toward Corvallis, John O'Leary, who was a graduate student in the School of Forestry in 1945, remembered seeing evidence of the flume and the mill:

... the main mill was up the west fork of Oak Creek, and you can still see the old fly wheel of that mill ... the flume went right down that creek, made the turn when it hit the main fork of Oak Creek, ... then turned, and I don't know where it went from there, but somebody told me it went on into town (1979, p. 19).

The exact route of the flume after it emerged from McDonald Forest is not well known. Many people remember the existence of Oak Creek Flume, but no one interviewed could precisely detail its route. A map
from the historical map file at Oregon State University shows "location of proposed flume" which was part of the Heath Tract. The map is dated April, 1915 and it follows a course that passes by a "schoolyard," and generally follows Oak Creek toward a county road. The details are not sufficient to determine the extension of the route.

John O'Leary, who is presently on the faculty of the O.S.U. Department of Forest Engineering, has some of the bricks that supported the flume. The piers were wooden, but they were set on red brick foundations about 6 x 6 feet in dimension. Rowley and Jackson (1979) could find no evidence of the wooden parts, but Rowley had seen fragments as recently as the early 1960's. They were able to locate the mill site on the west fork of Oak Creek during the summer of 1979. The site contained fragments of a metal flywheel; deteriorating piles of red brick and fire brick; the location where the fire pot for the boiler was placed; a depression on the ground that was man-made; random lengths of cable; stumps, and other evidence of logging activity. The old road bed that provided access can still be followed.

Bill Davies (former School Forests Manager) remembered seeing support beams, rotting timbers, and, "the dangdest mess of brick down there, way down in the bottom (of the creek) (1979)." Davies ran a survey line through the site once and had intended to have all of the brick carried out.

As the Cultural Resource Inventory indicates, Oak Creek has been the scene of much settlement and harvest activity. Several harvest sites are identified, particularly along Road 600 and near its junction with Road 6020. The School Sawmill, which will be discussed under the Education
theme, operated in this locale. Most of the sites can be identified by such clues as vague traces of road beds leading toward disintegrating piles of sawdust, or bits of brick, pieces of automobiles, and other logging apparatus. Sometimes the presence of sawn lumber, usually covered by encroaching bramble, provides the necessary evidence to assume human activity. Most harvest sites are associated with water, which was obviously necessary for transportation and later, for cutting with steam-powered machinery. No attempt will be made here to describe each harvest site in detail. The Inventory provides specific information on physical environment, historic fabric, location, condition, and other details. A description of one site, however, might serve to exemplify harvest sites in McDonald-Dunn Forests in general.

Rowley and Jackson on July 23, 1979, visited a site in Dunn Forest that was located about 1000 feet south on Road 200, South Fork Berry Creek Road (northwest one-fourth of Section 16). The site consisted of several components: an abandoned road, house sites, mill site, slab pile, log pond, and assorted debris scattered over the area. Rotting timbers, sawn lumber remnants and other evidence of a structure were still in evidence. Rowley had located this particular site several years earlier through information provided by Bill Davies and other residents of the area.

There had been several structures erected to house the mill, store equipment, and provide shelter for a few workers. One structure was used for the machinery that conveyed the slabs away from the mill, hence, the slab pile that still exists. This pulley-driven mechanism had a chain and cross-bars. The mill was probably powered by gasoline or diesel as there was no evidence of steam use. There was a large room with
an attached lean-to that was used for storage. This building, which Rowley burned about 1968, was approximately 10 X 20 feet in size, and stood on posts about one foot off of the ground. Some of the structures must have been used by the five or ten persons that were required to operate the mill. The remaining structures were "bumped with the cat," as Rowley termed it, and are deteriorating in rubble piles. Several roads provided access to the mill, one came directly in off the county road.

Close to the mill was the earthen dam that served as a log pond for the operation. Since a typical mill sawed logs as rapidly as possible, storage became essential; it was the pond that provided efficient storage. Also, logs were much easier to move about in water than when stored on the ground. A common practice, according to Mary Rowley, was to build a dam by moving dirt in on two sides, then placing a timber across the creek at water line. Then planks were driven into the dirt at an angle across the dam; the water would cause the planks to swell to a tight fit. This technique provided a cheap and relatively efficient dam that lasted until the planks rotted. Flooding during 1973 or 1974 removed all of the remaining evidence of the man-made dam. An experimental research apparatus installed on the dam by fish and wildlife personnel from O.S.U. continues to operate in this area. Research had been going on at this site for at least 25 years, according to Rowley.

This site was the location of previous human occupation, unrelated to the saw mill operation, according to Rowley. Strewn over the area were parts of automobiles of the 1920's vintage—found were a gas tank, fender, dashboard, steering wheel, and crankcase—as well as much other evidence of human use. St. John's Wort, an exotic plant to this area, is found in various places at this site. The presence of this plant is
usually indicative of a homestead.

The saw mill was operating as recently as the 1940's when the U.S. Government acquired the land for incorporation into Adair military base. A stand of Douglas fir across the road from the mill site was about 26 years old in 1960, thus indicating that it had been clearcut around 1934 (Rowley, 1979). Other vegetation on this site includes blackberries, Tansey ragwort, maples, oaks, and grasses.

In several respects this site on South Fork Berry Creek Road represents a typical "Harvest" cultural resource site. It was based on exploitation of the natural environment in the most expedient manner i.e., cutting of easily accessible timber near a water source and close to transportation lines. It experienced several phases of human occupation, probably commencing early in this century and ending with the acquisition of the land by the U.S. Government. The historic fabric--the remains of human activity--has been either eliminated by human action (deliberately in most cases), or is deteriorating through natural forces. There are virtually no written records pertaining directly to the specific site; there are a few aging first-hand informants who are difficult to locate. Finally, with "Harvest" sites, as is the case with virtually all other cultural resource sites in the Forests, Marvin Rowley is the best single source of information.

Harvest and Management Since 1925 in McDonald-Dunn Forests

It is difficult to discuss contemporary harvest activities in the School Forests without mentioning the general management framework that has evolved since the first acquisition in 1925. Initially, there was no management in the sense that it is now known. The early planting of trees in the Arboretum was carried out in conjunction with forestry
classes under the direction of faculty members such as T. J. Starker. T. J. spent many evenings and weekends of his own time in overseeing various activities.

In the 1928 edition of *The Annual Cruise* a satire appeared that gave an indication of these early activities. Under the heading, "Blue Monday--A Tragedy In No Acts," the characters are listed as: Prof. Starker, twenty-odd budding silviculturists, shovels, mattocks, young trees,"Two-Bits," and "Six-Bits." The students and their "prof" travelled to the Arboretum in the School's venerable trucks, where they spent the day planting trees.

... finally arriving at plantation with very heavy loads of trees. Time out for wind recovery. After rest period, trees are planted at rate of 11 per hour per party. Johnson falls in poison oak and receives much sympathy... Brown discovered asleep under a log... Rain which has been damp all along, suddenly becomes wet. Class seeks shelter.

Prof. Staker: "We'll start back to town just as soon as all these trees are planted." Planting progresses at rate of 120 trees per hour per man (Scientific note: Trees may be planted much faster if three or four instead of one are placed in every hole). (P. 43).

Fisher, writing in 1937 mentioned that, "The Arboretum has been developed largely through the efforts of Professor Starker (p. 43.)" In the same article Fisher described the management of the Forest at that time:

The forest is managed by four faculty members, Professor Earl G. Mason, assistant to the Dean, being in general charge of the McDonald Forest. Professor Patterson directs improvement work such as the road system that has been constructed by the CCC. Professor Kearns has control of the research program. Professor Starker has personal supervision of the 170-acre Peavy Arboretum in connection with McDonald Forest (p. 43).

It was obviously more responsibility than a committee of faculty members or an occasional class could effectively undertake. The solution to this problem came in part with the annual Arboretum Day or
"A"-Day" as they came to be called. In 1932 The Annual Cruise noted that:

According to the custom of the club, Arboretum Day is observed once each term. On this occasion members of the club contribute a full day's work in developing the Arboretum tract. Each year this development reaches greater proportions, and the fine spirit in which the work is accomplished speaks adequately for the interest in the project (p. 23).

The CCC program at Camp Arboretum had removed some of the need for this cooperative effort, but there was still much work to be done. The Annual Cruise for 1937 told of resuming the traditional "bean festival" (Harry Patterson's famous bean-hole beans), using the rule, "no work, no beans."

Ribes eradication, snag falling, trail clearing, sign posting, cordwood piling, log bucking, and general cleanup of fences and projects constituted the major part of the work. The entire morning was spent on manual labor, or at least, on the fernhopper's conception of it, . . . the boys gathered at the cabin for a general bull fest and interchange of woodland lore (p. 69).

A-Day's came to be an institution at Oregon State College that not only accomplished much necessary work on School lands, but also provided socialization opportunities for students and faculty. Bill Wheeler, who came to Oregon State University in 1949, is completing his thirty-first year of service in 1980 ("I'm somewhat persuaded that this is a permanent job," says Wheeler). Wheeler remembered the A-Days during the 1950's and the role they played in the School's programs:

The purpose was two-fold. One was to have a cleanup day on the forest, the other was to have contests of various kinds and fun in general. . . . one of the things would be to . . . cut out the invading Douglas fir and other unwanted species in the Pine Race study. . . . as well as repairing bridges, cleaning out the nature trail or doing work on the cabin. In general, the morning was spent as a work period, followed by a bean-hole bean feed. Pat Patterson's bean-hole beans . . . were started the night before. Pat's students would dig a big trench, which was filled with wood to be burned to provide a good bed of
coals. Five gallon lard cans would then be filled with beans, molasses, and a chunk of backstrap or pork. These cans would be put in the trench and covered with earth, where they'd be during the night, and be all ready to go, piping-hot, at noon the next day. We'd have a noon meal and then there would be activities at Cronemiller Lake such as high climbing, log burling, chopping, and bucking (1980, p. 12).

Richard Dilworth (1979), retired Head of the Department of Forest Management, recalled the role of students and faculty in management of the School's lands:

It was always handled by Starker or some faculty member. I had part of it. The Arboretum was mine. Because I taught nursery practices . . . they turned it over to me, but . . . it was just a committee assignment . . . One of my classes got the Adair Tract. There was 4,000 acres . . . up on the forest peak that had some old growth timber that had been cut over but high graded, and so my class went up and cruised it and came up with a volume and then we put it up for sale . . . we sold it to Jack Brandis Co. (p. 29).

In 1931, when McDonald Forest and the Arboretum together consisted of about 1143 acres, the first management plan was formulated. Bill Davies (1979) remembered that this was prepared by a graduate student as a part of his graduate program. Very little cutting occurred during this period, however, because the Forest was regarded as an outdoor laboratory, and not a resource to be exploited commercially. Also, much of the land had been logged prior to being acquired by the School. The lack of roads was also a contributing factor to a low interest in commercial exploitation. According to Davies there was some harvest activity on a limited basis:

. . . some of the faculty used to try to do a little commercial stuff out there. I think T. J. Starker had a post cutting deal to sell fence posts . . . wood, or something. The forest was not actually operated as a real commercial forest until I became manager. I couldn't see that a forest just sitting there. Those trees . . . there was a lot of salvage. The trees were dying and falling down, and the young stands were getting so thick. They needed thinning for improvement of the
stand, and we started cutting three or four million board feet a year. Nothing but salvage and thinning for the first five - ten years. (p. 10).

Some limited thinning was carried out during the 1930's; during the same period the Forest Club provided cord wood to fuel the College's heating system. There was a heavy sleet storm during 1942 that caused widespread top breakage in second growth Douglas fir stands and side and top breakage in hardwoods. Some of this may have been salvaged.

A memorandum written by Earl Mason in 1941 gives an indication of the limited commercial operations and income from the School lands. He noted that gross receipts, by years, obtained from the sale of forest products and rent from leases of grazing areas was:

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<tr>
<td>1937-38</td>
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<tr>
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<td>$ 3,269.68</td>
</tr>
</tbody>
</table>

In 1944 a 12-acre area at Lewisburg Saddle was logged by a private contractor. This may have been the timber sale mentioned by Paul Dunn in 1954:

Hoselton Lumber Company of Corvallis. A contract dated September 30, 1944, for approximately 700,000 board feet of logs and poles at $4.50 per M for the logs and 3c per lineal foot for the poles. The income was $3,058.45 (p. 3).

The same memorandum described a contract with E. L. Coe of Corvallis dated March 1, 1948 for approximately 500 trees for poles and piling that resulted in income of $1,168.50. Another contract was signed with Dog Face Lumber Company of Corvallis on July 6, 1950 for 250 M board feet of Douglas fir logs; the income was $5,939.74.
Davies thought that it was income (about $200,000) from some old
growth timber on the Adair Tract that initially provided the funds to hire
a forest manager. During this period sales were arranged through private
contractors or put out to bid. The first Forest Manager was Harry
Nettleton ("Net"), who prior to teaching at O.S.C., had had experience
with the Bureau of Indian Affairs. Nettleton's era as Forest Manager
can best be characterized as "custodial" i.e., very little active manage-
ment was undertaken, the primary emphasis being on protecting the forest
resources. Nettleton's period of service in this capacity was from 1948
until 1959 when Bill Davies assumed his duties. Wheeler (1980) remembers
Nettleton as a "quiet, pleasant, very friendly, pipe-smoking individual"
who would get things done but with little fanfare--he was not "an aggres-
five back-slapping type (p. 11)." His trademarks were his ever-present
dog, pipe and "patrolling" of the Forest, according to many who knew
him. According to Wheeler, Nettleton fit well into the role of custodian
and felt comfortable in it. Bill Davies (1979) remembered Nettleton's
management era as having no emphasis on commercial aspects:

It was primarily a custodial type management. That was
his sole job as manager, and he spent a lot of time
riding around the roads out there to see that people
didn't run off with anything... and just see that it
was there, and to worry about it... Very little
commercial management... until... in 1957 when I
talked Nettleton into setting up this commercial
thinning program (p. 11).

After Harry Nettleton's retirement in 1958 Bill Davies was appointed
Forest Manager; his period of service extended from 1959 until 1973.

Nettleton, who suffered from diabetes, died shortly thereafter in
the early 1960's. Davies had worked for Weyerhaeuser Co. until 1946
when he was appointed as an associate professor in the Department of
Forest Engineering. In 1951 he became professor and Head of the
HARRY I. NETTLETON
First Forest Manager
(1948 - 1958)

WILLIAM DAVIES
Second Forest Manager
(1959 - 1973)
Department; in 1959 he added the duties of the Forest Manager to those of Department Head. "... as I look back on it, I was foolish to undertake the two really, since I taught twenty class hours a week through three terms besides (1979, p. 12)."

Under the direction of Davies and later Marv Rowley (1973-present), management of the School Forests became much more intensive and comprehensive. Harvest activities during this period also reflected the greater emphasis on productivity. Rowley (1979) summarized the shift in approach:

I think we see a transition between no management, just anybody going out and doing their own thing on the Forest, and then trying to bring it into a managed state ... under Harry Nettleton they sold at least three fairly large timber sales. The philosophy of management ... came from the government agencies ... put up a timber sale, draw a contract, put it up for bid ... and this got them about the same results as you get on a government timber sale ... the Manager wasn't able to dictate a whole lot under it ... if you go back in the early 1950's, there was no engineering on a road ... and there were some excellent roads built during that time, but there were some lousy ones, too (p. 1).

Rowley noted that the School became aware that more flexibility was needed in the management, than was ensuing from this approach to timber harvest. It was at this point that Rowley again became involved with the School Forests.

Rowley graduated in Forest Engineering in 1950 from the School of Forestry; in 1954 he joined with his brother-in-law to form a contract logging company that specialized in working with tree farm problems. It was in this capacity that his professional life became entwined with the management of the School Forests. In 1956 he undertook work on a demonstration project sponsored by the Benton County Extension Service on Spaulding Tract on Marys Peak. The 40-acre tract had been released
by the School of Forestry for this purpose; Martin Thingvold was the Extension Service representative who coordinated these activities. Thereafter, Rowley and his partner carried out several contracts for thinning in the Oak Creek area and School personnel thought that their work was highly satisfactory. "They liked what they saw, and they laid out several sales over the next couple of years and sold those on an oral bid basis to whomever came in after they advertised, and we bought every one of their sales. I think . . . all except one sale, we were the only ones that showed up (Rowley, 1979, p. 2)."

The work Rowley's company did during 1957 and 1958 embarked the School on a regular thinning program. At that time mills were paying favorable prices for small wood--almost as high as for larger dimensions. When Davies took over as Manager (25% of his duties were allocated to this position) he and Rowley decided to cooperate in a manner to further integration between the harvest and other School programs. In 1959 a two-year contract was negotiated--a timberland rehabilitation, salvaging and marketing contract, as Rowley called it--between Rowley's Company and the School of Forestry. Prior to this no attempt had been made to consider research and instruction when contracting for timber sales. Rowley recalled that there had been several large "traditional type sales" during the 1950's. The Corvallis Logging Company took out about 5 million feet on Dunn Forest (head of South Berry Creek, Section 21), and the Taylor-Hart Lumber Company bought 2 million feet down lower on the same creek two years later.

The relationship proved to be a satisfactory one for both parties:

In 1959 when we started this contracting, we'd sit down with Bill, and decide what our scope of operations was going to be, where we were going to start, and how we
would carry out the contract. At that time we started on the north edge of McDonald Forest, north of Cronemiller Lake, and covered all the forest land in a pattern year by year, working southward toward Oak Creek . . . We were aiming at covering it in a ten-year period . . . thinning, salvage, whatever was necessary . . . it was anything from clear cut to real old growth patches. We were looking at finishing that by 1969 . . . we just got underway, making good headway, and October 12, 1962, a storm hit. The storm came in without warning, with not much rain involved (p. 4).

The Columbus Day storm was the single greatest agent of change in the School Forests in the modern era. Accounts of first-hand informants always run to the superlative in describing the storm and its effects on western Oregon. John O'Leary, (1979) who was in the Forestry Building when the storm commenced, said: " . . . it was over 100 miles an hour . . . Boy, it was really strong. I've never seen a wind like that; I've been in some pretty good typhoons, but I never saw wind blow that hard (p. 17)."

He described the campus and the community as being strewn with large topped trees, broken and down electrical wires, upended structures, twisted metal, and other evidences of severe force. O'Leary lived only six blocks from the Forestry Building, but the journey that evening took almost two hours to complete. " . . . climbed trees, up over the top of them, underneath them, and there were wires down . . . you didn't put your foot down until you were pretty sure there wasn't a wire under it . . . all the electricity in town was off (p. 16.)."

The following morning Rowley flew over the Forests to survey damage and sketch on aerial photographs the locations of major blowdown areas. Rowley estimated that about seven million board feet of timber had been blown down in two hours. Davies hired an additional logger and set Rowley to work salvaging along the main roads in the Forests. Roads were open in about a week, but the clean-up continued for two years.
To carry out this task Rowley and Parker Tree Farm Service had to acquire additional logging equipment on short notice. The additional equipment was employed to increase the cut in the Forests; by 1965 about six million board feet were being cut annually by Rowley's company. During this period Rowley was in effect managing the Forest under the direction of Davies:

Bill made the management decisions . . . we decided where we were going to start and what type of operation it was going to be . . . and we carried the work out on the ground. We did our own timber marking . . . or trained a crew to do it. We laid the roads out . . . Most of the major road systems were designed by senior forest engineering classes . . . and then we went in and built the road . . . the silvicultural classes and the land-use planning . . . classes were involved in it, too . . . of course the students did all of the planting (Rowley, 1979, p. 6).

Thus, a cooperative and mutually beneficial management approach was developed that integrated the efforts of School administrative personnel, forestry students, and a private contractor. Throughout this period Rowley's contracting company was also carrying out logging operations for other interests; in 1973 Rowley resigned and became the full-time manager of the School Forests (on the retirement of Davies).

Rowley summarized the benefits of the cooperative arrangement under which he had worked:

Bill set the policy, and we discussed alternatives . . . but on the ground, land-use decisions were made by me . . .
I think my experience was unique in that I had the whole School of Forestry and all the researchers behind me . . . when I made a decision. I'd talk it over with Bill, and we could talk to the forest geneticists, . . . to the silviculturists, the engineers. We had the pick of the brains of the University, and that was probably the elite in the United States, and it was a good working relationship (p. 7).

With Rowley's appointment, Dean Stoltenberg also created the position of Director of School Forests to whom the Forest Manager reported. Prior to this the Forest Manager reported directly to the Dean. John Beuter
was selected for this new position; he continues in this role today although he has since then (1973) also been appointed Department Head of Forest Management.

Summary of Harvest and Management Since 1925

The enumeration of certain key developments provides a succinct summary of harvest and management activities in the School Forests in the modern era. Marvin Rowley's recent statement on the status of the Forests (Oregon State Forester, January, 1980) was very useful in formulating this summary. Also, for specific information on the harvest in the School Forests one can inspect the table that follows--"Cut--McDonald-Dunn Forests." This compilation was begun by Bill Davies in 1949 and has been continuously updated to the present by Marv Rowley.

(1) Initially, there was no management or systematic harvest in the School Forests. Management, such as it was, was carried out by students and faculty. Much of this was performed on an individual basis, such as the efforts of T. J. Starker and others; A-Days (Arboretum Days) were initiated in the late 1920's and these provided much needed labor for maintenance and development.

(2) Some isolated thinning projects and other small undertakings by faculty were accomplished. Students cut cord wood that was supplied to the College for use in heating campus buildings.

(3) The activities of the CCC enrollees from Camp Arboretum resulted in very significant improvements in the Forests. These included construction of roads, trails, buildings, firelines, lookout towers, shelters, a reservoir, and related improvements. The accomplishments from this period were significant and enduring--many tangible physical improvements are still existing today.

(4) Some timber sales were carried out during the 1940's. Some of these were put out to bid, others were privately arranged. In 1948 Harry Nettleton was appointed Forest Manager. This epoch in the history of managing the School Forests can be characterized as "custodial."

(5) Under Nettleton an annual cut was established of 2.7 million board feet. Some stand improvement projects were undertaken;
roads were improved; and, for the first time the School could begin to count on an annual income from the Forests.

(6) In 1956 a series of thinning sales were begun; the Rowley and Parker Tree Farm Company contracted for most of these. This marked the beginning of Marvin Rowley's professional involvement in the informal management of the School Forests. As a student, Rowley was also very active in School programs in the Forests (see the discussion about the Forestry Club Cabin).

(7) Bill Davies was appointed Forest Manager in 1958 on the retirement of Harry Nettleton. A more permanent working arrangement between the School and Rowley was established. Rowley set about to systematically rehabilitate the Forests. The School sold the logs on the open market and the contractor was paid a portion of the sale price. Other improvements such as road building, stand improvement, and regeneration were negotiated. Regular crews of students were hired during summers starting in the 1950's.

(8) A ten-year rehabilitation plan was drawn up with the objective of moving systematically from the north edge to the south end of the Forest. The Columbus Day storm on October 12, 1962, blew down seven million feet of timber and interrupted the 10-year plan. For two years salvage continued to clean up the Forest, then in 1965 the original plan was again undertaken. The Forests had changed in many ways as a result of the storm.

(9) Three cycles of harvesting have occurred; currently the third cycle is underway. The first cycle included salvage, thinning, reforestation, and access development. The second cycle focused on marginally stocked areas. The last cycle involves thinning in stands planted by students in the 1930's and related activities. Some years the annual harvest has been as high as 4 million board feet.

(10) Marvin Rowley was appointed Forest Manager in 1973 when Bill Davies retired. Rowley (1980) summarized the harvest since 1950 in the School Forests as follows:

Of interest is the fact that approximately ninety-three million board feet have been harvested from the McDonald and Dunn Forests since 1950 with an increase in inventory from ninety-five million board feet to one hundred fifty million board feet. This removal of what approaches our original inventory has been accomplished with a minimum visual impact on the Corvallis area (p. 10).
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<th>Year</th>
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<th>Dunn Annual</th>
<th>Dunn Cumulative</th>
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PART II: EDUCATION, RESEARCH, RECREATION, MILITARY

3. EDUCATION

Beginning in the freshman year, field trips are made to the forest in several classes, and this continues throughout the four years. The close proximity of this forest area provides an excellent outdoor laboratory, and in consequence Oregon State does not require students to attend a summer camp in the woods.

Instruction and the School Forests

This simply stated fact in 1961 by Harry Nettleton indicated the progress that the School had made from the days of the Arboretum Committee in 1923, and the other initial efforts to acquire an outdoor laboratory. Sometimes the ordinary day-to-day activities of individuals and organizations come to be regarded as commonplace, mundane and unworthy of comment. In some respects this has been the case with the educational use of the School Forests. From the outset, the Arboretum and the growing forest system, were used intensively and regularly by the School of Forestry in its educational programs. Historical records from several sources--School of Forestry, O.S.U. Archives, Benton County Courthouse and others--are replete with information about acquisition plans, costs, legal aspects, procedures, and related concerns. These concerns were carefully documented in the usual places (business offices, archives, state auditor records, etc.). Early correspondence between the Forest Manager and the Dean of the School regularly made statements about timber harvest, condition of roads, and management practices and problems related to the forest resources. Very seldom were statements included that would have reflected the extent and nature of the primary use for which the outdoor laboratory was acquired--education of foresters.
These activities seem to have been taken for granted by those who left records for these years.

For example, Harry Nettleton's biennial report prepared in April, 1956 included the following topics: (1) number of acres increased since previous report; (2) total stumpage for the Forest Peak timber sale; (3) board feet of timber sales on the Adair Tract; (4) a clear-cut salvage sale on McDonald Forest; (5) planting of 62,000 Douglas-fir seedlings in McDonald Forest; (6) part-time student employment of 2,000 man hours per year; (7) cooperation with State Game Commission on hunting season and the deer harvest; and, (8) cooperation with a "Federal trapper" in trapping bears in and near the Blodgett Tract. No mention was made of teaching or research on any of the School properties.

What was the official policy statement with regard to the purposes for acquiring these forest lands? Mary J.L. McDonald's original intent was reiterated many times throughout the period of her relationship with the College. It was to, "... acquire garden lands in the vicinity of the college for use in experimental planting, or ... for reforestation."

In 1926 T.T. Munger, Director of the Pacific Northwest Experiment Station, outlined the purposes as he viewed them, at the official dedication of Peavy Arboretum:

This tract is going to serve, and serve most admirably as I see it, a three-fold purpose. First, it is going to be a classroom with life-size living models, with a hillside as the teacher's blackboard. I saw the Harvard Forest referred to recently as a 2000 acre textbook. This is the 340 acre textbook where forthcoming Oregon foresters will learn the best of their dendrology, their mensuration, their silviculture, their forest ecology. Second, this is going to be a research laboratory. Experiments will be tried here that will add to the world's
store of knowledge. . . . Third, this is going to be a demonstration forest, which should radiate object lessons in forestry all over the countryside. This forest will be so tended, and thinned and reproduced that maximum production will be obtained. It can be a means of broadcasting the forestry gospel visually . . . (p. 8).

Munger's vision of the future was correct in most respects, but not all. The lands that make up McDonald-Dunn Forests have played a primary role in the teaching program of the School of Forestry. Research has been carried out, but to a lesser degree than instruction. With regard to maximum production of timber and other forest products, Munger's prediction was in error. The Arboretum and other School lands have never been managed for maximum production; as demonstration forests they have fulfilled their destiny.

In 1942 George Peavy endorsed the ideas expressed earlier by Munger and further elaborated on the purposes of the School Forests:

In securing forest lands . . . I had these things in mind:

1. The use of the land for instructional purposes. In other words, the creation of a forest laboratory for students of forestry.

2. The use of the land for forest research, this to be carried on by graduate students or by members of the faculty, depending on the nature of the research project.

3. To set up a demonstration forest which, under management, would serve an object lesson to encourage timber land owners of Oregon to put their properties under sustained yield management.

4. To derive revenue from the utilization of the various forms of products, which revenue would be used in making the objectives above more completely attainable.

From the above it appears that there can be drawn a clear line of demarcation between the first three and the fourth objectives. The first three tie in closely with the instructional program of the school. The type of research which can be set up under financial conditions now existing,
cannot well be divorced from instruction. In addition, the development of a management plan for the forest, under faculty supervision, . . . will need to be affiliated with the instructional program of advanced students (Peavy, p. 3).

"Pat" Patterson's Role

The early educational uses of the Forests were not described in detail, but isolated references offer glimpses of some of these activities. "Pat" Patterson, for whom Patterson Road was later named, was one who extensively used the outdoor laboratory for his classes. Henry R. Patterson came to Oregon Agricultural College in 1920, after spending 11 years as a logging engineer. He graduated from the University of Oregon in 1909 with a degree in civil engineering. His career extended from 1920 to 1968. In 1951 he retired as Head of the Department of Forest Engineering in the School of Forestry at Oregon State College. Loren "Stub" Stewart (1931) described a typical day in the woods with Patterson:

"We will leave at 7 o'clock sharp in the morning," are Pat's farewell words Thursday afternoon. That means getting up at 6 o'clock in the morning, eating a hurried breakfast and getting to the Forestry Building in time to put on the caulked shoes before it is time to leave. We pile in "four-bits," including Pat with his long overcoat, and are off . . . Today we are going to run the "P" line . . . The truck is driven as far as possible and then it is a walking show. Each man carries the instrument that he is to use that day, and woe to the transit man as he carries his heavy instrument up the hill for about two miles. The coffee pot is also packed along as we couldn't run very much "P" line without a stimulant. . . . We stagger up the mountain wondering if we will ever make it. . . . After a short rest the work is started. Pat takes the two axemen and goes out in front and begins to clear the line for the transit (This is the job we fight over!). . . . About 11 o'clock Pat sends one of the axemen after water. The man that is selected for this job has to get the coffee pot and start down the hill. If he is lucky he may find water within half a mile, but he isn't usually lucky. . . . We all gather
PATTERSON AND CLASS

HARRY R. PATTERSON
(1921 - 1961)
around the fire and settle down to enjoy lunch and a cup of hot coffee. . . . We work until about 4 o'clock. By this time about four thousand feet of "P" has been run. . . . Then the long trip back to the Forestry Building is suffered. . . . We arrive at home to find that dinner has already been served, and have to eat a cold meal. "Such is the life of a logger!"

Bill Davies remembered that the highlight of Patterson's eight hour labs in McDonald Forest was the activities of the noon hour:

. . . at noon . . . Pat would assign somebody, there was a big ritual with him, about 11:30, to go over and get the pot and build a fire and get ready to put the coffee on. Pat would usually make the coffee. And they'd sit around the lunch fire and talk about their work and I think more instruction went on around that damned lunch fire than in the classrooms (p. 16).

Patterson's coffee was considered to be strong, even for rugged foresters. ". . . the way he made coffee was to put some boiling water on and put a rock in it and keep putting coffee in until the rock came to the top, then the coffee was ready (Davies, 1979)." John O'Leary, who was a student in the School of Forestry during the 1940's, also remembered Patterson's eight hour labs and strong coffee.

". . . Pat did most of the teaching from 12:00 to 1:00 around the campfire at noon. . . . We learned more from Pat at that time than we did in the classroom (1979, p. 8)."

Dan Robinson, who was also a student of Patterson recalled those field trips during the 1930's to McDonald Forest and to other School lands:

Pat was a very quiet individual, a tremendous gentleman, and an eternal pipe smoker. His specialty was railroad engineering; construction of logging railroads. At that time there might be only ten or a dozen students in Logging Engineering. He'd take his Logging Engineering majors on a two- or three-day field sessions up to Mary's Peak, up to McDonald Forest, and up to Northwest Oregon on the School's Blodgett Tract. They would . . . camp
out in tents. In fact, for a couple or three years, the Forest Engineers used taxi cabs for transportation of field trips to the McDonald Forest. They had no trucks, they had no buses, they had no vehicles of their own (1978, p. 6).

Other Early Field Experiences

Ray Yoder (1979) first came to Oregon State College in 1937. He remembered the students and the places where classes went for outdoor learning experiences:

... the students in Forestry did feel different or unique, that is they had a smaller school than was typical of most of those on campus, Pharmacy being the exception. They were a clannish lot, they tended to know each other, most of them did, ... and there was some ... elitism among the Forest Engineering students. They knew that theirs was a little bit tougher program in a very tough curriculum ... they set high standards for themselves and for each other ... The places students went for laboratories, most of them went to the McDonald Forest. A major exception ... was the tree identification and dendrology work which was typically around Corvallis and on the campus. The engineering work that we did, road location and surveying ... was almost entirely on the McDonald Forest.

Another glimpse of instruction in the School Forests during the 1930's is provided by The Annual Cruise for 1932. On May 23, 1931 seventy-five neophyte foresters left the Forestry Building in four trucks headed for Sulphur Springs. The group was divided into parties of four. Camp was made, the night passed uneventfully. After breakfast the next morning instruments were issued and projects assigned. Assignments included traversing old trails, locating new trails and roads, and making topographic maps. The second and third days were repetitions of the first, with the possible exception that, "The duly elected cooks, who by this time had become extremely sus-
picious of the desirability of their jobs, . . . were reluctant to leave their blankets so early in the morning (p. 71)." On the fourth day the group returned to Corvallis and the Spring Trip for that year was officially completed.

Alan Berg (1979) during the late 1930's, not only had classes in McDonald Forest during the academic year, but also worked there with the N.Y.A. program on holidays and summers. Berg described these activities:

During the three years that I worked on N.Y.A., that was involved mostly with timber cruising. There were two activities during 1937-'38-'39 that were being carried on. One was a survey work, and this was carried on mainly by logging engineers. They were trying to find corners and running lines. I did some of that. . . . but most of the work I did was timber cruising--estimating the volume. We did a ten percent cruise of McDonald Forest and all of the area around the Forest, because the School was acquiring more land . . . We did this on Saturday and Sunday and on holidays (p. 26).

These were all college students. Always on a crew there would be the upperclassmen . . . they had had courses and knew a little bit more about this than some of the freshmen or sophomores. . . . Then I think the last year that I worked, I was doing a grazing study on some of the bald hillsides and on some of the farmland that was next to the Forest. . . . I can remember we cruised upper Soap Creek (p. 27).

The "Prof" During the 1930's

It was not just the forest engineers who regularly used McDonald Forest and the Arboretum during these early years. Eugene Peterson (1936), a student in Technical Forestry during the mid-1930's, wrote about his teachers and their learning resources:

The technical forestry department is headed very capably by Prof. T.J. Starker, known to his neophytes as "Prof." "If a student can tell me what kind of wood is best for
PROF. STARKER'S SILVICULTURAL CLASS
First planting crew on McDonald Forest - Spring 1925

T. J. STARKER
a plank on which to walk across the Grand Canyon, he knows his wood properties," is the theory upon which Prof oper-
ates.

Unlike many forestry schools which reserve a summer ses-
sion or spring term for intensified field work, class room work at O.S.C. is interspersed throughout the year with practical application in the school's near-by ar-
boretum and 3265-acre McDonald Forest. This forest area
is a natural laboratory for experimentation and research
in silviculture, ecology, logging methods, forest manage-
ment, wood durability, etc. To train foresters properly
the school operates on the theory that adequate technical
knowledge is essential but is not in itself sufficient.
Practical field work is stressed at Oregon State through-
out the four years (p. 29).

T.J. Starker was well-known for the challenging questions that he con-
stantly asked his students. One of his favorite puzzlers was, "What
kind of wood are the beams in the M.U. ?" (The answer: they are not
wood, they are concrete). Although T.J. extensively used McDonald
Forest for class instruction, he also developed a learning resource
in the Forestry Building. One December 11, 1933 he announced that
the, "rather dark room at the East end of the upper floor where you
were exposed to Wood Utilization, Surveying, etc. . . . became the
location of the Forest Museum (1934, p. 23)." Some of the items of
tantalizing interest in Starker's museum were: a 23-year old Sitka
spruce road sign; a sample of the Napolean Rice black walnut tree;
portions of a replica of a bridge over the Toutle River, Washington
(built by Bob Conklin, '23); a 25-cent piece of Tenino wooden money;
a piece of veneer from the airplane, Winnie Mae, which was flown a-
round the world by Wiley Post; a piece of Douglas fir showing 92-year
old fire scars; an oak falling wedge; a piece of pine that had been
in a dry kiln for 16 to 20 years; a collection of wood treated with
Permatol; a 30-year old "Camas Valley" sign made of Western Red Cedar;
two commercial wood cellulose sponges; some 1½" black locust spines
from McDonald Forest; and a "queer-shaped alder root" (The Forestry Club, 1936). This partial list of Starker's collection was a small part of the total museum's holdings.

T.J. Starker was one of the more memorable and flamboyant teachers in the School of Forestry, but there were others who occupied their own unique niches. A self-appointed poet from among the Fernhopper's ranks was Vondis Miller, who often penned verses about the era. It is not known whether or not "Ode to the Profs" represented his work at its pinnacle, but it does offer a look backward:

Ode to the Profs

Dean Peavy juggles figures in a most financial way,  
And it isn't any wonder that his hair is getting gray,  
What really keeps the snow away is that flaming red-hot tie,  
So here's to the Dean and his warm cravat as the years go rolling by.

On Dendrology and Tree Ident. we hail the name of Starker,  
But when the grades come rolling in our day is always darker,  
He teaches Silviculture, and we all admit he's good,  
But does Pinus Ponderosa make California White Pine wood?

If it's logging roads or bridges Patterson then rules the scene,  
But the thing that makes him famous is the lowly Bean Hole Bean,  
Topographic maps and logging plans to all his boys are plain,  
But the loggers greatest joy is running transit in the rain.

His name is Earl Mason, but he's mostly known as "Mase,"  
He teaches Mensuration, and he has a poker face,  
Administration and Protection are two little pets of his,  
If W, H, and Y were gone he couldn't give a quiz.

Schreiner and Cummings are both Engineering sharks,  
Each Saturday they take us on the most delicious larks,  
Their ravings on the transit and the compass are a fright,  
And we have to shoot Polaris in the middle of the night.

Vondis Miller

The Fernhoppers' Image

During these early years the School of Forestry's practical orien-
tation created a certain campus image for the foresters. Dan Robinson remembered that Peavy's "boys" were ambivalent about this:

The forestry students were really close on campus. . . . they were self-identified as kind of rough, tough, woods beasts. Certainly they carried that impression to the rest of the students in the University. Foresters were regarded somewhat as "rubes" . . . the (other) students envied them because there was a terrific esprit de corps. Foresters had a great deal of pride in what they did and what they were. Dean Peavy . . . for example, had what we called "red-tie day." Every Wednesday all the forestry students and faculty wore a red necktie--brilliant red. The louder the red color, the better. This identified foresters on the campus. . . . The Forestry School was envied because of the fierce pride and dedication by the rest of the University, but also it was regarded as somewhat of a plough-horse earthy institution. There were these mixed attitudes among students and faculty (p. 5).

The custom of wearing the red ties served to set the foresters apart, but not necessarily in a negative sense. The Annual Cruise of 1934 noted that, "Dean Peavy's 'boys' made quite a hit at the logging meet with their hickory shirts and flaming adornments of their larynx. In contrast to the city clothes of the members of the congress (Pacific Logging Congress at Portland) this striking garb . . . drew much favorable comment (p. 26)." Rowley stated that during the 1950's when he was a forestry student, other students on campus would often taunt the Fernhoppers by saying, "Hey, is that your tongue hanging out of your mouth?" The practice of wearing red ties on Wednesday persisted into the 1960's.

The Outdoor Laboratory In The 1940's

By 1941 Acting Dean Earl Mason reported that the instruction staff was growing:

The staff of the school . . . now consists of nine full time men and five graduate assistants. The growth of
the school in enrollment has necessitated additional instructors. An enlarged faculty has resulted in a specialization of the work of each faculty member that has not heretofore been possible. The larger staff has also enabled us to lay the groundwork for a sound development in protection, management and economics. Oregon State is now ready to take her place as second to none as far as facilities for instruction are concerned (1941, p. 39).

Throughout this period of expansion and specialization in the instructional program, McDonald Forest and the Arboretum played an integral role. In 1941 Mason compiled a report titled, "History and Past Activity On The McDonald Forest," in which he noted that, "Since 1927 the McDonald forest has provided a laboratory for approximately 50,000 man hours of instruction in forestry annually (p. 8)." This terse statement provides some indication of the educational uses of the School lands during this era.

When John O'Leary was a student in the School during the mid-1940's field trips to McDonald Forest involved more walking than today. This was especially true if the objective was to carry out class exercises in old-growth timber, because the forest lands acquired by the School were mostly cut-over prior to acquisition. Also, the road system was not yet developed to the degree that it is today. There were some old-growth pockets then, and students would walk to these locations. Classes in forest engineering often travelled to Marys Peak instead, in order to work with big timber. This too involved hiking, because there were few roads. Later, after 1949 when O'Leary returned to Oregon State College as a faculty member, he was given the responsibility for the School's trucks.

We had ton and a half state trucks, canvas-backed trucks with bench seats. We used to keep our tools under the benches, and we'd sit on the benches. We had five (trucks).
I was in charge of those for years and years. We had nothing to do with the motor pool. We had our own shop and our own garage, and I hired one of the students to be the boss. He usually hired three other fellows to help him, and in the morning they would drive them up, park them out in back of the old Forestry School, back them in, facing out. And when the students would get their tools . . . they'd walk out and get in . . . and away we'd go. Then at night the same two or three guys would ferry them back to the garage. We had a covered garage down there, fairly close to where the Physical Plant is now (p. 5).

Richard ("Dick") Dilworth, who was to subsequently become Department Head of Forest Management, was also attracted to O.S.C. by its teaching resources. Dilworth was teaching at Louisiana State University (a post he had returned to after World War II) in 1946, when Dean Dunn induced him to come to the Northwest. His first impression of McDonald Forest was, "Gee, this is just like Louisiana, poison oak everywhere." Nevertheless, it was McDonald Forest that weighed heavily in his decision to make the move.

Well, I thought it was a terrific laboratory. When I was at L.S.U. we had one a 100 miles away, at Bogalusa, which was a great laboratory too. But here it was right in the back yard and that's one of the things that I thought made Oregon State great. Because we could talk about practices in the morning and go out and put them into practice that afternoon. Science with practice. . . . It was unique. Washington had to go a long ways. They couldn't do it on a one-day trip. L.S.U. couldn't do it. Iowa State couldn't do it. . . . Duke was the only one that had their forest and their campus together. . . . So it's unique and with sawmills within five minutes and pulp mills a short distance we could give them that practical experience that others had to get on the job (p. 29).

Dilworth also remembered the forestry students during the late 1940's as being different from those he had taught in Louisiana i.e., more pragmatic, and less inclined toward theory than practice. They were older, many being veterans, and most had some field experience. Dilworth remembered his image of them as being men who wore "tinpants": 
They were loggers, they were dirt foresters, they came to learn how to do it. That is, the existing procedures and how to do them. And so then we taught them how to do it and that is what we did for quite a few years--take the existing procedures and fed it to them and then they went out and qualified for jobs (p. 21).

**Educational Use of the School Forests in the 1950's**

In 1954 Dean Paul Dunn noted in a report that, "It is the main instructional laboratory for the forestry students as well as a serving for research purposes. Classes convene on the area almost daily for practical forestry projects and a 14-year check showed more than 50,000 man-hours of use, annually. The students are transported to the Forest in School trucks (p. 3)." Bill Wheeler remembered one episode involving the School trucks during a field trip to Dunn Forest:

One winter day in 1955, Bill Ferrell and I were on the Dunn Forest with two crews of a forest regeneration class. We transported the students in Chevy trucks with wood bows and canvas covers, open only to the back. You could see where you had been but not where you were going as you were traveling down the road. . . . it was a bitter cold day and the students were out there running a regeneration survey. I was out checking the crews in the field and as I headed back toward the truck and came around a bend in the road, I could see smoke rising. I thought, "Good, they have a lunch fire started and I'll be glad to warm myself by that." As I got closer, however, I noticed that the fire was not on the ground, but in the back of the truck. As I got a little bit closer I could hear hoots of laughter and much noise coming out of the back of the truck. The students had built a fire on the bed of the truck and were sitting on the benches warming their hands with black smoke billowing out the back (p. 9).

Bob Wilson, who is currently on the faculty in the Department of Forest Engineering, was appointed by Acting Dean Walter McCulloch in 1952. Dean Dunn was on a sabbatical leave in Chile during that year. Wilson recalled that one of the reasons he was attracted to Oregon State College and the School of Forestry, was the availability of
the School's Forests for instruction.

I think I was impressed by their curriculum and the School and the fact that they did all of their field work out . . . learn by doing, . . . I liked the idea that they didn't have any summer school here as they did in Colorado, and in most other schools. . . . You had a chance to go out and do what you were talking about in the classroom. . . . Surveying isn't something that you only do in the classroom (p. 3). . . . We'd go out to Mac Forest and have the labs out there . . . I don't think it has ever been changed since I've been here in the surveying class--always had six hour labs . . . Last year I got put on report because somebody complained I didn't give them time to eat lunch (p. 14).

Another School resource that served an instructional purpose for a time, was the School Sawmill. It had a brief but memorable part in the School's programs.

School Sawmill

During 1947, a portable, army surplus sawmill was acquired and set up in the Oak Creek area. The unit is under roof. Classes in logging and milling benefited by the installation as timber was cut, the logs milled, and the lumber sold. Due to work hazards and a poor market for the relatively low-grade material, the operation has been suspended temporarily. The net cost of the activity to the Forest is shown as $13,819.54 (p. 4).

Dean Dunn's succinct statement in 1954 well summarized the story of the School's attempt to operate its own sawmill for instructional purposes. According to John O'Leary (1979) the sawmill was acquired through the efforts of Ralph DeMoisy, a faculty member in the School of Forestry. DeMoisy had worked with a mill of this type during his military service and was familiar with its operation. He assembled the portable mill on a site near Oak Creek Guard Station on Road 600. Almost from the start there were problems in keeping it in good operating condition. Bill Wheeler remembered some of the problems:
SCHOOL SAWMILL
Oak Creek area
Early 1950's
... (it) was a G.I. portable sawmill, it was a hold-over from World War II. It was almost constantly in need of repair. I don't think it ran two consecutive days where it ran well. Individuals working on the mill had to be predominantly mechanics first and secondarily sawyers. When logs were broken down, there was some difficulty in maintaining uniform dimension. ... The mill was used as a laboratory for the ... students in Forest Products. ... Usually there would be an F.P. staff member present. I remember seeing Jack Grantham and Jim Snodgrass out there ... with the Forest Products students. They had to be innovative to make that thing work (p. 18).

Bob Krahmer, who was a freshman in the Department of Forest Products in 1951, worked at this sawmill on Saturdays during his first year. The mill only operated on weekends. The usual crew consisted of about 6 to 10 students; 2 or 3 of these were required to turn the logs with cant hooks. It was powered by two Chrysler six cylinder engines that were housed in a long rectangular building (about 25 by 70 feet). The structure, which had no permanent foundation, was made of wood; flooring was also of wood. The logs were brought into the mill from the north end and lumber came off the opposite end on the green-chain. There was a single circular saw and no mechanical turner. A separate engine powered the trim saw.

O'Leary recalled that the acquisition of the sawmill prompted the School to acquire additional equipment and also brought about a rivalry:

I came back in September and the thing was going. And then we had to have logs for it, so we had a big surplus list ... one day, and I noticed they had a D-6 tractor on it. ... I got permission from Dean Dunn to put our name in for it. They also had a lot of logging equipment, blocks and things of that nature. ... I paid $146.00 for the tractor ... we got a logging truck for about $100.00. ... fixed the tractor up, and then we started logging for the sawmill. And for the first couple of months ... we had quite a time. We took quite a kidding from ... the Forest Products guys who actually ran the
sawmill. We'd get four or five of them in the classes one afternoon and go out and saw logs. They were always ahead of us, we had a hell-of-a-time getting logs for that thing. Finally we put it all together and . . . we just covered that sawmill with logs. They told us to quit, and we kept on going. We had logs cold-decked all around it, couldn't see it (p. 18).

Wheeler also recalled the friendly rivalry that developed at the School Sawmill. "The engineers would bring the logs to the rollway . . . and the F.P. students would be sawing them up. At a pre-determined . . . time whoever was ahead or behind, would determine who bought the beer (1980, p. 18)." Milford ("Mac") McKimmy (1979) who was a graduate student in the Department of Forest Products in 1949, also worked at the School Sawmill. He recalled that they initially only milled Douglas fir, but just before discontinuing the mill they cut a variety of species, mostly hardwoods, for use in tree identification classes. At that time each student had a complete set of woods for study purposes. It was the custom to trade wood sets with forestry schools in other regions, therefore, there was a demand for such samples. Ultimately, it became obvious that the amount of learning involved could not be justified in view of the expense and effort required to continue operations. McKimmy recalled that about 1954 or 1955 the mill was sold to a salvage firm in Portland, the Alaska Junk Company. Nothing remains on the site today.

In 1955 a special staff writer for The Oregonian travelled to Corvallis and spent the day in McDonald Forest with Bill Davies and his forest engineering students. Davies, who was Head of the Department of Forest Engineering at that time, was conducting his classes as usual. Reporter Grilley photographed Davies and his students around the lunch-time fire and "gabfest", as he termed it (Patterson's
legacy?). His account offers a glimpse of the instructional process at that time:

Ever wonder how a forest road is built? Seniors in forestry at Oregon State College get practical first-hand experience in actual road building in one of the many courses which the forestry school offers. This logging transportation course is open only to senior forest engineering majors or graduate students ... During fall term, the students plan how they would log timber from a certain spot located in McDonald forest ... They measure the area and figure how many board-feet of lumber will come from the standing timber. The problem for winter term is figuring how to get the timber out of the forest and just where the road should be. After deciding its location, the students draw up complete plans for the road. Economics of logging off a selected tract is studied during spring term. The class figures out how much the project will cost and what the profits will be. Oregon State's outdoor forestry laboratory of 6000 acres is the closest to the campus of any forestry school in the United States (p. 16).

Ted Cobo, who graduated from the School of Forestry during the mid-1950's, reminisced about the education he received, the social environment of forestry at O.S.C. and the Fernhoppers' image:

... the logger image. I suppose that was one of the things that contrasted the red tie was that it was the rest of the week that people wore hickory shirts or "stag" pants ... foresters were not businessmen. They were the woodsmen on campus. Mac had a definition about the forester being an amateur woodsman with a college education, which I suspect summed up his outlook better than I realized it then (p. 11).

While at O.S.C. Cobo was very active in all School activities; he was President of the Forestry Club among other duties. After graduation he went to work for the U.S. Forest Service where he applied the practical education he had completed. His first jobs were related to pre-sale preparation where he was called upon to chain and traverse areas, cruise timber and participate in road location, survey and design. These were the skills he had so often practiced in the School Forests and elsewhere, and they were adequately mastered. In retrospect, Cobo (presently
at Rogue River National Forest, Oregon) perceived some limitations to the largely practical orientation of his education:

... I guess the education was adequate--looking at it now I'd say it was adequate for the forestry technicians. It seemed like the school work was pretty much oriented toward practical, on-the-ground application rather than on scientific forestry or management. ... the School was not oriented toward graduate study or research (p. 19).

The orientation of the School had always been toward the applied realm. This approach was reinforced by Dean Walter McCulloch (1955-1966) who was known as an exacting task-master. McCulloch's maxim was, "the students will have to work hard when they leave, so in order to achieve success they'd better start working hard now." He viewed the School Forests as central to the educational program (1968):

Yes, we use it daily. Actually the School forests are just detached laboratories for many classes: silviculture, surveying, mensuration, tree identification, dendrology. This relieves the need for a summer camp (Fry, p. 89).

McCulloch was regarded as somewhat dogmatic by some. He reflected the traditional view that forestry was for the "virile red-blooded outdoorsman," and therefore, was no place for females. (The first woman to graduate from Forestry was Pauline E. Barto in 1945.) For example, on one occasion he was the keynote speaker for a logging conference. He was surprised to note several women, who were the wives of conferees, seated in the audience. On ascending the speaker's platform he announced that his remarks had not been prepared for a mixed audience. He stated that when the women had left the room he would proceed. He paused and after an uneasy several moments the women departed. Another anecdote serves to convey the moral flavor of the School of Forestry during his administration. During New Student Week the forestry faculty counselled
with prospective Fernhoppers about their career plans.

... a very obnoxious individual showed up among the students: dirty, sloppily dressed, foul-mouthed, and so I just went to this guy and said, "There's no place in forestry for you; get out. I will refuse to sign your registration card." He had just come down here thinking to find a snug harbor from which he could rob dormitories. Of course, you can't always be that lucky but Forestry runs a pretty tight ship (Fry, 1968, p. 92).

McCulloch placed the primary stress on undergraduate education (he held a doctorate in Education). Research was not emphasized, but there had been research activity occurring since the first parcel of land was acquired. The Research theme which follows, considers this historical thread. The School Forests played a large part in the instructional program throughout the McCulloch years; no specific data relating to use, however, could be found.

One custom that was re-instituted on October 16, 1960 combined work, instruction and ample doses of recreation--Mac Forest Day. The A-Days of an earlier period had given way to O-Days, which was an orientation for incoming freshman by upper classmen. The students, through the Forestry Club, had proposed the resumption of this event; with the approval of Dean McCulloch the second school weekend in October was designated as Mac Forest Day. The report of the day's activities was like an echo from the past (The Forestry Club):

During the morning, the students and staff members cleared brush, repaired signs, worked on the club cabin, built fences, worked on release cutting of exotic species, and maintained roads. At noon the Forestry Femmes provided an excellent lunch of spaghetti with the trimmings. Two hundred plates of spaghetti were consumed. The afternoon activities were designed to acquaint the freshman and new students with the school and club activities. Dick Dillworth gave a short talk on the development of the student functions which led to Mac Forest Day (1960, p. 50).

These special days dedicated to working in the Forests continued into
MAC FOREST DAY
1961
the mid-1970's, then ceased. Most of the work is now performed through students employed in the summers and throughout the year by Ivan Cutsforth, a forestry technician who lives in the Upper Residence at the Forest Genetics Nursery.

The 1960's and 1970's

Social movements and concomitant change in American society have affected many ways of thinking and living during the 1960's and 1970's. The students and educational programs of the School of Forestry have reflected these historical currents. This has been especially true with regard to public awareness and involvement in natural resource management decisions. Bill Wheeler through his involvement as Head Adviser for the School, has been especially aware of some of the changes brought about by the environmental movement.

Well, I think it had several effects . . . One, of course, was growing interest on the part of the general public with regard to resource use. An increased number of individuals wanted to get intimately involved in management and decision making processes regarding natural resources. As a result, we saw quite an increase in enrollment. This brought people with varied backgrounds and interests. . . . one thing that it did, was call to the attention of the professional forester . . . the fact that he is very definitely accountable to the public for what he does.

This heightened interest was reflected in a large increase in Forestry enrollment. In the fall of 1971 there were about 550 students in the School; by 1975 this number had increased to 1116. Some of this increase could be attributed to the transfer of the Department of Resource Recreation Management into the School of Forestry in 1973. The educational uses of the Forests have increased with the burgeoning enrollment. Students have studied many fields there including regeneration, cruising, road surveying and layout, logging methods, silviculture, dendrology,
forest ecology, aerial photo interpretation, and many other aspects.

Also, the era brought with it a broader perspective on the forest and its resources, on the part of students and faculty. This shift in orientation has been reflected in the School of Forestry's students and programs. Alan Berg contrasted his experience as a student in the School during the late 1930's with the present period:

The changes in the School of Forestry ... are really ... very remarkable. When I was a student, foresters tended to be more of a technician oriented person than they were a professional ... we were taught how to produce timber, how to fight fire, how to do all these things. But we really were not taught how to understand the forest. ... there was a great deal of emphasis on the forest as a producer ... we talked about getting the logs out of the woods, and these sorts of things, and there wasn't a great deal of concentration on some of the other values of the forest. I think over time this has changed ... we're interested now in water production of the forest, the recreational aspects of the forest, the forest as an ecological system--all these sorts of things (p. 49).

**Contemporary Educational Uses**

Many other departments on the O.S.U. campus have incorporated the School Forests into their educational programs. All are requested to register with the Forest Manager but not all comply. Some of those Departments which have cooperated with Marvin Rowley through registration are: General Science, Biology, Rangeland Resources, Soils, Physical Education, Geography, Entomology, R.O.T.C., Botany, Fisheries and Wildlife, and Anthropology. According to Rowley, however, this represents a small fraction of the departments which are actually conducting classes in the Forests. He thinks that almost all of the Schools in the University are in some way represented in the user group.
An indication of the contemporary use by the School of Forestry is the following list of courses that have been registered with Rowley's office for the 1978-1979 period: Introduction to Forestry, Photointerpretation, Mensuration, Forest Management Operations, Forest Engineering, Logging Engineering, and Physical Properties of Wood. There are many other School classes that occur in the Forests.

Over the years the School Forests have been regularly visited by various groups and individuals, for education purposes. Since 1973 Rowley has issued a regular annual report, thus providing a record of some of this activity. Some of the groups have been: Chamber of Commerce Forestry Tour; Annual Benton County Sixth Grade Conservation Tour, the Girl Scouts; Benton County Small Woodlands Association; Forestry Extension; Fernhopper Day Alumni, Western Oregon Forest Protection Association; School of Forestry faculty; Chemeketa Community College forestry class; Philomath School second grade students; and forestry class from Sacred Heart School in Salem, Oregon. There have been many other groups. McDaniel remembered that forestry students from the University of Washington once camped at the Oregon Forest Nursery. There have doubtless been other touring student groups that have visited the School's lands.

Special tours have often been carried out for visiting foreign guests. McDaniel recalled that at different times German, Japanese and South African foresters visited the Nursery and McDonald Forest. T.J. Starker remembered serving as a tour leader for various Finnish and German foresters. Karl Oedekoven from Bonn, Germany was one such guest; Oedekoven subsequently became head of the West German Department of Forestry, according to Starker. There have been many other groups and individuals from outside the U.S. who have visited the School Forests.
A second major purpose for acquiring the School Forests was for research. The discussion now turns to the Research theme and its historical role in McDonald-Dunn Forests.
4. RESEARCH

If you were to draw a line correlating research activity in the School with research activity on the Forests, it would be a pretty good relationship—John Beuter, 1980.

Research as a human use of McDonald-Dunn Forests is a recent story which can be quickly related. George Peavy's mission at Oregon Agricultural College was to train "dirt foresters," not researchers. For example, on one occasion when he scrutinized the curriculum for deficiencies, it was camp cookery that emerged as a gap in the foresters' preparation. Katherin Brown Peavy related the story:

... so he took his problem to Ava Milam, who had recently come to the college to start a department of home economics. "Ava," he began. "I wish you'd offer a course in camp cookery." "Why, I never went camping in my life and I don't know one thing about outdoor cooking!" protested Miss Milam. "And anyway, my schedule's full." "Try and make room" Peavy persisted. "Now, George, you know I must consider my girls," ... "My boys are just as important as your girls!" retorted the Dean. "We need that course!" He got it. So the dainty Miss Milam ... learned how to make bean hole beans ... the mysteries of sour dough ... bread in the reflector ovens they devised (1976, p. 14).

Peavy's understanding of forestry's needs, however, was adequate for its time, and he provided the leadership that launched a solid program of forestry education at O.A.C.

There are references to research throughout the School records pertaining to the 1920's and 1930's. These early activities would now be considered as field experimentation with various management practices rather than research i.e., there was no rigorous research design, replication potential, etc. George Barnes (1956) made some conclusions about the status of research during the early period in the School:

In the early years of the School of Forestry, little attention was given to research. The staff was small and instructional loads were heavy. Forestry training was concerned primarily with the extraction and utilization of the economically access-
ible timber resources. After experience with dwindling forest
supplies in the East and South, some farsighted foresters foresaw
a similar end even to the great resources of the West. They
realized . . . we had better accumulate some silvicultural know-
ledge for the future management.

Excerpts from Paul Dunn's chronological summary of "Major Activities:
Peavy Arboretum - McDonald Forest," provide an indication of some of the
early research activities. His timeline includes the previous work
done in 1921 by Harry Nettleton.

**Dunn's Summary of Research Activities**

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926</td>
<td>Four thinning plots were established.</td>
</tr>
<tr>
<td>1927</td>
<td>Various thinning plots were established on the area.</td>
</tr>
<tr>
<td>1928</td>
<td>The post farm was started by Professor T. J. Starker. Ponderosa race study plantings were made.</td>
</tr>
<tr>
<td>1929</td>
<td>Seed of 34 species of pines was received and planted in a nursery, as an experiment carried on in conjunction with the Eddy Tree Breeding station of Placerville, California (later changed to Institute of Forest Genetics).</td>
</tr>
<tr>
<td>1939</td>
<td>Ponderosa pine race study plantings were made. Tolerance and trench plots were established by silviculture classes.</td>
</tr>
<tr>
<td>1931</td>
<td>A girdling plot was established to determine the influence of girdling Oregon white oak on the survival and rate of growth of Douglas-fir seedlings; results showed greater height and diameter growth.</td>
</tr>
</tbody>
</table>

The seedlings grown from seed of the 34 different species, received from the Institute of Forest Genetics and planted in the nursery in 1920, were transplanted in the Arboretum.

V. E. Miller, a graduate student, prepared a management plan for School lands.

1932 J. W. Kimmey, as a portion of his work on the McDonald Fellowship, made a pathological survey of the Arboretum and McDonald Forest for the purpose of listing and classifying some of the more important and conspicuous fungi.

1933 H. A. Fowells, a McDonald Fellow, prepared a summary of forest activities. Studies in progress were:

- Ponderosa pine race study
- Pruning experiments
- Tolerance and trench plots
- Douglas-fir spacing test
- Douglas-fir reproduction
- Control of poison oak
Douglas-fir liberation         Control of oak coppice
Douglas-fir thinning          Planting methods
Planting succession after burns Natural snag reduction

1934 Henry Tiedemann, a McDonald Fellow, made a study of the factors relating to establishment of Douglas-fir reproduction.

1939 The inventory of the McDonald Forest was completed (timber inventory, as well as topographic, type and site maps). A fire history study of the Forest was made by examining the eight stumps of recently felled trees.

1941 L. A. Baker, a graduate student, prepared a study of timber grazing areas on the Forest.

1947 D. F. Collins, a graduate student, prepared a study of comparative grazing values on cut-over areas.

1952 The research program was expanded to serve some of the problems of management; artificial and natural regeneration projects being of highest priority. The total research time in management fields was now .8 of one staff man.

1954 The OSC Forest Experiment Station was authorized to correlate and expand forest research projects at the College; particularly to extend forest management research on School lands. It was to be financed at the outset largely by income from the Adair Tract.

T. J.'s Projects

T. J. Starker (1979) was probably the first to initiate "experiments" in the Arboretum and McDonald Forest; his projects were varied and practically-oriented:

Well, of course, the main objective was the instruction of the young foresters. I had a box full of experiments--apple box full. It disappeared along with that map I told you about. For instance, the French people have the practice of gathering up all the twigs and litter in their forests and using it for fuel and bedding and things of that kind for their animals. They call it "sotrage," and so we had an experiment on the same basis. We picked it up on a plot and put it on another plot to see whether it would help the other plot . . . We had thinning experiments. We had pruning experiments. I laid out the roads . . . the engineering profs, Schreiner and Patterson did the detail (p. 64).
According to Starker, he had compiled a comprehensive map and other information relating to lands he helped to purchase for inclusion in McDonald Forest; these materials were stored in a "4 X 4 plywood case." After Starker left O.S.C. in 1942 the case, as well as the "apple-box full of experiments" disappeared. "It probably had T. J. Starker's name on it. . . . That's the high price in turnover of personnel (p. 62)."

Starker (1978) often took the lead in initiating new projects on School lands.

I . . . just took charge, I guess. I had Cascara plantations. I had ponderosa pine plantations. I think I was the first professor of forestry . . . that recommended getting away from the government regulations of eight by eight spacing to twelve by twelve or even fifteen by fifteen . . . I recall that I planted some Western Larch out near the highway. Of course, in the fall the leaves turned yellow and dropped . . . and Peavy jumped on me for planting those trees that died close to where everybody could see them. I said, "Well, Dean, you wait until next spring; they'll come out (p. 26).

One of Starker's earliest projects on School lands, that continues even today, was his famous Post Farm. The Annual Cruise for 1933 described this undertaking:

The most notorious of the investigations on the forest is the so-called "Post Farm." The study was started in 1928 by Prof. T. J. Starker to determine the relative value and durability of fence posts of different species and treatments. To date there are 14 different species "planted" with 11 different treatments on Douglas fir and several other species. So far 32 per cent of the cottonwood posts, 20 of the white fir, and 27 of the red alder have failed (Fowells, p. 19).

In 1978 Starker described his original purposes in establishing the Post Farm and how he distributed the findings:

... the idea was to determine the longevity of the wood in the natural state and also the longevity of various treatments. And we put in twenty-five posts in each series. For instance . . . they were creosoted . . . there was osmosis salts . . . there was chemonite . . . and there were a lot of other treatments. . . . At
that time the School of Forestry didn't have any money for publications, and so I went over to the Engineering Department who had some funds. Sam Graff was a "crochity" but a very able Engineering prof, and he issued an annual report for me. Except once I went over there, and he says, "Professor Starker, do you think I'm going to print this every year?" And I said, "Well, I think it's worthwhile." "Well," he says, "frankly we're getting more requests from farmers for this particular bulletin than anything the Engineering Department has ever printed." (p. 25).

This project continues today under the direction of D. J. Miller, Department of Forest Products. Its termination date is indefinite.

**Ponderosa Pine Race Study**

Another of the early studies on School lands that still exists today is the Ponderosa Pine Race Study, which was initiated in 1928. The object of this research project was to determine the adaptability, survival, and rate of growth on various sites in the Pacific Northwest of Ponderosa pine planting stock grown from seed taken from different parts of the natural range of this species. The project was a cooperative study undertaken with the Pacific Northwest Forest Experiment Station. The site chosen in McDonald Forest had a southwest aspect and a steep slope that caused the soils to dry during the summers. Plantations were also established at Washington State College, Pack Forest, Whitman National Forest, Deschutes National Forest, and Columbia National Forest. There were ten races of pine included in the original plantings: Eldorado, Steilacoom, Willamette, Bitterroot, Crater, Deschutes, Lassen, Flagstaff, Carson, and Harney.

One of the early problems encountered was that of staking and otherwise identifying the trees. The 1936 edition of *The Annual Cruise* noted the difficulties:

Originally a large number of trees in each plantation was staked and numbered to aid in computing the percentage loss. . . . it has not proved practical to keep these stakes in place. Some of
the contributing hazards to which they have been exposed are: rodents gnawed, buried and displaced some stakes; grazing animals displaced others; the elements made some numbers illegible; students and CCC enrollees removed or displaced some of them. Souvenir hunters removed the embossed aluminum tags from the corner posts (p. 36).

In subsequent years, a standard maintenance task that was undertaken during Arboretum Day was to clear the Ponderosa Pine Race Study of invading vegetation. Also, pruning experiments were carried out on the plantation (The Forest Club, 1936):

In December, 1934, several rows of planted Ponderosa Pine on the "Bald Spot" in the McDonald Forest were pruned to determine the effect of removal of different amounts of crowns. In this test one and two whorls of limbs were retained on alternate rows, alternated in turn with rows of trees that were left with crowns intact. On December 4, 1935, the test was repeated . . . (p. 56).

This study was ultimately taken over by Anthony Squillace and Roy Silen, who did the systematic monitoring and preparation of annual reports. Roy Silen continues this today; he is a geneticist at the Forestry Sciences Laboratory at Oregon State University.

**Other Early Activity**

The Ponderosa Pine Race Study and T. J. Starker's Post Farm are the two best known of the early research projects in McDonald Forest and the Arboretum. There were other research-oriented activities occurring in the School of Forestry as well. For example, students studying silviculture used to travel to the J. A. Wheeler Farm, four miles southeast of Corvallis, to inspect the oak thinning plots. "Particularly to Bob Aufderheide and the silvicultural class . . . is it familiar, as they did the initial work. On last October 19th, we made our annual inspection . . . (The Forest Club, 1936, p. 35)."
The Mary McDonald Research Fellowship also provided the impetus for some research. The 1930 edition of *The Annual Cruise* announced that:

A research fellowship in lumber seasoning is also available to those carrying on graduate work in connection with the School of Forestry experimental dry-kiln. This fellowship amounts to $500 per year (p. 36).

Dunn's summary of research activities at the Arboretum and McDonald Forest indicates the extent of support for research provided by the McDonald Fellowship program.

By 1939 there were numerous projects being carried out in McDonald Forest and the Arboretum. In addition to the Pine Race Study and the Pine Pruning Study, the following were underway, in that year, according to Anderson:

1. Selective Logging: Fifteen acres on a ridge above Soap Creek were selectively logged.

2. Effect of Slash Disposal on Reproduction: Various methods of slash disposal were being tested to investigate their effect on reproduction.

3. Plant Succession On Douglas-fir Burn: Ten plots were established to study the steps in natural revegetation of burned or cut-over land.

4. Soutrage: The effect of removing soutrage, or the litter on the forest floor, on soil condition. Surface soils on plots that did not have soutrage removed, were in better condition.

5. Wolf Tree Eradication: A number of old growth firs were girdled to cause gradual death and deterioration. The purpose was to study the effect on blow-down, and prevent damage to the understory where possible.

6. Borggrevé Thinning: This was a system of thinning in which the largest dominant trees, as well as the suppressed trees, were removed. The objective was to remove the suppressed before they were lost.
7. Thinning and Pruning In Young Douglas-fir. A study was underway to determine the effect of pruning and thinning on total increment as well as on quality.

McCulloch, Mason and Willison also worked on various projects during the late 1930's. In 1937 McCulloch initiated studies on hybrid popular plantations, direct seeding, vegetative propagation, and the role of bracken fern as a cover crop. Mason and Willison conducted investigations on thinning practices (Barnes, 1956).

Alan Berg (1979) remembered the research that was going on during the late 1930's:

... there were a number of experiments that were being carried out on the forest, but somehow or another in the transfer of faculty that occurred somewhere around 1941 ... all the records were lost ... Nobody seems to know what happened. ... some of the things I recall is that Professor Starker ... had an area out there in which he was picking up all of the litter that fell on the ground (the soutrage study) and trying to assess the nutrient turnover in a very gross sort of a way. ... Every silvicultural student had a project that he was required to work on, and McCulloch had a number of different things going on out there. Student after student would pick these things up and carry them on. One of the things I worked on with another student was a project to find out how fast litter decayed and went back into the soil. There was a number of different tests out there. We went out and weighed these and kept records and passed it on to the next group of students. ... there were a lot of different things going on, but there was no massive research going on at that time (p. 54).

Thus, the activity was varied, unstructured and by and large, unrecorded.

No systematic compilation of projects occurring on the School lands was maintained, and very few records of that period survived to the present.

Research and The School In The 1940's and 1950's

World War II stimulated interest in forest research; the State Board of Forestry established the Oregon Forest Products Laboratory in 1947. In 1954 the Oregon State College Forest Experiment Station was
authorized by the State Board of Higher Education. The Dean of the School of Forestry was named Director of this research unit. Initially it operated under the umbrella of the Oregon State College Agricultural Experiment Station. It was during the 1950's, therefore, that research was becoming recognized as a concern of the School. Richard Dilworth (1979) stated that McCulloch's emphasis, however, continued to be on undergraduate education.

As long as McCulloch was the Dean that's the way it remained. By that time I was beginning to realize that we were running out of information. That is, we'd utilized in our procedures the information that previous research had provided, but forestry was becoming so much more important. . . . we had to have a better scientific base so we could say not only what happened, but why. And so I started to look for people with a little better scientific background and in '56 (I) hired Bill Ferrell. When I went for this Ph.D. program I realized that . . . we had to have a more scientific base (p. 36).

Dale Bever (1980) noted that Dean McCulloch had some interest in research as indicated by his own investigations, but that there was very little funding available to support this activity. The Severance Tax that was passed in 1947 and made funds available in 1948, only supported research in forest products. In 1956, the State Department of Forestry's research program, which had been located in Salem, Oregon, relocated to Corvallis and combined with the Forest Research Laboratory. It was administered by a non-college committee until 1959 when it was transferred to Oregon State College. Rudy Kallander (1978) served as head of this unit until the reorganization instituted by Dean Stoltenberg (1966-present).

Thus, after these developments during the mid-1950's research in the School of Forestry and on School lands greatly accelerated. Basic data on the Forests were still being gathered during this era. For
example, Bill Wheeler and Bob Keniston conducted a soil survey on McDonald Forest and on the Adair Tract during the summer of 1950. "We spent the entire summer digging soil pits, taking soil samples, and recording information with regard to the various types, soil depths, and so on (p. 9)." During the 1960's research on weather patterns was undertaken in McDonald Forest.

McCulloch Peak Radar Site

It is somewhat ironic that Walter McCulloch's name has become associated with the history of the School Forests through his support of research rather than teaching. The connection is rather tenuous, however, because he had little to do with the activities that resulted in the highest peak in McDonald Forest being named McCulloch Peak. In 1960 the Atmospheric Science Branch of the Science Research Institute (at O.S.C.) headed by Vernon Cheldelin, was interested in locating a site where a radar complex could be installed to study weather patterns. In 1959 a radar unit (CPS-9) contained in a truck and trailer (diesel-powered) were installed on Marys Peak. This site proved to be unacceptable because it was too far from Corvallis, too accessible to visitors with malicious intent, and a Forest Service tower interrupted the scan of the radar leaving a fan-shaped hole in the pictures.

In 1960 some of the graduate students who enjoyed hiking in McDonald Forest reported to Fred Decker, a staff member in the Atmospheric Science Branch, that they had seen a site that seemed ideal for research purposes. The peak, then unnamed, was the highest point in McDonald Forest (it was very close to the forest boundary). Decker concluded that it was a site superior to Marys Peak because, among
other reasons, it allowed study of storms breaking over Marys Peak itself. Decker consulted with Bill Davies and Walter McCulloch regarding permission to erect some weather monitoring equipment at the site. Permission was given, according to Decker (1979), with a simple "sure, go ahead," and no written agreement was prepared. Decker suggested that since the peak was unnamed that it should be called, "McCulloch Peak." Written permission was obtained from Starker and Clemens to cross their property over Alder Creek road.

With the help of graduate students the Physical Plant, and other volunteers the necessary equipment and materials--surplus radar, Quonset huts, supplies, and other items--were transported to the peak during 1960. The facility was used to study weather, particularly approaching storms as they encountered the Coast Range. Decker described a typical day's operation:

Once you were set . . . the storm, everybody was alerted . . . you knew that the equipment was capable of running at the moment, that all the maintenance problems were up, and you could run, and you had a supply of fuel on hand, and that everything had been checked out and we were fully operational . . . we would sound the alarm . . . we'd have people out at various locations doing observing while the radar was operating up there at the Peak. There might be two or three people up there at the Peak . . . You'd hear the constant roar of the diesel power unit going (p. 6).

Unfortunately, the radar unit was not operating when the Columbus Day Storm of October 12, 1962 slammed into Oregon. The longest distance a storm was detected was 325 miles to the west.

About a dozen graduate students, mostly master's level, derived their thesis data from this radar installation before about 1968, when it ceased to function. The problems were endemic--loss of funding from the Signal Corps and National Science Foundation (all "soft" money),
vandals, and maintenance problems—and unsolvable at the time. Decker recalled that vandals, in addition to malicious destruction, removed all copper parts due to the high price being paid for copper at that time. About 1969 Decker attempted to get permission to dismantle the facility, but its ownership was unclear, since it had been government surplus property. Thereafter, it was simply abandoned and left to the vandals and natural processes. At this writing, most of the remaining structures have been removed, and the road has been blocked a short distance from the top of the Peak.

This research facility served its purpose for about six to eight years before the problems of operation became too severe. During these years various authorities and specialists in weather visited the site. For example, the Regional Director of the National Weather Service in Salt Lake City, Utah travelled to Oregon to visit the monitoring station. The U.S. Signal Corps arranged for Professor Singer of Zurich, Switzerland to visit. Singer was a well-known weather authority. Other foreign and national weather experts were also given tours of the facility before its demise about 1968. The McCulloch Peak Radar Station was an interesting episode in the history of the human use of the School Forests.

An indication of some of the research activity in Dunn Forest during the 1950's and 1960's, can be found in the annual reports submitted to the Federal Security Agency (later the Department of Health, Education and Welfare). According to the terms of the transfer of Adair Tract by the U.S. Government to the College, an annual report was required. These reports had a standard format that included a description of the property, its use, status of any buildings, improvements
carried out, the presence or lack of discrimination in the use of
the facilities (on the basis of race, nationality, religion, politi-
cal principles or residence), and similar items.

The report for the 1955-1956 period contained for the first time,
a separate category of "Research."

The Adair Tract and the Adair Hospital lot were utilized
for certain phases of the Forestry School research program.
The following projects are being conducted thereon and will
be continued through the next fiscal year.

1. Vegetational development and rate of restocking
   on cutovers after logging.
2. Volume of annual seed fall and dissemination
   pattern on cutovers.
3. Relative survival of Douglas-fir races of known
   seed source.
4. Rodent populations and methods of control.
5. Brush, weed-tree and grass control by application
   of chemical herbicides.

... During fiscal year 1955-56, the fields of silviculture,
forest management, forest products, soils, entomology and
pathology were included in the budget. Actual expenditures
amounted to $18,154.24 (p. 2).

Subsequent annual reports showed little variation from these
projects. The 1959-60 report also listed several new projects:

1. 14 permanent sample plots were established this
   year in 24-year-old Douglas-fir to study growth
   and stand reaction after various types and
   intensities of thinning.
2. Use of a branch of Berry Creek, on the Adair Tract,
   for water studies continues (p. 2).

The research reported through 1965 continued to be these same projects.
In 1966 Popovich reported that the Naval Hospital Tract was being used
as a laboratory for long-term genetic studies of Douglas fir. The
area was also being used for demonstrations and a source of material for
graduate study in genetics.

Research In The School Forests In Recent Times

The first School Forests Annual Report was prepared for the 1973-74
year. In it Marvin Rowley stated that he cooperated in three research projects on School properties: (1) Dr. Henry Froelich (Forest Engineering) established a soil compaction study plot on Dunn Forest; (2) Dr. Richard Hermann (Forest Management) established two plots on severe south slope sites to determine types of seedling and treatments that are needed to reforest these areas; (3) Dr. Ed Aulerich studied skyline thinning techniques. This was not the extent of the Forest Manager's activities in support of research, however, as there were many other projects underway:

During the year, I have worked with many researchers on an advisory basis when they have a need for a short term study area or material from the forest. This has included picking areas for Dr. Rudinsky of Entomology to do Douglas-fir bark beetle collecting; soil test areas for USFS scientists; bark collecting for the Forest Products Department; and others. I have attempted to locate these activities where the best results would be achieved and where they would disturb the area and other activities the least (p. 1).

During 1974 Rowley established a standard registration and reporting procedure for researchers in the School Forests. This was the first attempt to systematically document research activities in the Forests. Information required was: (1) Person responsible for the research; (2) location; (3) site modifications or other environmental impacts anticipated; (4) cooperation required by forest personnel operations; (5) starting and termination dates; (6) anticipated expense required from Forest budget; and, (7) time required by Forest operations personnel. For the 1974-1975 Annual Report there were seven projects registered.

The School Forests Annual Report 1975-1976 reported eighteen new research projects that were initiated during that reporting period. Academic units represented included Atmospheric Sciences, Air Science, Entomology, Fisheries and Wildlife, Forest Engineering, Forest Manage-
ment, Forest Research Laboratory, Forestry Sciences Laboratory (USFS), General Science, and Zoology. Twenty-three research projects had been initiated in previous years and were continued during this period.

The most recent Annual Report (1978-1979) lists nine new projects and thirty-six projects that were started in previous years and continued beyond June 30, 1979. Therefore, according to the information available to the Forest Manager there are 45 research projects currently underway in the School Forests. These are associated with the following departments or units: Air Science (Corvallis Area Rain Gauge Project), Botany, Entomology, Environmental Protection Agency (Forest Soils Research), Fisheries and Wildlife, Forest Engineering, Forest Management, Forest Products, Forest Science, Forestry Sciences Laboratory, General Science, Radiation Center, Water Resources Institute, and Zoology.

What are the subjects of study of these various research projects? The following is a partial list that gives some indication of the diversity:

Newt ovulation
Animal damage to Douglas-fir
Lateral yarding mechanics
Nursery seedling survival
Bark beetles
Ecology of aquatic insects
Forest microclimatological mechanisms
Effects of soil compaction by logging on forest productivity
Suspended sediment transport in mountain streams
Alternatives to clear cutting
Weathering characteristics of prefinished hardboard lap siding
Post farm
Relation of species of attacking decay fungi to kind of preservative treatment
Forest ecology
Grasslands reforestation
Endocrine control of amphibian reproduction
Point and non-point pollution
Monitoring of reptile population

Mary J. L. McDonald's reaction, if she were able to peruse such a list,
"... to acquire garden lands in the vicinity of the college for use in experimental planting..."

Mary J.L. McDonald-1928
would surely be one of amazement, but also a high degree of satisfaction. Not included in the last Annual Report because of its recentness, is an archaeological investigation in the vicinity of the Arboretum, that was undertaken in 1980. This project is under the direction of personnel from the Oregon State University Department of Anthropology. The total number of research projects is not known, because not all researchers have registered their projects with the office of the Forest Manager. Rowley, in his routine management activities in the Forests, often encounters evidence of research about which he has not been informed. For example, Rowley and Jackson during the summer of 1978, observed a number of large bird houses located high above the ground in a stand of Douglas fir a short distance from Homestead Road in McDonald Forest. Large, easily visible numbers were painted on each, indicating that it was probably a part of a series of such houses. Rowley had no record of this activity; he indicated that this was not unusual because some still do not register their research as requested. This unauthorized research is minor in impact on the Forests, according to John Beuter (1980), because it is non-disruptive and non-destructive. The greater problem is that harvest or other management activities may inadvertently destroy a valuable project.

The Forest Genetics Nursery located at Peavy Arboretum, has not played a large role in the contemporary research program of the School. It has not been a particular asset, but it has been convenient. We do grow a few trees there for the Forests, but the costs are probably greater than buying them elsewhere. The main department that it serves is Forest Science, but John Gordon (Department Head) doesn't see it as a particular asset either. It's not being operated as a formal nursery now; it's not even used a lot for research. Most of the experiments have already served their purpose, most measurements have already been taken. There are no specific plans for the projects that are there. (Beuter, 1980).
The goal of School Forest management is to harmoniously integrate research, instruction, and income-producing activities such as harvest, in a manner that will fulfill the original purposes of the Forests (Beuter, 1980). Consistent with this approach, Beuter and Rowley have stressed preserving the Forests' diversity and variety. For example, grasslands have not been regenerated as would have been done had maximum timber production been the objective. This management approach has been conducive to research (and instruction) and is compatible with the original purposes of the School Forests. The most recent innovation is the establishment of a system of recording a narrative statement for everything that is done in the Forests. That is, for each action, such as salvaging timber, or leaving a tract as grassland, a statement will be written for future reference by researchers and managers. The historical data from this research will be incorporated into this information system.

Research as a human activity in the School Forests is recent. From the first practically-oriented investigations undertaken by T. J. Starker during the 1920's and 1930's--"an apple-box of experiments for the instruction of the young foresters"--to the present era of much greater research sophistication, McDonald-Dunn Forests have well served the School of Forestry and others as an outdoor laboratory.

The discussion now turns to the recreational uses of the School Forests.
6. RECREATION

The lands owned by the School that are now included in McDonald-Dunn Forests, have served as a recreation resource for many years. People from Corvallis, Benton and Polk Counties, and the wider community have visited the Forests for day hiking, picnicking, limited camping, horse-riding, hunting, bird-watching, and related activities. Illegal entry into the Forests by recreationists using two-wheel (such as trail bikes) and four-wheel vehicles has been a persistent management problem over the years. Perhaps the greatest recreational use has stemmed from School programs such as A-Days, Forestry Club Cabin activities, events held at Dean Peavy's Cabin, and more recently, "Spring Thaw"--the modern counterpart of A-Days, but with no cooperative work involved. Because of the custodial management approach that prevailed from the outset, recreational access has been generally limited to day uses. Some organized groups have been permitted to camp overnight, such as the Boy Scouts, but these occasions have been the exception. Rowley recalled, for example, that a Boy Scout group was once allowed to stay overnight at a site near Homestead Road in the southwestern part of McDonald Forest. One of the earliest established recreation sites in the Forests was Sulphur Springs, which is well remembered by many long-time residents of the area.

Sulphur Springs

"Well, Mama, we'll just hook up the buggy and the buck-board and go to Sulphur Springs, take our tent. You fix up the victuals." That's what they used to always say (McDaniel, 1978, p. 15).

Sulphur Springs was identified as a recreation destination point
SULPHUR SPRINGS
as early as the 1890s when people would travel there in wagons and on horses to "take the waters" and meet their friends. McDaniel has been told by "old-timers" about occasions when fifteen to twenty families would congregate there, hold camp meetings, sing songs and generally have fun. They even took mowing machines to the area and leveled the grass to provide a more comfortable setting, and hauled in cords of firewood for use by the campers. According to Harriet Moore (1979) some people travelled there by bicycle. During the 1890's bicycling became a fad that swept the nation, and the residents of Benton and Polk Counties participated in the movement. Mrs. Moore recalls seeing historical photographs in the O.S.U. Archives that were taken at Sulphur Springs that included wagons. She also recalls news notices in local newspapers telling of bicycle trips to the Sulphur Springs area. (In the 1940's her son rode his bicycle from Oak Creek to Sulphur Springs on a trail that existed at that time.)

Some references to a resort existing at this location have been found, but this could not be corroborated. Mrs. Moore thinks that there never was such a development at the springs; no other informant or source could shed additional light on this question. The tradition of "taking the waters" has been based on the idea that there are certain medicinal or healing qualities in the water from which the consumer benefits. Harriet Moore noted that the development of such springs has been relatively common as evidenced by such places as Boswell Springs in southern Oregon and Soda Springs in Linn County. T.J. Starker (1979) remembered sampling the water: "I think the water tastes nasty... its bad enough they ought to get something out of
it. I don't know what it would cure, though. Might put you under the sod (p. 30)."

A first-hand informant who remembered Sulphur Springs was Edwin Woodcock (1979). The Woodcocks, a family of long residence in Corvallis, used to camp there on a regular basis, during the summers. Mr. Woodcock, his parents, four brothers and one sister would often travel to the area in a buggy during the late 1910's.

As recently as 1936 his firm, Woodcock and Sons (an automobile dealership), used to hold company picnics at Sulphur Springs where they played baseball and engaged in other recreational games. Mr. Woodcock does not remember when the spring was encased in cement; no other informant could pinpoint this date either. In the 1940's the School, with the aid of the CCC enrollees from Camp Arboretum, developed a recreation complex at this location near Soap Creek. This was described in an earlier section. The facilities included a network of nature trails, campground developments, and a designated recreation area of 20 acres.

Problems of regulating the behavior of recreationists have been constant. Harry Nettleton wrote a memorandum to Dean Dunn in 1954 that detailed one episode that was probably not atypical. Nettleton received a telephone call from an angry landowner who lived near the gate to the Forest, west of Sulphur Springs. A party of six persons on horseback had crossed his property in entering the Forest; they were camped at Sulphur Springs campground. Nettleton and his wife followed the trail of the horse party to the top of the divide between the Oak Creek and Soap Creek drainage. They returned to the campground and waited for their arrival. An angry exchange ensued in which the
Forest Manager was told to "go straight to hell--this is a public campground--neither you nor anyone else can order me off it!"

Netleton went to his field radio to call the sheriff; the campers thereupon decided to depart.

During our rather heated cross-conversation I explained the status of the campground and the necessity of making no exceptions so far as allowing people into the area and especially during the closed season. It didn't seem to register. I'm in their dog-house (p. 2).

All of the Forest Managers have had to deal with problems of littering, vandalism and other depreciative acts. Finally, the problems became so severe that all remaining structures were removed and access to the area was partially controlled through the placement of large rocks along the edge of the road. Marvin Rowley (1979) described the people who cause the problems and his response:

They're all types. There are people that walk in, that ride in illegally. They break in through a fence, or they find an alternate route in. This is one of the games that we play; they find a way in, and I find a way to keep them out. I block it, I find a way I can keep them out continually, and they look for another way in. When they find it . . . I find it, I block it (p. 12).

Forest Club Cabin

A second recreation resource that has been even more central in the historical mainstream of the School of Forestry, has been the Forestry Club Cabin. The first cabin was built in 1925 and burned in 1949; the present structure was constructed 1950-1952. Both of these buildings occupied a primary place in the School's educational and recreational programs.

The first cabin was begun by the forestry students, under the direction of Dean Peavy, on August 22, 1925 and finished January 23,
1926. The first Forest Club meeting was held in the cabin on December 2, 1925. Dean Peavy had decided that the School needed an assembly hall or "Arboretum Log Cabin" as it was called initially.

During the summer of 1925, the Dean could be seen driving his Dodge between the Arboretum and the campus quite frequently. It was not uncommon to hear him say: "It's only seven miles from town on North Ninth Street Highway--pavement all the way." Again, you would see him sketching something on a piece of paper. Thus the end of one man's dream was being diagrammed. . . . I had occasion to get a glimpse of one of these sketches one day and here are the specifications for the cabin: "Not a stick of sawn material in the building. Nine logs high of peeled Douglas fir logs, with butt diameter maximum seventeen inches, minimum fifteen inches, top diameters not less than ten inches." Thus the walls were built on a solid concrete foundation. . . . the wall is ten feet high and beams, ten to twelve inches in diameter, are placed eight feet apart. . . . The size of the building is 32 x 52 feet. . . . the rafters are peeled Douglas fir poles. . . . the walls are all of round logs notched into each other with "v" and inverted "v" notches. . . . the chinking is done with pure yellow clay. . . . The fireplace, which is eight feet wide, is lined with fire brick. The chimney is of red brick to be veneered with cobble stones (McGuire, 1926, p. 20).

The logs were cut on the Arboretum and hauled to the site; students and faculty alike contributed their labor for this cooperative project. McDaniel remembered some of the individuals who were involved in the project:

Kelly McGuire and Trever Lewis did most of it, especially Kelly McGuire . . . Trever and Kelly pulled the logs down with a Ford Tractor, iron wheels. One of them had to sit on the front of the tractor, . . . it would tip back. And then Dean asked me if I'd be willing to peel some logs. And I said, "well, I might as well keep busy." So he brought out some peeling stuff and I started in and peeled a lot of the logs (p. 14).

Rowley speculated that this particular site was chosen because it was well located for a water supply, and there were logs available nearby. Early photographs taken shortly after its construction show that the Cabin was located on the edge of a clearcut area. On December 2, 1925 George Peavy and Kelly McGuire touched a match to the
first fire to be kindled in the Cabin and the Dean solemnly dedicated it to "fraternity, loyalty, and democracy."

The Cabin became the focal point for the many School connected programs that were carried out in the Forest and at the Arboretum. Anderson, writing in 1939, described the events:

Arboretum Day held in May each year centers around this cabin. Here, in the grassy glade fronting the cabin, genuine bean hole beans, brown bread, applesauce, ice cream, and hamburgers are served in immense quantities every year. Steak feeds and smaller meetings are held in the cabin occasionally. The picnicking area in front of the cabin is also well utilized. In the summer of 1940 the cabin was the site of the first N.T.A. student fire fighting squad. Recent improvements around the cabin site have been carried on by the CCC. A new rustic parking place has been completed. The sturdy cement stove is to be replaced by a kitchen; an information booth is to be built (p. 23).

Vernon McDaniel, class of 1925, remembered that the Dean had two fast rules about early forestry events such as A-Days and other activities centering around the Cabin: "No, that's one thing Peavy wouldn't allow. No beer, no women." Dan Robinson is another who remembers his days as a Fernhopper in the mid-1930's and these activities. Robinson is unique in that he is the only person currently in the School of Forestry who has had an association with all of the Deans. He arrived to O.S.C. in 1936, and graduated in 1940 with a major in Forest Management; after a short period he returned to become a faculty member in the Department of Forest Management, a position that he occupies today. Therefore, his relationship with the School extends from 1936 to the present. Robinson (1978) also recalled that John Barleycorn was not a part of these early gatherings:

Not that foresters didn't drink beer in those days. I guess foresters always drank beer. . . . we respected the State law that no beer on state property at that
time. Real black coffee, gallons of black coffee. . . .
Foresters drank black coffee on outings in McDonald Forest,
and beer and other refreshments at Price's Tavern downtown
(p. 8).

The Cabin was used intensively by the School for its many social
and professional functions, but other organizations were not denied its
use. This practice ultimately caused the demise of the first cabin as
noted in 1949 by the Barometer:

February 13, 1949, is a blackcat day in the history of
the OSC Fernhoppers. . . . fire destroyed the Forestry
Club log cabin in Peavy Arboretum. So clean was the
burn that all that remained were two brick fireplaces,
the concrete floor and foundation, and a woodshed standing
apart from the cabin (The Forestry Club).

A fraternity had held a dance the night before and a spark from the
fireplace probably got through a crack and onto one of the logs. A
committee was formed to investigate the possibility of rebuilding the
cabin. Rowley (1980) summarized the events that followed:

. . . funds were found to purchase materials that weren't
donated or didn't grow and blueprints for the new cabin
were approved soon after the ashes cooled. The School
Forest was made available . . . for raw materials and
some of the necessary equipment. By this time there was
a war surplus D-6 cat and a Corley Sawmill over on Oak
Creek and that's where the new construction started.
Forest Engineering students put their logging skills to
work skidding out timbers . . . they were hauled to the
mill on the same G.I. truck we used for field laboratory
transportation. The Forest Products students broke them
down into the materials needed and they were hauled and
piled at the Cabin site. In the fall of 1949, the re-
turning students went to work in earnest. By Arboretum
Day, 1950, a new Cabin stood in that forest glade (p. 9).

Rowley, who was a senior in Forest Engineering, was appointed construc-
tion foreman for the project. He reported to Jack Grantham, a professor
in Forest Engineering. The Cabin was built on the same site, but it
faced the opposite direction from the first cabin. The ridge ran east-
west on the original cabin and the new one was built with a north-south
YOUNG ROWLEY
About 1950
(left)
FOREST MANAGER
1973 - Present
FORESTRY CLUB CABIN
1980
orientation.

Peavy's Cabin

Another structure that figures significantly in the history of the School Forests is the log cabin built for George Peavy by friends and alumni. The Forest Log for December, 1935 reported the event:

The "Cabin in the Hills," which is to be presented to President George W. Peavy, of Oregon State College, by his forestry friends in commemoration of his 25 years as dean of the school of forestry at O.S.C. has just recently been completed and is now ready for occupancy. The cabin is located on one of the high points of the Arboretum. . . . It is about 20 x 38 and consists of two rooms. One is the kitchen which is about 10 feet wide and extends across the building. The balance of the cabin is taken up by the living room. A stone fireplace, with an inlay of petrified wood, graces one end of the living room (p. 5).

The Cabin was located on Vinyard Mountain in the southeastern portion of Section 3. (Other sources state that it was completed in 1932.) The Dean used this building for meetings of the staff, Xi Sigma Pi gatherings, for a retreat to meet with out-of-town guests on matters of College business and for related functions. In reviewing the correspondence of Peavy's era as President, one often encounters references to the Cabin:

I should like very much to meet with the special Forest Committee Sunday . . . We could go up to my cabin on the hill where we would be quite free from disturbances. . . . Incidentially, I'll broil another T-bone if it meets with your approval . . . Naturally I don't expect to get any financial commitment out a hide-bound Scotchman. As you may infer, I was just smudging a little to see which way the wind was blowing (Peavy, 1937).

This letter was written to an official of the Federal Intermediate Credit Bank in Spokane, Washington and it gives an indication of some
of the business as well as recreational uses the Dean made of the Cabin.

Dan Robinson remembers occasions when he attended events at the Dean's Cabin:

... we had sessions up at the Dean's Cabin. We would all pitch in and cook our steaks and have our coffee. The Dean always provided that for the Forestry Society, Xi Sigma Pi. Then we sat around afterwards and sang forestry songs out over the hills from the Dean's Cabin and talked about forestry ... and the out-of-doors, and philosophies of natural resource conservation. This was one of the major contributions of Dean Peavy in conveying his attitudes and philosophies ... some of my colleagues even today, reminisce about that time ... about the tremendous contributions he made in the moral and spiritual sense (p. 7).

Sometimes the Dean went to the Cabin for the week-end with his wife, according to John O'Leary (1978):

He used to go up there when he was younger, and he used to walk up there before the road was built and stay there. He'd walk up Friday night and stay Saturday and Sunday, and come down Sunday night. He and his first wife (p. 15).

T.J. Starker (1978) also visited the Cabin on numerous occasions:

Oh, we had feeds there. For instance, I recall, going out there ... with the University of Michigan Club ... I think there were 13 of us. There were about three lawyers, three or four professors ... (Peavy was an alumni of Michigan).

Although most of the use was by faculty members, and of course the Dean, other non-academic persons used it on occasions as well. Rowley (1979) remembers taking a group of Sunday School children there once and spending the night; an evangelist met with the group. Andrew Peavy, (1980) the great-grandson of George Peavy, remembered family stories about the Dean going up to his cabin during periods of marital discord. Eventually, after the Dean died in 1953, the Cabin began to deteriorate and became a management problem. Bill Davies,
who was Forest Manager at the time (1961), decided that some action
had to be taken:

We were afraid of fire there . . . Nobody was using it much
and the logs were getting all rotten and bugs in them, and
kids would climb up the hill and build fires in the fire-
place. We were afraid they would burn it down so I talked
to Dean McCulloch about it and some of the people who had
built the cabin for Peavy were still alive, and he contacted
some of them and told them what we thought we ought to do,
and they said they thought that would be a good thing (p. 14).

The Cabin was dismantled, and later the remains were burned. Davies
had a concrete slab poured over the exact outline of the original
floor, and the fireplace was kept intact. A bronze plaque dedicating
the Cabin to Dean Peavy remained mounted on the fireplace, but it was
subsequently removed. A student later encountered the plaque some
distance down the hill from the cabin site. He turned it over to
Marvin Rowley, who still has it. The Cabin was taken down in 1961;
the Columbus Day storm in October, 1962 blew a large Douglas fir across
the foundation, therefore, it would have been severly damaged had it
still been on the site.

George W. Peavy's ashes were sprinkled on the slope that the Cabin
overlooked. Today nothing remains except the fireplace and concrete
slab that was poured where the floor once was (it was originally con-
structed of wood).

Hunting in the School Forests

The foothills near Corvallis and its environs were used for hunting
long before the first white settlers came into the Willamette Valley.
Early accounts, however, pointed out the difficulty of "living off the
land," as more people settled the Valley floor and the edges along the
foothills. Hunting, as a means of supplementing the diet, was a regular
part of the early Benton County resident's rhythm of life. Wallis Nash in 1877, mentioned the recreational treks to the hills and mountains near the Willamette Valley:

During the late summer and autumn the mountains are the resort of numbers of the farmers of the Willamette valley and their families, as well as the storekeepers from the cities and towns. Packing their stores into one of the long narrow wagons of the country, and not forgetting the rifle, shot-gun, and fish-rod" the whole family shut up house in the valley and start for the mountains. . . . The wagon is unpacked, the tent pitched, the stores arranged, and the family disperse; the men to hunt the black-tailed deer, and later on in the season the elk . . . and the black bear. The boys find a lake near by filled with trout . . . The women and children fill huge baskets with the . . . berries (p. 123).

One of the few sites in McDonald Forest that is specifically associated with hunting is the Harwood Spring Hunting Cabin site (near Vineyard Mountain). Both Rowley and Davies remember that a cabin once stood at that location, but little is known about it. Davies (1979) noted that Harry Patterson always took his senior engineering classes there on field trips, because he liked to drink the water from the spring. No other informants knew of the cabin, but there was a reference to it in The Annual Cruise for 1940:

There are several cabins . . . which are quite well known, but very little seems to be known about the undersized log cabin at Harwood Springs. It seems probably, however, that this was built as a homesteader's cabin or a hunter's shack (Vincent, p. 48).

At some undetermined point after the School began acquiring the various pieces that made up the Forests, it was decided that hunting was incompatible with the other intended uses i.e., education and research. Rowley (1979) summarized the events that lead up to the present hunting policy:

I don't know at what stage they decided that they couldn't tolerate hunting because of the student use . . . So they
negotiated contracts with the State Game Department ... to set aside the McDonald-Dunn Forest lands as a refuge. Up to 1953 it was a game refuge with no hunting allowed. But about that time ... the deer population built up because of no harvest. ... built so they couldn't plant a tree without it getting eaten. ... almost 100% of their plantations were being devastated. So they worked out a program ... to have controlled hunts. They coordinated this with the Fisheries and Wildlife Department on campus, so the students there would have a learning experience out of this besides having data they they didn't have from anywhere else (1979, p. 9).

Harold Sturgis of the Oregon Department of Fish and Wildlife described the outcomes from this cooperation:

... here seemed to be a perfect opportunity to provide students from the Department of Fisheries and Wildlife experience with both hunters and deer in checking station situation. By requiring all hunters to check in and out of the area, accurate records of hunter participation and deer harvest could be kept. ... A principal objective was to test the response of the deer population to heavy annual harvests. ... McDonald Forest has not only revealed to us the high productivity of a healthy blacktail population; it has provided an opportunity to test the long-term effect on a deer herd of heavy annual harvests of female deer (1977, p. 1).

From 1953 to 1973 controlled hunts were annually held in the Forests; the average number of deer harvested was 285. The results of twenty years of hunts (either sex) showed that intensive harvesting of the deer population enhanced the tree regeneration. According to Rowley, the deer browse dropped down to 5 to 10% which is within the tolerable range. The number of hunting days was subsequently reduced (since 1973) and the harvest has dropped to 100 deer a year. This has again caused losses due to browsing (52% in 1979 in McDonald-Dunn Forests according to Rowley, and almost 100% on Spaulding Tract).

Some accidents and one fatality have resulted from hunting in the School Forests. In 1978 a youth was accidently shot, and earlier
in the 1950's during bow-hunting, some recreationists were injured. John O'Leary recalled several episodes that occurred when he was in McDonald Forest with a class:

... these were real razor sharp type arrows ... One guy snuck up on another guy and shot him in the rear end with an arrow, had to pack him out. I was up there one day and got the crew started, and a car came down. A guy with a real white face asked me which way it was out of there, and I pointed down the road, told him we just keep going down the hill. He started down, went about 100 feet, ran into the ditch, opened the door and fell out. I ran over there and got him straightened up, and asked him what was the matter. He was out hunting with a bow and arrow, came back to the car, and he had a hand full of arrows, and these had steel points ... he started to shove them in his back seat, and he moved his foot forward and put one right in his leg. I guess he bled too much, because he passed out. So I had to get the truck and take him to the hospital (p. 11).

The School of Forestry's High-Lead (1979) reported the fatality:

On Nov. 24, at 7:45 am, a 13 year old Albany boy was shot on McDonald Forest. He was hunting with his father and brother ... The shooter was using a 7mm Magnum rifle equipped with a scope. He shot uphill through light brush about 300 feet. The boy was sitting sideways to the shooter ... the shooter saw the orange vest as the boy fell, and knew that he had shot a person. He helped give first aid and transport him to the ... hospital. The boy was ... sent on to Eugene where he died.

Until 1975 the Forests were considered a game refuge which only gave protection to game animals. Now it is designated a wildlife refuge in which all hunting is regulated by permit. Other animals that are found in the Forests include the spotted owl, piliated woodpecker, cougar, bobcat, bear, beaver, possum, raccoon, rabbit, squirrel, and many others.

Other Recreation

Much of the recreation in the School Forests is informal day use and as such, has not been systematically recorded. In recent years
RECREATION IN McDONALD FOREST

PEAVY ARBORETUM TODAY
(1980)
students enrolled in recreation management classes at Oregon State University have made periodic studies of recreation use patterns, but this information has not been made available. Common sights on weekends and during the week, particularly with favorable weather, are joggers, horse-riders, day hikers, bird-watchers, dog-walkers, photographers, and other recreationists. Not as common, but unfortunately also present on occasion, are those who are illegally using the Forests for recreation. Some of these have been mentioned—trail bike enthusiasts, four-wheel drive vehicle operators, and illegal hunters. Rowley noted that some "shady" types of recreation occur:

... a locked gate is a challenge to some people. "By golly, I'm going to get in there and find out what's in there." And when they get in there and find out that... the challenge is getting through the gate, and I think another part is... for drinking parties... they get in there and know... the sheriff or nobody else is going to catch them. They can throw a wild party, they can go park on lover's lane... and they don't have to worry about anybody catching them. So there are the shady types of recreation. ... Illegal hunting. They know this is a refuge, and there's likely to be more deer there and easier to spotlight... (1979, p. 13).

Vernon McDaniel (1979) mentioned another "shady" recreation activity about which he heard many stories. About one-eighth of a mile from the sawmill that had been located on Calloway Creek, and near the present fence that demarcates the Nursery, a complex of several structures was erected. These served to house people who were associated with the sawmill. McDaniel was unclear about the date, but thought it was around the turn of the century. One of these dwellings operated for a time as a house of prostitution, according to the stories of long-time residents related to McDaniel. The house was located on part of the original tract purchased for the
Arboretum by Peavy in 1925. McDaniel was told that the structure mysteriously burned, putting an end to the nefarious activities:

All the ladies used to come out from Albany, and Corvallis and around. So I guess the married women got tired of it and burned the house down. . . . They blamed the married women for it, but they kept their mouths shut. They didn't say anything (p. 17).

McDaniel did not personally see any of the structures. Rowley has also heard similar stories about these activities at this location, and at several other sites in McDonald Forest. McDaniel remembered the location of another house of prostitution that was located on the fringe of the Forest. It was a short distance east of the Arboretum entrance (near Rt. 1, Box 327B); it probably operated during the 1890's. This one also burned after only a short time of serving local loggers, farmers, and other clientele, according to McDaniel. For several reasons, no first-hand informants could be found who could corroborate these claims.

Wood-cutting could be considered to be recreation for some. This activity has greatly accelerated in the past five years, according to John Beuter (1980). For the years 1975-1976 there were 600 cords of firewood removed in an individual cutting permit system. The total income from this was $1,415.16 (Rowley, 1976). The School Forests Annual Report for 1978-1979 reported 1,222 permits issued, 1,352 cords of firewood harvested, and a gross income from this activity of $9,384,10 (p. 23). These figures are doubtlessly related to rapidly escalating energy costs and the concomitant movement back to heating with wood. Although there is clearly a utilitarian motive involved, it could be argued that wood cutting is a recreational activity as
well, for many participants.

The activities of the School of Forestry have probably constituted the greatest single recreation use of the Arboretum and its environs. These activities have centered around the traditional A-Days, and more recently events such as the "Spring Thaw." The Forestry Cabin has been used extensively for recreation, as has Peavy Lodge, which is open to other groups in the University and the community. Lake Cronemiller has been included in School events as well. Organized tours through the Forests have been carried out regularly over the years. These could be considered as a mixture of recreation and education; the definition would depend upon the participant's motives and satisfactions. This human use of the School Forests has been discussed under the Education theme.

Finally, one indication of the School's broader view with regard to the uses of the Forests, is the cooperation with representatives of Native-American groups. The Forest Manager has facilitated the establishment of a sweat house in Dunn Forest, for use by Native-Americans from U.S.U. and elsewhere. This facility, which is a small simply constructed structure, was established in 1976 at a location that would offer seclusion. The extent of use is unknown, but the deteriorated condition of the sweat house would indicate that it is not now regularly in use.

Recreational use of the School Forests has not been a primary management goal. The School, through its administration of these resources, has focused on the original purposes of the Forests: teaching, research and activities that support these two purposes--harvesting on a
limited basis. Nevertheless, recreation has gradually taken a larger role, and will probably continue to expand in importance as the Valley urbanizes and recreation resources close by become more important.

The discussion now turns to the final theme in the human uses of McDonald-Dunn Forests--Military.
7. MILITARY

I have been told that the disposal of the Camp Adair property will be through your office. I would appreciate information in regard to details of the sale.

(letter from Dean Paul Dunn to William Kennedy, Reconstruction Finance Corp. August 1, 1944.)

Camp Adair

One of the many ways that World War II affected the lives of people living in Benton and Polk Counties during the early 1940's was the establishment of Camp Adair, a U.S. Army training cantonment. It was built during 1942-1943 and ultimately came to house up to 30,000-50,000 people at a given time; it contained about 50,000 acres. It was formally dedicated September 4, 1943, but was occupied by troops before that date. The camp was named in honor of Henry Rodney Adair, who was a native of Astoria, Oregon and scion of a prominent Oregon Pioneer family (McArthur, 1952). Henry Adair's grandfather was a congressman, governor of Kentucky, and the First Collector of Customs for Oregon. General John Adair (1808-1888), established the first customs house on the Pacific Coast, in Clatsop County. He retired in 1860.

Henry R. Adair graduated from West Point and became a lieutenant of calvary in the regular army. The border disturbances in 1916 prompted a response from the U.S. Government in the form of an expeditionary force that penetrated northern Mexico. Adair was killed June 21, 1916 at Carrizal, Mexico during a surprise attack on a small detachment of American troops about 90 miles south of El Paso, Texas. "Lieutenant Adair conducted a spirited defense but the few troopers in his immediate
vicinity were greatly outnumbered and many were killed (McArthur, 1952, p. 86)."

Camp Adair functioned from 1942 until 1945 when it ceased to be an Army post. Camp Adair post office was established June 1, 1942 and discontinued May 23, 1946. The hospital area of the camp was occupied in 1945 by the U.S. Navy and used as a rehabilitation center for a short period. Immediately after the end of World War II there was a large increase in student enrollment at Oregon State College creating a demand for housing. The College remodeled the hospital wards into apartments and rented them to students. The students subsequently formed their own government and renamed the locality Adair Village. Adair Village had its own post office established in 1947. As the College's program of constructing residence halls began to meet the student housing demand, the Adair Village housing was no longer needed.

According to Ken Munford (1980), the U.S. Air Force in the early 1950's turned the area into a SAGE (Semi-Automatic Ground Environment) installation as a filter and defense control center for western Oregon. It served as a part of the early warning system that was devised during this period to guard against inter-continental ballistic missile attacks. It controlled bases in Klamath Falls and Portland. The SAGE blockhouse, officers and enlisted men's clubs, family housing, gymnasium, church and other buildings, were built for Adair Air Force Station. When it was determined that the defense system of which this facility was a part was obsolete (the increasing sophistication of enemy ICBMs made it so), it was discontinued and the station was closed. The buildings
were used and acquired by various public and private organizations and individuals. The Benton County Parks Department, for example, acquired the Officers Club and currently operates it as a meeting facility. There is also a county park on the site. The housing was sold to private individuals, who organized an incorporated community, the City of Adair Village, in 1976. In 1979 the population was 550.

The U.S. Army Period

The following summary, prepared by Ken Munford provides a concise overview of the U.S. Army's presence at Camp Adair 1942-1945:

Four infantry divisions manned, equipped, and trained for overseas duty:

91st Division "Powder River Division"

Consisted of 361st, 362nd, 363rd Infantry Regiments
346th, 347th, 348th Field Artillery (M) Battalions
916th Field Artillery (L) Battalion

Was attached to the Fifth Army and served in the Italian Theater from Rome throughout northern Italy.

96th Division "Deadeye Division"

Consisted of 381st, 382nd, 383rd Infantry Regiments
363rd (M), and 361st, 362nd, and 921st Field Artillery Bns

Was attached to the Tenth Army and took part in the Leyte and Okinawa invasions.

70th Division "Trailblazer Division"

Consisted of 274th, 275th, 276th Infantry Regiments
882nd, 883rd, 884th (L) and 725th (M) Field Artillery Bns

Was attached to the Seventh Army and saw action in the Saar region of Germany.
104th Division "Timberwolf Division"

Consisted of 413th, 414th, 415th Infantry Regiments
387th (M) and 385th, 386th, 929th (L) Field
Art. Battalions

Was attached to Canadian Army, First Army VII Corps and
served in Roer River district, crossed the Remagen Bridge
into Germany, occupying a large territory as far north as
Paderborn.

Each division also had Headquarters & Headquarters Co,
Military Police Platoon, Cavalry Reconnaissance Troup,
Signal Co, Engineers Bn, Medical Bn, and Quartermaster
Bn.

The history of the 104th Division, which was activated at Camp
Adair on September 15, 1942 is recounted by Leo A. Hoegh and
Howard J. Doyle in Timberwolf Tracks, published by the Infantry

Acquisition of the Adair Tract

It was through the foresight, initiative and tireless efforts of
Paul Dunn, who was Dean of the School of Forestry at the time, that
more than 4000 acres of forest land were added to the School forest
system. His initial inquiries to the U.S. Government in 1944 met with
the usual delays, vagueness and inaction that one would expect from such
a request. He solicited opinions from the School's faculty concerning
the feasibility and desirability of such an acquisition. The response
was not always encouraging. Dean Emeritus George Peavy responded:

The tracts in question are so detached from the Forest
that we could not hope to consolidate our holdings by
acquiring the intervening lands. Due to the remote sit-
uation control of the area would be expensive. It is
my opinion that we should follow our policy of buying
adjacent areas and those principally to the west of our
present holdings (1944).

After raising several points regarding the limited funds available
for expansion, management difficulties of a detached tract and other
concerns, Harry Patterson concluded:

The tract should be developed: fences, fire-lines, protection roads established, probably telephone lines constructed; buildings and other improvements arranged for and perhaps a forester installed on the tract. Where will the funds come from to undertake this development (1944)?

Earl Mason's opinions were set out in outline form, and there was little doubt about his sentiments:

Present situation: School is land poor. Lands program is inadequately financed. Lands are poorly managed . . .

Conclusions: I doubt if the lands now under the control of the school can be justified on basis of actual use. We need most of all to develop and use properly the lands we now have. . . . I particularly doubt the wisdom of cutting timber on the McDonald Forest . . . to raise funds . . . to purchase additional lands.

Recommendations: Let's get busy on our main task of developing our forest lands and our staff personnel and not spread available funds too thin (1944).

Later in 1948, after much negotiation and efforts by Dunn to convince the concerned parties that acquisition of the tract was desirable, President Strand was notified that there would be an appraisal cost of about $2,000. The actual cost as determined later was $1826, but this was the sole expense in acquiring over 6200 acres of land. Strand wrote to Dunn stating his reservations:

My attitude about this deal has changed some. I am not nearly as enthusiastic as I was about a year ago. You will note also that it is going to cost us about $2,000 for the appraisal. . . . Are we dead sure that we want this land after all, and what would be the cost of operation after we get it (1948)?

Dunn satisfied his doubts by paying the fee for both the School of Forestry and School of Agriculture, out of the McDonald Forest account.

Thus, Paul Dunn from the outset had to overcome much resistance
PAUL M. DUNN
Dean School of Forestry
(1942 - 1955)
to the idea of acquiring additional lands for the School forest system. There were those who supported his plan as well. He sought and received the support of Senator Guy Cordon (Oregon), who was a personal friend and a supporter of the timber industry. Senator Cordon's efforts played an influential role in the eventual outcome. Often the response from the U.S. Government was discouraging, as indicated for example by this excerpt from a letter written by the Surplus Property Board in Washington, D.C. to Senator Cordon: "Camp Adair has been declared surplus to the Board. However, there now appears to be a further need for this land in connection with the war effort. . . . It will not be assigned to a disposal agency . . . until it is definitely determined that no further military need exists for it (Fuller, 1945)."

Adair Military Reservation had been assembled from lands that were purchased and obtained through condemnation proceedings (See "Conveyances To The United States Of America" and "Condemnation Proceedings In Which United States Of America Was Plaintiff"). An ownership map prepared by the War Department in 1942 also provides an indication of the numerous ownerships with which the U.S. Government had dealt (see "Ownership Map Of Camp Adair").

Paul Dunn (1978) recollected the events that lead to eventual success:

In 1945, after the war was over, it was evident that many of the camps should be abandoned. . . . I contacted the agency and obtained information as to the procedure that had to be followed. The land had been acquired mostly from private citizens; farmers, with some timber companies.

The area was mostly in Benton and Polk Counties. . . . it was thought that the former owners would have first chance to repurchase their property. However, nearly eight years had lapsed and many of the former owners had moved away and
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## CONDEMNATION PROCEEDINGS IN WHICH UNITED STATES OF AMERICA WAS PLAINTIFF

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were not interested. ... Then we learned that the educational system programs would have a high priority in the purchase of the land. ... The value of the property had been set at $150,000. Whatever it was I could see some future in it. ... As we moved along it became evident that educational institutions would have number one priority for definite programs relating to education and research use. Former owners or World War II veterans would have next priority.

It had been appraised by two of our former graduates, who were with the State Board of Forestry. They gave us data as to the quality of the timber. ... We proceeded and presented our request to the Federal Land Bank of Spokane, who had responsibility for disposal. We dealt with them for a time and finally with help from Senator Cordon, we were granted the tract of 6200 acres, as a block of forest and agricultural land (p. 8).

On May 19, 1947 Senator Cordon dictated a telegram to a Western union operator in Washington, D.C.

DEAN PAUL DUNN, SCHOOL OF FORESTRY
OREGON STATE COLLEGE

AM TODAY ADVISED BY WAR ASSETS ADMINISTRATION THAT APPLICATION OF OREGON STATE BOARD OF HIGHER EDUCATION FOR 6200 ACRES OF LAND AT CAMP ADAIR HAS BEEN APPROVED. WAA APPROVED SALE OF PROPERTY TO THE OREGON STATE BOARD OF HIGHER EDUCATION ON BEHALF OF OREGON STATE COLLEGE FOR FAIR VALUE ESTABLISHED BY WAA $250,000 AT FULL ONE HUNDRED PERCENT DISCOUNT TO BE ACCEPTED IN LIEU OF CASH.

The telegram further stated that the land was transferred on condition that wide publicity be given concerning the, "dangers inherent in the explosive contamination of the property." The 6200 acres consisted of agricultural as well as forest lands. Dunn negotiated an agreement between the School of Agriculture and the School of Forestry concerning the division of lands and responsibilities.

It took quite a few discussions before I convinced the Agricultural people that there was any value to the farm area. (William Schoenfeld was Dean, Earl Price was his assistant.) They thought it would be a "headache", but finally it was agreed that if it could be acquired, the
Management of the Forest and Agricultural Lands

This was formally concluded with a memorandum of understanding on August 11, 1952 (see "A Memorandum Of Understanding Between The School Of Forestry And Agriculture; Oregon State College Regarding The Administration Of The Adair Tract"). As shown by this initial agreement, the lands were divided into three general administrative divisions: Forest, Agriculture and Marginal. Rowley (1979) believed that the Federal Land Bank did not accurately designate forest and agricultural lands, and that the vague agreement between Forestry and Agriculture caused some early problems in management and administration:

The original agreement was drawn . . . they drew boundaries . . . and said . . . "this is forest land, this is ag. land, and all the forested land within the agriculture area will be managed jointly . . . by the School of Forestry and the income will go back into the property." . . . Now, when Harry Nettleton took over as Manager, he just played ignorant of the ag. area, and stayed away from it as much as possible. They built their fences where they wanted them . . . There were no controls from our standpoint at all as far as managing those areas. When Bill Davies took over, it was pretty much fenced . . . He backed off from doing anything within those areas. They had one sale . . . that Harry Nettleton put up in the ag. area. It was the only one that I knew that took place . . . Then when I took over . . . and started asking questions . . . with John Beuter, we brought the thing to a head, and negotiated an agreement . . . that these lands within the ag. area were indeed forested areas, that they were ours to manage, and that we would pay them an annual fee for five years at a set amount. At the end of that five-year period, we would re-examine the potential on those lands . . . and arrive at a new five-year fee (p. 3).

This agreement continues to function today to the apparent satis-
MEMORANDUM OF UNDERSTANDING
BETWEEN THE
SCHOOL OF FORESTRY AND AGRICULTURE: OREGON STATE COLLEGE
Regarding the
ADMINISTRATION OF THE ADAIR TRACT

A. General: For general administrative purposes, the Adair Tract shall be divided into three general classifications as follows:

1. Forest - "F" - land best suited for the commercial growing of forest trees; with boundaries as indicated on the attached aerial mosaic.
2. Agricultural - "A" - land best suited for farming and/or livestock grazing; with the boundaries as indicated on the attached aerial mosaic.
3. Marginal - "M" - land within the agricultural boundaries which supports woodlots and more or less scattered second-growth timber definitely separated from the commercial forest land by farming or grazing areas.

B. Administration and disposition of income.

1. Forest: The forest land, as indicated on the attached map, shall be administered by the School of Forestry and all income from such land shall be credited to the School of Forestry.
2. Agricultural: The farming and/or grazing lands, as indicated on the attached map, shall be administered by the School of Agriculture, and all income from such land shall be credited to the School of Agriculture.
3. Marginal: Land within the boundaries of the agricultural areas which supports woodlots and more or less scattered second-growth timber shall be jointly administered by the School of Agriculture and the School of Forestry as experimental areas and income from the sale of forest products from such lands shall be set aside in a separate fund. This fund shall be used for the administration of such woodlots and second-growth timber stands as experimental areas, including costs of fencing and utilization of the forest products thereon - whether for land usage or for direct sale.

The joint administration of above described marginal lands shall be prescribed and supervised by a committee consisting of three representatives mutually selected by the Deans of the Schools of Agriculture and Forestry respectively.

RECOMMENDED BY:

H. I. Nettleton - Forest Manager

Joe B. Johnson - Acting Head of Department of Animal Husbandry

Dean, School of Agriculture
Dean, School of Forestry

August 11, 1952
Date
faction of both parties. John Beuter recently renewed the five-year agreement, based on contemporary stumpage prices. (The acreage involved in the Berry Creek and Soap Creek Farm forest lands is 270 and 346 respectively.) The Memorandum of Agreement signed in June, 1976 specified the relationship:

... the School of Forestry will manage the forested areas of the Berry Creek and Soap Creek Ranches ... the agreement provides that the described areas be managed in conjunction with Dunn Forest ... with net receipts of said management to be transferred to the Agricultural Experiment Station in the form of an annuity.

The Annuity paid for the period July 1, 1975 through June 30, 1979 was $29,000. The overhead costs of management are 20 percent of the net receipts; the annuity is a "long-run, moving average toward the ultimate forest productivity of the lands (p. 4)."

The Use of Adair Tract

The mandate from the U.S. Government concerning the use of the land was unequivocably stated in the deed:

First: That for a period of twenty-five years from the date of this conveyance, said premises shall be continuously used as a part of and in connection with the School of Agriculture and the School of Forestry at Oregon State College to provide more complete teaching laboratories to facilitate the training of forestry and agricultural students in practical methods of land administration based upon research findings, and to augment and to supplement the facilities of Oregon State College for the conduct of useful research in all phases of the proper use of the lands ... and for incidental purposes pertaining ... to the management and operation ... but for no other purposes.

Second: That for a period of twenty-five years from the date of this conveyance, the Grantee, its successors or assigns shall file a semi-annual report with the
War Assets Administration ... showing or setting forth the uses of the said property during the preceding year ... 

Third: That it will not resell or lease said premises, or any part thereof, within twenty-five years from the date of this instrument without first obtaining the written authorization ... providing, however, that mature timber may be harvested in accordance with sound forestry practices and the proceeds thereof used solely for research purposes by the said School of Agriculture and School of Forestry (p. 5).

The discussion of the Education and Research themes pointed out the extensive use which has conformed with these original purposes.

Also included in the deed was a statement describing previous use of the property, which was to affect future harvest and management activities in Dunn Forest: "... was formerly used by the War Department as an impact area of a bombing (artillery, mortar, machine gun, grenade, etc.) range;" and, "... was subjected to contamination by the introduction of unexploded and dangerous bombs, shells, rockets, mines and charges either upon or below the surface." What was the nature of the military's use of the Adair Tract? How has this military use affected contemporary programs of instruction, research and harvest activities?

Military Use of Paul Dunn Forest

One soldier who served at Camp Adair was Alan Berg, who arrived during the fall of 1942. Berg had finished Officers' Training School at Fort Sill, Oklahoma, and requested assignment to Camp Adair. He arrived just as the first troops were occupying the newly constructed base. He did not think highly of the first troops that he served with:

We got a batch of soldiers the like of which I've never seen before. They were all misfits. For instance, we had two men--one had been in the Austrian Army in World
War I, and you can imagine how old he was. The other had been in the German Army and his name was Lietzoon. ... (one) was a round, roly-poly guy and Lietzoon was a tall alcoholic and a wood carver. ... I had them in my squad. I was a shavetail at the time and they would goosestep. We'd yell ... at them, and they'd stop ... You'd give a command to right turn ... and boom ... there they were goose-stepping again. ... Another fellow they had drafted was a little short man. I tried and tried to get him to fire a gun, but he never could. He'd lay on the firing range ... and he could never pull that trigger. He was a bed-wetter, ... and had been given a choice; he'd beat up his wife ... jail or ... the Army. ... I remember his wife was going to come visit him, and we brought him into the orderly room. He was hardly able to sit there. We looked down ... the pathway and here came this lady, and my Lord she was a huge thing! He saw her, and made a beeline for here and leaped, and she caught him in her arms just like a baby (1979, p. 33).

The primary use of Dunn Forest by the U.S. Army was for training combat troops, therefore, there was a great deal of activity related to this purpose--maneuvers, artillery firing, weapons practice at the rifle range, simulated war games, and related events. Since much equipment and men had to be regularly moved across Highway 99W a heavy-timbered overpass was built over the highway. Over this moved field artillery pieces, tanks, and other heavy equipment that were travelling from the cantonment area to the firing range and other destinations. A Southern Pacific railroad line was moved a half mile east to provide more room for the various training activities. Many spur lines were subsequently installed to bring supplies to the warehouses that stored the large mass of materials that were needed for the camp. The building of the camp caused the small town of Wells to be eliminated, as it stood on the site.

Vernon McDaniel (1979) remembered the relationship he had with the military authorities and the effect of the camp's activities on the Oregon Forest Nursery:
cooperative. We had some little trouble there once in awhile. the troops coming through trying to manuever in the Nursery. Set up guns. Tried to cut down my rhododendrens, and camouflage machine guns. I was a friend of the Provost Marshall, and all I had to do was to give him a call. And then, once in a while we had ... the escapees, A.W.O.L.--we had a motorcycle patrol through McDonald Forest for several years, 24 hours a day. We'd wake up many a night and hear those motorcycles droning (p. 18).

McDaniel stated that Peavy allowed the 96th Division to carry on maneuvers a half mile west of Cronemiller Lake. He has seen many "foxholes" in that area that remain today. One day he returned from a trip away from Corvallis and found soldiers in the Nursery carrying out a simulated battle:

They were running the Jeeps up and down the roads. They were supposed to be light tanks. The kids would be rolling all over the trees and hiding in the brush. They had small sacks of flour. They would raise up and throw these sacks at the Jeeps. If they hit them, it was "caput", blown up. So I went down, and said "Who in the 'H' is handling this outfit?" They said, "the Colonel down there." I went down there and I said, "Are you in command here?" He said, "Yes... What of it?" I said, "You get your men out of here... fast!" He said, "Is that so." he said, "You know this is war time?" I said, "Do you know this is State property and you have been absolutely forbidden... because there is no invasion of the United States. Now, you get the 'H' out of here (p. 17)."

According to McDaniel the Provost Marshall was called, who immediately arrived and ousted from the Nursery the recalcitrant Colonel. Later McDaniel supplied Camp Adair with some trees to be planted around the barracks. This act, and other forms of cooperation, earned the good will of the military command. "Little Mary and I even had the pleasure of accompanying the General... to Camp Adair. He sent his command car after us, and we had dinner with him. I got saluted more that day. Mary thought she was the Queen of England (1978, p. 18)."
One of the duties assigned to Berg was the orientation of new troops. At his first orientation session he pointed out that he was familiar with the region and immediate locality; he stated that it rained some, but it was not too disagreeable. As for snow, there was almost none, he told the new recruits. "Well, I'd no sooner gotten those words out of my mouth when . . . it started to snow, and it snowed and snowed. . . . everything stopped. We just couldn't move at all (p. 33)." When the snow stopped it started to rain. Berg's credibility with the new soldiers was strained:

. . . the next thing that happens is it started to rain. And it rained. I can remember out in the firing range, . . . there would be just kind of a sheet of water all over the firing range--just pouring down. These men were laying out there trying to fire their rifles and I'd come by and they would look up at me just like to say, "Boy you sure know how to lie." It flooded. It washed out the bridge at Albany, and we had . . . these vehicles that run on land then run on water. We were using those to go out and rescue farmers . . . The whole camp was under water. . . . it was a good thing that those troops finally left, and we got some new ones in because I don't think they would have believed anything else I'd have told them (p. 34).

Waldo W. Ball, whose father established Ball Studios in Corvallis, was a physician during the 1940's when Camp Adair opened. His perspective on the activities of the U.S. Army was a medical one i.e., the introduction of 30,000 to 50,000 people into the Corvallis area created a strain on the medical facilities. He well remembered the greatest medical problem he treated for the servicemen:

We had quite a problem with poison oak because they were on maneuvers out in the hills where there was lots of poison oak and many of the army doctors knew nothing about what poison oak was and they would treat them with hot packs and two of them died. Because they'd have this rash . . . from the poison oak and it would drive into their body (the hot packs) . . . and they died from toxic effects (Ball, 1979, p. 74).
Another outcome of the presence of the U.S. Army in the Benton
and Polk Counties was the introduction of several exotic species of
animals, according to Ball.

Some of the soldiers were uneasy, especially the boys from
the South and some of the officers thought if they could
have pets to take care of, they would be more ... satis-
fied. Make better soldiers. They didn't seem to be able
to get to them like they would the northern boys and so
they let some of these boys have some possums for pets.
And from that day to this day, ... they just gradually
increased. ... None of them were here before it all.
The doctors told me. They psychiatrists out there said
that they thought that they would be good therapy for these
young G.I.'s to have a pet ... and they would be more
tractable. ... And so they let some of them have possums,
because they'd had them in the South. And that was the be-
ginning of our possum infestation (p. 13).

Dr. Ball stated that the introduction of the nutria to this area came
about in the same way. The writer did not attempt to verify these claims.

McDaniel's cooperation with U.S. Army command personnel once re-
sulted in the recommendation that a forester be included in the organ-
ization of each division. According to McDaniel, he was asked to coop-
erate in some war games that required the hiding of several regiments
from their foes. Two colonels approached McDaniel for help:

"Yes, I think I can help you out, providing you follow my
instructions." He says, "That will be done or there will
be some dead soldiers." So I put one up by the big cabin
... right in the center of the grove. ... I took the
other one up the hill, and there was a beautiful grove of
Douglas-fir ... It's thick, and you get back in there,
and you couldn't see those trucks or anything. It was
practically a very dense canopy. ... those planes looked
for two days for those two regiments, and they couldn't find
them. Well, consequently this major ... said, "... what
we need is a forester for every regiment." ... These two
generals agreed, and they wrote a letter to Secretary Stim-
son, who was Secretary of War. ... wrote back and said,
"I'm sorry gentlemen. One week ago orders went out that
there shall be no more hired civilian technicians." ... So
I didn't get my appointment (p. 20).
The human use of the School Forests that has had the briefest duration is that of the military (1942-1945). The military administered Camp Arboretum, as discussed in Chapter 6, but the entire focus was on conservation rather than training of men for war. Although the period was brief, there continues to be evidence today of this epoch in the history of McDonald-Dunn Forests. Marvin Rowley has seen many remnants of this period: "fox-holes", "pill-boxes" (some still exist on private land and on the land administered by the School of Agriculture), truck roads, shrapnel-filled timber, foundations of structures, and even a simulated village for training in house-to-house combat. Bill Wheeler (1980) recalled seeing this village in 1951:

In the summer of 1951 we conducted a soils survey . . . on the Soap Creek side of the Dunn Forest. . . . One thing I remember particularly, I think it was in Section 22, . . . was the simulated village used by the troops at Camp Adair. They would go in there for indoctrination in street fighting or house-to-house combat among these frame buildings set up there. The buildings had . . . false fronts and set up to simulate a village street. The remains of some of these were still there in 1951. It was rather interesting to be walking along through the fields and the brush and all of a sudden come across the remains of these old buildings. . . . eight to a dozen with false fronts, fallen down . . . in a straight line (p. 22).

The Forest Manager has a continuing campaign to discover all "polluted" timber in Dunn Forest as it causes problems in the milling process i.e., broken saw teeth, damage to other equipment, etc.: . . . rifle ranges and their artillery impact areas left a lot of shots and bullets in trees, and we're continually cleaning those areas out as fast as we can get to them, or when we come to them. We try to identify the metal pollution area and get rid of the wood and start growing something that doesn't have bullets in it. You've seen the sculpture in my office? . . . I've got a whole pile of
wood up there; I call it "Wood Pollution." It's got shrapnel and bullets, and all kinds of things in it (p. 20).

Rowley recommended that some of the early timber that was sold be discounted to compensate the sawmill owners for damages. Berg described the process by which Dunn Forest became "reinforced," as Rowley terms it:

We went on forced marches through the Forest, and we fired, it must have been tons of lead into the trees. . . . For years afterwards when they were cutting the trees . . . the saws would cut metal that had shell fragments or whatever . . . and the saws would break. A lot of the old barns and houses that were on the Forest or in the valleys next to the Forest were fired upon and burned. We had one colonel . . . who just loved to make "errors." He was always making an "error" with a howitzer. They would always land on a house or something. Just loved to see them burn (p. 34).

The houses and other structures that Berg mentioned were those left from the previous occupation; they were not occupied at the time they were being fired upon. The Cultural Resource Inventory includes compartment maps that detail the locations of many of these military-connected sites. Sections 14, 15, 22, and 23 were heavily impacted with various types of projectiles because the firing range was located in this area. Section 4 and 9 were also affected to a considerable extent. Rowley knows of no case in which explosive materials have harmed a visitor to the Forest in the years following the military usage.

With the completion of the Military theme, the discussion of the human uses of McDonald-Dunn Forests is concluded. The major uses of the Forests have therefore been summarized within a framework that included the following themes: Settlement, Harvest Activities, Education, Research, Conservation, Recreation and Military. The last segment of this report contains the Cultural Resource Inventory, and a brief statement of conclusions and recommendations.
Chapter 7

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CHAPTER 8:

CONCLUSIONS, RECOMMENDATIONS, CULTURAL RESOURCE INVENTORY

"History" is the name we as human beings give to the horizon of consciousness within which we live. (Harvey Cox)

... history is just one damned thing after another. (Arnold Toynbee)

How do we know its us without our past? (John Steinbeck)

History is a useless heap of facts. (Lord Chesterfield)

I am far too much in doubt about the present, far too perturbed about the future, to be otherwise than profoundly reverential about the past. (Augustine Birrell)

Historians, it is said, fall into one of three categories:
  Those who lie.
  Those who are mistaken.
  Those who do not know. (Anonymous)

As these excerpts indicate, there has not been complete agreement about the place and meaning of history in the human experience. American culture has often been characterized as ahistorical i.e., the relative importance of the past in the values constellation has been minor. A well-known American sports figure once enunciated it as, "never look back, someone may be gaining on you." Henry Ford's famous dictum, "history is bunk," has often been cited as irrefutable evidence that Americans care little for what was, but much for what is or will be. A burgeoning historic preservation movement in the U.S. suggests otherwise. The variety, scope and complexity of local, state and national programs to protect the nation's cultural heritage, have dramatically grown in recent decades. One reflection of this movement is the body of laws that has been passed--from the Antiquities Act of 1906 to the Archaeological
Resource Protection Act of 1979—providing the legal umbrella for a preservation system. Preservation programs at all levels of government have come into being. The Heritage Conservation and Recreation Service of the U.S. Department of the Interior administers a national program that includes identifying, documenting, funding and otherwise preserving the nation's heritage. Some of the major programs it coordinates are the National Register of Historic Places, Historic American Buildings Survey, Historic American Engineering Record and Interagency Archaeological Services. At the state level the State Historic Preservation Office administers a broadscale preservation program that meshes with national programs. Important functions include administration of historic preservation grants-in-aid, the Statewide Inventory Of Historic Buildings And Places, and legal compliance with preservation law on federal lands.

Many individual states and municipalities have promoted passage of laws and taken other measures to encourage preservation of cultural resources. Oregon, for example, has a large body of legislation directed toward this end. The Land Conservation and Development Commission (LCDC) has a land-use planning goal (Goal 5) that specifically deals with cultural resources. Historical societies and other heritage oriented organizations at local, state and national levels have developed programs that contribute to the preservation mainstream. This broadly based, multi-faceted movement has opportunities for preservation support that should not be ignored by those who administer the School of Forestry's lands.

Some of the recommendations that follow note these possible avenues of cooperation. The history of McDonald-Dunn Forests is a unique and colorful story that merits being re-told to present generations. The recommendations are intended to not only suggest ways to preserve the
historic fabric that remains, but also to convey some of the drama of another era. The recommendations are structured in four categories: Planning, Management, Interpretation and Research. Some topics, such as research, overlap with other categories.

PLANNING

1. Cultural Resource Management Goals Statement

A concise, carefully thought out statement enunciating the School's goals and objectives with regard to cultural resource management would provide the basis for management direction. The range of alternatives and management strategies includes preservation, rehabilitation, reconstruction, benign neglect, and destruction (and combinations of these). Is preservation of these cultural resources desirable? In the past the practice has been to eliminate management problems through eliminating the historic fabric e.g., burning structures in the Forests. What about sawmill sites and early trails? Should any effort be made to consider these in carrying out management and harvest practices? In the absence of a clearly stated goal, expediency may be the deciding factor. What should be the School's policy with regard to the Civilian Conservation Corps structures still remaining? Should they be retained unaltered? Should they be modified as need dictates? Should routine maintenance, such as painting or re-roofing, take into consideration the original fabric? In the absence of a clearly stated goal, expediency rather than long-term desired outcome, may determine what action is taken.

There are many programs of historic preservation which provide advice and technical services helpful in determining a basic direction. The Heritage Conservation and Recreation Service (regional office in Seattle), State Historic Preservation Office (Salem, Ore.), and National Trust For Historic Preservation (Washington, D.C.) are a few organizations that deal with these concerns.

2. Cultural Resource Inventory

The first step in the establishment of a cultural resource data base for McDonald-Dunn Forests has been taken with the completion of this research. This effort should be viewed as a beginning; much more information remains to be collected. Additional survey work will surely surface first-hand informants who know locations of other sites, as well as those having supplemental data for sites already inventoried. The inventory should be continually updated as a part of management and planning. A black and white photograph and a brief narrative
(see Cultural Resource Inventory) should be filed with the compartment maps for each tract in the Forests.

At present, the Benton County Planning Department is carrying out a county-wide inventory of cultural resources. The sites identified in McDonald-Dunn Forests should be integrated with the Benton County Inventory, as well as the Statewide Inventory Of Historic Buildings and Places. This cross-indexing would be helpful to all agencies which are integrating cultural resources into the planning process.

3. Nominations To The National Register Of Historic Places

The National Register of Historic Places is the official list of the nation's cultural resources worthy of preservation. Listing in the National Register: (1) makes property owners eligible to be considered for federal grants-in-aid for historic preservation; (2) provides protection through the Advisory Council On Historic Preservation (a national council based in Washington, D.C.); and, (3) makes owners who rehabilitate certified historic properties eligible for federal tax benefits.

The criteria for nomination are stated by the Heritage Conservation and Recreation Service:

The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
B. that are associated with the lives of persons significant in our past; or
C. that embody the distinctive characteristics of a type, period, or method of construction, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
D. that have yielded, or may be likely to yield, information important in prehistory or history.

The evaluation of nominations is performed by the State Historic Preservation Office and the National Register staff. A cumulative list of the properties in the National Register is published annually.

The buildings and sites located in the School Forests associated with the Civilian Conservation Corps era are probably eligible for inclusion in the National Register. Because these are dispersed---Cap House, Powderhouse site, Oak Creek Guard Station, Nursery buildings---the category of nomination (there are several categories) would be "National Historic District."
The implications for the School of Forestry would be: (1) eligibility to be considered for federal grants-in-aid for preservation; (2) prestige that comes from managing a resource that has been judged to be of national historical significance (and possibly thereby eligible for other public and private funding for preservation); and (3) no management constraints. The only management implication would be that the historic district would be removed from the National Register if the properties are allowed to deteriorate to the point of losing their historical integrity.

It is recommended that the necessary research and preparation of the nomination documents be undertaken. (See Appendix A: National Register Nomination.)

4. Cultural Resources And The School's Educational Programs

There are many opportunities for integrating cultural resource planning for the School Forests with academic coursework that is presently underway. For example, students enrolled in such courses as Multiple-Use Decisions (F 439), and Cultural Resource Planning and Management (RR 470) could include cultural resources as one component in their planning exercises. Information about sites already identified, as well as new data, could be collected for the Cultural Resource Inventory of McDonald-Dunn Forests. Projects could also include preparation of a cultural resources goals statement, and appropriate management plans that would achieve these goals. Students enrolled in the Department of Forest Products might be encouraged to study and recommend wood preservation methods for the log structures located near the Jackson Place. Historic preservation maintenance for wooden structures poses some special problems that these students might help solve. Opportunities for involvement of students in the interpretation of cultural and natural resources (Department of Resource Recreation Management) are discussed in the interpretation section of the recommendations. There are doubtlessly many other avenues of involvement of the School's educational program in the planning for cultural resources in McDonald-Dunn Forests.

5. Recreation Planning And The School's Educational Program

Planning for recreation and cultural resources are related activities that could be undertaken simultaneously. Cultural resources often play a large role in the recreational use of lands, therefore, the relationship of the two should be considered.

Dependable data are needed concerning the amount, type and distribution of recreation use of the School Forests. The existing, potential and demand for recreation is not known. This offers the students enrolled in several curricula the opportunity to fill a gap in the information base. Pressures for greater public access to School forest lands are likely to accelerate, given the higher costs of transportation and the rapidly urbanizing environment that borders the School's lands.
A goals statement for recreation in McDonald-Dunn Forests should be formulated. It should consider the relationship of cultural and natural resources in the recreation system, and clearly enunciate the School's position on this use of the land. Students enrolled in such courses as Recreation Resource Planning, Multiple-Use Decisions, and Outdoor Recreation Policy could study these concerns. Ideally, some funding for staff support would be forthcoming to ensure satisfactory survey design, dependable data and appropriate presentation of findings. Classes in the past have randomly collected information about recreation use in the Forests, but this has not been systematically carried out and the results have not been made available.

6. Names On The Land

An important vehicle for commemorating those who have been significant in the history of the area, is the naming of places for them. Nettleton, Patterson and Schreiner Roads reflect this practice. Paul Dunn's contribution will not be forgotten. There are several others who have played a dominant role in the history of the School and the Forests, and their names, at some point, should also be permanently associated with the places and events that they helped to shape. As already mentioned, probably no one other than George Peavy has been so pervasively significant, as T.J. Starker. Vernon McDaniel occupies a unique historical niche as well, and he too should be remembered. In modern times, no single man has had the long-term relationship to the Forests that can match that of Marvin Rowley. These names should someday be left on the land.

MANAGEMENT

1. Cultural Resource Management Plan

Recommendation #1 in the section dealing with cultural resource planning, proposed that a goals statement be prepared. Based on this statement a management plan should be drawn up that will provide direction for management of all of the Forests' cultural resources. The recommendation mentioned above discussed some of the problems of operating without some overall view concerning goals. This plan could provide the framework for day-to-day management. Several categories are initially brought to mind. Decisions about the continued preservation and maintenance of the CCC-related buildings and structures, should be a high priority. Replacement of fabric, such as re-roofing, affects the historical integrity of the structure. Additions and alterations could destroy all integrity. A plan for managing certain fragile sites should be considered i.e., those such as sawmill sites, early trails, and archaeological sites, that are easily destroyed by management practices.
2. **Destruction of Cultural Resources**

In the past cultural resources have been destroyed, either intentionally by School personnel, or through neglect. These decisions should be made within an overall management framework that is consistent with the goal for cultural resources in the Forests. For example, decisions concerning the log structures located near Jackson Place will be necessary soon. Should these be destroyed? What about "benign neglect" as a management policy? Should they be rehabilitated and allocated for a contemporary use? These are planning decisions, but they cannot be divorced from management.

3. **Management For Public Use**

An adage in the historic preservation field is, "use it or lose it." Perhaps an appropriate management response would be to attempt to involve the public more in the use and enjoyment of cultural resources in the Forests. Use of the Sign Shop in Peavy Arboretum for a visitors center or museum is discussed in the next section. There may be other adaptive uses for structures such as the Cap House, Oak Creek Guard Station and the log shelters near Jackson Place, that would facilitate and enhance preservation. The custodial management approach that has prevailed from the outset may not be adequate for the future.

4. **Cultural Resource Management And The School's Educational Programs**

Students enrolled in the Department of Resource Recreation Management and Forest Management would have expertise in accomplishing some of the tasks necessary in formulating a management plan. This would be a particularly appropriate task for those enrolled in Cultural Resource Planning and Management. Forest managers will have to deal with cultural resource considerations when they enter professional service. The Multiple-Use Decisions course would be a possible avenue for studying these concerns.

**INTERPRETATION**

1. **Cultural Resources Interpretative Goals Statement**

Interpretation was once defined by Freeman Tilden as:

> An educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experiences, and by illustrative media, rather than simply to communicate factual information.

There are many opportunities to interpret to the public the cultural
and natural resources managed by the School of Forestry. Particularly rich in possibilities are the Peavy Arboretum and Nursery, where so much of interest has transpired. A carefully prepared statement concerning the role of interpretation on the lands managed by the School, would serve to crystallize thinking and provide some management direction. Interpretation can serve as a useful means of developing public understanding and support; it is also a valuable tool in management. Most important, it is totally consistent with the original purpose of acquiring a system of School forests i.e., education and research.

2. **Interpretive Prospectus**

Stemming from the goals statement should be a more detailed plan for implementing an interpretive program. One approach to conceptualizing the interpretive framework might be a program based on the themes that were developed in this research: Settlement, Harvest Activities, Education, Research, Conservation, Recreation and Military. Other themes might be added such as Transportation and Management. The range of interpretive activities could include some or all of the methods listed in the next portion.

3. **Possibilities For Interpretation**

A. **Visitors Center**

Ideally, a visitors center would be established in Peavy Arboretum where the natural and cultural resources managed by the School could be interpreted. Exhibits and demonstrations could include historic as well as contemporary perspectives on these resources. Several buildings might serve some purpose in this undertaking: Sign Shop, Peavy Lodge, and the ex-State Forestry Department residence next to Peavy Lodge. Funding might be sought from such organizations as the Endowment For The Humanities and the American Association of Museums. Perhaps such a facility could be operated in connection with Horner Museum, which could provide staffing. There are many possibilities to be explored. Such a facility could be valuable in management of the Forests, building public support, and for the educational outcomes it would provide. A well-to-do alumni whose name might be associated with such a center or a company in the timber industry, might be willing to endow a visitors center.

B. **Historic Logging and Modern Forestry Practices Demonstration Project**

Dr. Mike Freed, Department of Resource Recreation Management, has developed plans for a demonstration project that would interpret historic and contemporary forestry practices. Such a program could be operated in conjunction with a visitors center, or individually. It would allow visitors to handle selected tools, such as a mallet and froe and a "miser whip." It could involve actual felling of timber and observation of other modern and historic practices.
An early logging camp might be recreated, into which the visitor would arrive by buckboard or horseback. There are many possibilities for such a program. Funding might be sought from some of the sources mentioned in "A". For example, the "T.J. Starker Historic Logging Museum" would be attention-getting. There are many organizations such as the Forest History Society and the Association For Living Historical Farms And Agricultural Museums, that could provide information and technical services. Local organizations such as the Benton County Historical Society and Horner Museum, could be helpful. Living history programs are very well-received by the public.

C. Audio-Visual Interpretation

The possibilities for audio-visual methods of interpreting the School's cultural resources are only limited by one's imagination. Slide-tapes, film-o-graphs, historic films, oral history recordings, exhibits, displays, models, demonstrations--these are a few techniques that could be employed. For example, a slide presentation about Camp Arboretum narrated by one of the original enrollees, would be an effective means of communicating what camp life was about. An exhibit of historical photographs about Camp Adair, with appropriate captions and text, would be interesting. The possibilities are too numerous to list.

These audio-visual programs about the Forests could be packaged in a manner to be distributed, through the Forest Media Center in the School, to schools, private organizations, and other users. They would be useful for public relations, logging conferences, Fernhopper Day, new student orientation, and similar events.

D. Publications

The possibilities for publications are almost unlimited, because so little exists at the present. A self-guided walking or horseback tour through the Forests would be useful. A pictorial history of the School Forests is a publication that would find a wide audience i.e., telling the story through the use of historical photographs. Individual pamphlets on selected topics such as harvest practices, Camp Arboretum, Camp Adair, early settlement, etc. would provide fundamental background information to the visitor. A program recorded on cassette tapes describing the history of the area might be a way to communicate a broader understanding. A brochure that explained the original purposes of the Forests--education and research--complete with photographs of early activities, would be effective. A map with historical information could be prepared.

E. Signs And Other Public Information

A program of communicating with the public at the primary access
points to the Forests, is needed. This might be done through erecting signs, billboards, information kiosks, registers and other facilities. The areas to be considered are Oak Creek Guard Station, Lewisburg Saddle and Peavy Arboretum. There are other points at which visitors enter the Forests; these should be studied. Interpretation could play a useful management role in affecting visitor behavior.

4. Interpretation And The School's Educational Programs

The interpretation of the cultural and natural resources of McDonald-Dunn Forests offers many possibilities for involvement of students and staff in the School. The Department of Resource Recreation Management offers an option of study in cultural and natural interpretation. These students would be useful in carrying out the recommendations dealing with interpretation. Class projects could focus on the Forests; an interpretive goals statement and prospectus could be drawn up; on-site interpretation could be tested; and, many other tasks could be accomplished. Planning an historic logging demonstration project, or similar undertaking, could offer an opportunity for collaboration among students enrolled in Forest Management, Forest Engineering and Resource Recreation Management. Faculty might also become involved. Forest Engineering students might find it attractive to participate in a living history demonstration of historic logging methods. Alumni of the School of Forestry could be drawn into such a project, thus reinforcing the School's ties with its graduates.

RESEARCH

1. Needed Research

There are many topics dealing with the history of McDonald-Dunn Forests that warrant more attention. This research did not deal in depth with the Camp Adair era; no complete history has been written. This should be undertaken while there are still many first-hand informants who could provide information. (It would be a good topic for a graduate thesis.) Other specific research needs stemming from this investigation are: (1) more comprehensive information on the settlement era and the locations of home sites in the study area; (2) Indian-U.S. relations and Indian movement past and through the Forests; (3) more development of the transportation theme i.e., a detailed examination of trails and roads through the Forests; and, (4) specific historical data on educational and research uses of the Forests since 1925. A biography of George W. Peavy would be a useful contribution to the literature dealing with the School.

2. Preparation Of Research Needed List

A procedure followed by one region of the National Park Service
(Southwest) is the circulation of a "research needed" list to universities and other academic units. It is pointed out that no funds are available for such research, but the National Park Service will cooperate in other ways i.e., "in-kind" services, etc. Many graduate students, seeking topics for theses, have completed worthwhile investigations that were needed by the Park Service. The School might consider this possibility for research topics related to the School Forests.

3. **Oral History Program**

The oral history program initiated with this research should be continued and expanded. Many of the key persons related to the history of the School and the Forests were interviewed -- Starker, McDaniel, Davies, Dunn, Rowley -- and there are many others with important information. The history of the School Forests is bound to the history of the School, therefore, much remains to be done to provide comprehensive first-hand knowledge. A systematic procedure should be instituted whereby any retiring staff member is comprehensively interviewed as part of the oral history program. These tapes and transcripts are permanently reposed with the Oral History Program of Horner Museum, therefore, scholars in the future will have access to them. This program also has important implications for School-alumni relations, for it provides another tie with graduates. It could become a regular feature at such events as Fernhopper Day, when many older alumni would be available. It should also be cross-indexed with the oral history programs of the Forest History Society, Weyerhaeuser Corp., U.S. Forest Service, and other organizations.

4. **Records Management and Archives**

Some of the important records pertaining to the history of McDonald-Dunn Forests are not located in a permanent storage facility, such as an archives. These include correspondence, personal letters and memorandums, as well as reports, copies of deeds, harvest maps, material related to Camp Arboretum, Adair Tract miscellaneous materials and similar records. These should either be reposed with O.S.U. Archives, or selected portions should be microfilmed by the Archives, to ensure a permanent record. Some of these have been passed from one Forest Manager to the next. While the records are often useful in management, the loss of originals would be irreplaceable. Perhaps copies of selected files could be made for use by management personnel, and the originals turned over to a professional records managing agency.

Historical photographs constitute a valuable resource for scholars and others who deal with historical concerns. The Horner Museum has already catalogued many photographs obtained from the Forestry Media Center in 1978, thereby establishing a School of Forestry collection. It is recommended that other historical photographs retained in the School, be transferred to Horner Museum.
5. Historic Preservation Technology And Research

The preservation of wood in historic structures--such as log cabins, corrals, lookout, bridges, houses, and flumes--presents special problems to cultural resource managers. For example, the U.S. Forest Service, due to federal legislation requiring preservation, is faced with a growing inventory of wood structures on the lands it manages. Other federal agencies, such as the Bureau of Land Management have similar problems. Most of those charged with cultural resource management duties, are not educated in wood preservation processes. Also, maintenance of historic wood fabric, requires different procedures from those needed for conventional structures.

The School Forests could provide the setting for needed research on these concerns. Equally needed is a means to communicate such findings to the cultural resource managers. A short-course offered through the School of Forestry, perhaps directed by the Department of Forest Products or Forest Science, would be very useful to field managers.
CULTURAL RESOURCE INVENTORY
MCDONALD-DUNN FORESTS

WEST FORK BERRY CREEK TRACT
(T 10S R 5W)

Compartment No. 1
(Sec. 5)

H-1 Early Wagon Road

This early wagon road to Kings Valley was developed and used during the settlement period (1850-1900). It relates to the transportation history of the Forests. An alternate route is also identified on the compartment map. No longer a travelled route.

Compartment No. 2
(Sec. 5 and 8)

H-1 Alternate Route--Early Wagon Road
H-2 Bullet Impacted Area

The western one-half of this compartment was "contaminated" with metal (bullets, shrapnel, other projectiles) during the period it was used for military exercises by soldiers from Camp Adair (1942-1945). The direction of fire was toward the west, from the east.

Compartment No. 8
(Sec. 8 and 5)

H-1 "TB" Sanatorium Site

It is believed that the buildings at this location were used for a sanatorium to treat victims of tuberculosis. Long-time residents of the area related this to Nettleton, but he did not personally know anyone who had resided at this site. Rowley has also heard of these events. It was probably occupied about the time of World War I (1917). Often when a family had a member who suffered from TB it
would board other similarly ill persons. This may have been what occurred at this site. No first-hand informants were interviewed. (Jackson and Rowley visited the site on July 23, 1979.)

The site included three buildings: dwelling, garage, and chicken house. There was a small creek located above the house that was impounded about 200 feet west of the site. The creek flowed underground before reaching the house. The dwelling was about 16' X 24' and contained three rooms. It also had a wing, therefore was "L-shaped." The chicken house was a rectangular structure 12-16' wide and 50-60' long. There was a basement under the dwelling; the depression is still visible. The front steps of the house were oriented to the northwest. A large oak tree on the site still had short pieces of board nailed to the tree to form a ladder. Metal remnants are strewn about--pieces of stoves, car parts, etc. The site is on a northeast slope. A concrete footing is still visible. The frame house had lap siding and a shingle roof.

The site's vegetation includes madrone, oak, grand fir, blackberry, scotch broom, and Canadian thistle. Rowley believes that Canadian thistle was first introduced to the Oregon Country during the settlement period, as early as 1850. Its roots were used for making bread.

Nettleton planted Douglas-fir trees on the site in 1966; the survival rate was 2%.

This site borders on land that was subdivided into 5-acre tracts after the First World War. It may have been a part of that subdivision.

Compartment No. 9
(Sec. 8 and 5)

H-1  Possible Home Site

This site was visited by Rowley and Jackson in July 1979. The remains of an old wagon were found; other debris was encountered in the creek bottom below the site of the wagon. Debris included an automobile frame, bathtub, stove, stove parts, and other metal fragments. The bathtub contained melted glass suggesting a fire might have destroyed the dwelling. Nothing is known about what activity occurred. These remains may have been thrown into the creek bottom after the fire. Remains of an old wagon were also found.

H-2  Water Reservoir

In the southern part of the compartment Rowley found an early water reservoir and a 3' pipe that carried water to a small farm to the north.
Compartiment No. 10
(Sec. 8)

H-1 Early Tram Road

This wooden tram road was built around 1920 to haul logs to a sawmill located in the southwestern part of Compartiment No. 11. It was built like a railroad, with logs as cross-ties and planks laid length-wise to form a track for the hard-rubber tires of the log trucks. A vertical plank was set inside the track to guide the vehicles.

Rowley built Road #100 on top of the road, therefore, today only a few traces can still be seen. When it was built in 1960 the tram road was still easily visible. The tram road was about 800 feet long; it was built the width of a truck axle, or about 7 feet, outside measurement. It was constructed of Douglas-fir.

Rowley first saw this tram road in 1960 and followed it to the sawmill site in Compartiment No. 11. He found some hard-rubber tires at the sawmill site, as well as piles of sawdust.

Compartiment No. 11
(Sec. 8)

H-1 Sawmill Site

Sawmill site dating from the early 1910's-1920's. Some piles of sawdust were seen by Rowley in 1960.

H-2 Early Road

Road served as access to the sawmill. About 1960 Rowley found a hard-rubber truck wheel and remnants of truck frames. The road follows the southern boundary of Compartiment No. 11.

Compartiment No. 12
(Sec. 8 and 9)

H-1 Donation Land Claim boundary

Compartiment No. 13
(Sec. 17 and 8)
H-1 Early Oak Fence Post

Old fence line and post found by Rowley. In 1978 the post was taken to Horner Museum, Oregon State University.

H-2 Donation Land Claim boundary

Compartment No. 16
(Sec. 16, 17, 9, 8)
H-1 Bridge Site

Located on Road #100 at the northern boundary of the Compartment. About 1957 or 1958 the School of Forestry faculty took a tour of Dunn Forest in a large school bus. On arriving to the wooden bridge all got out, but the passage of the bus badly damaged the bridge. The group was forced to make its way home by travelling old roads—the old county road to Kings Valley was one road taken. About 1960 the bridge was replaced with a steel culvert.

SOUTH FORK BERRY CREEK TRACT
(T 10S R 5W)

Compartment No. 1
(Sec. 16 and 21)
H-1 Water Source For Home Site

In the extreme southern part of this compartment was the water source for a home that was located in Compartment No. 5.

Compartment No. 3
(Sec. 16 and 9)
H-1 Sawmill Site Complex

The northern portion of Compartment No. 3 contains a complex that includes a sawmill site, log pond, residence sites for mill workers, old bridge site, and early access road. This small sawmill probably operated as late as the 1940's when the U.S. Government acquired the land for inclusion in Adair Military Reservation.
H-2 Diversion Dam

A concrete diversion dam constructed by the Department of Fisheries and Wildlife is located in the extreme northern portion of this compartment. According to Rowley, research in some form has been going on at this site for about 25 years.

Compartment No. 6
(Sec. 12 and 21)

H-1 Early Road

Compartment No. 8
(Sec. 15)

H-1 Kuntz Sawmill Site

Site of sawmill located west of Road #200-1 (about 500 feet). The site includes a mill and dam that was originally owned by a man named Kuntz. Tom Stevenson, a logger who presently lives in Wren, Oregon, worked at this mill. It probably operated during the mid-1930's. The site was first seen by Rowley in 1958. He found large piles of fire brick, the dam site, pieces of automobiles from the 1920's and other remnants. Rowley and Jackson visited the site in July, 1979. They found parts of automobile frames and cabs, milled lumber (4'' X 4''s", 2'' X 2''s"), old whiskey bottles, pieces of pipe, tin roofing, evidence of two structures, and a bricked enclosure for creating steam to power the mill. These brick structures measured 7½ X 9' (there were two); one side was shaped in a 45 degree angle. A pipe was probably extended up the creek to provide water, through gravity-flow, to the boiler.

There was also the remains of an earthen dam in which the logs were stored. One could still see the trench created from dragging logs up to the mill from the mill pond. The pond had its "brow log". An early logging road leads to the sawmill.

Compartment No. 9
(Sec. 21 and 16)

H-1 Home Site

Located in northern part of the compartment was a two-story
house with a one-half basement. The structure was burned in the 1960's to eliminate unauthorized use. Nothing remains on the site.

Compartment No. 14
(Sec. 21)

H-1 Possible Homesite

Compartment No. 20
(Sec. 21 and 22)

H-1 Early Road

Evidence can be seen of an early road that crossed through the northern part of the compartment.

H-2 Compartment Logged For World War I Airplane Construction

During World War I (1914-1918) this compartment was logged to provide Grand Fir for the construction of airplanes.

FOREST PEAK RIDGE ROAD TRACT
(T 10S R 5W)

Compartment No. 2
(Sec. 15 and 14)

H-1 Bullet Impact Area

The eastern segment of this compartment was immediately to the southwest of a rifle range used to target practice by soldiers from Camp Adair. Many trees in this area were "reinforced" with lead and metal shrapnel.

H-2 Arrowhead Site

An arrowhead was found on this site in the extreme western part of the compartment, when the road was under construction.

H-3 Home Site

No information was available about this site.
Compartment No. 7
(Sec. 23 and 14)

H-1 Early Logging Road

Early road used for logging and for access to farms located on the west side of Soap Creek.

PEAVY TRACT
(T 10S R SW 25 & 30)

Compartment No. 8
(Sec. 25 and 30)

H-1 Early Fence With Square Nails

Parallel with the northern boundary of compartment No. 8 are the remnants of an early fence, perhaps as early as the 1850's, that contains square, hand-made nails. Rowley found the site.

Compartment No. 9
(Sec. 30)

H-1 Territorial Road

One of the early roads that was designated, "Territorial Road," passed by the eastern and northern boundaries of this compartment. Rowley has seen this designation on old maps. A portion of the road that was by-passed can still be seen. (See the discussion in Chapter 7, Settlement theme.)

H-2 Ed Blake Home Site

Occupation at this site probably dates from the late 1850's. Ed Blake is associated with the story of the two Black locust riding whips that became trees, and the passing of Indians on the way to the reservation along the Portland and Umpqua Valley Road. The School acquired the 2-story house (built in 1886) in 1950's when it got the Hospital Tract; it was subsequently burned by Forest Manager Davies in the 1960's. Nothing remains on the site except the two locust trees (See the discussion in Chapter 7, Settlement theme).
H-3 Pig Pen Site

This livestock enclosure was associated with the Ed Blake homestead. Rowley recalled that it occupied an area about 20' X 30'. The pig pens no longer exist.

H-4 Portland and Umpqua Valley Road

This road was one of the primary corridors for north-south travel through the Willamette Valley during the settlement period. It was originally known as the California to Oregon Pack Trail; Hudson's Bay Company trappers were among the earliest users of this route. (See the discussion in Chapter 7, Settlement theme.)

H-5 Adair Hospital Officers' Housing

After Camp Adair was discontinued as a U.S. Army base, part of it was converted to a naval rehabilitation center. Officers associated with this medical facility lived in housing in this area. Most of them were doctors. The depredations where the buildings stood can still be seen. A "man-hole" associated with the septic system for this housing, still exists on the site. (See the discussion in Chapter 7, Military theme.)

Compartment No. 10
(Sec. 36 and 35)

H-1 Powder House

The Powder House was built about 1937 by the Civilian Conservation Corps of Camp Arboretum. The building functioned as a storage building for dynamite powder for blasting operations. Because blasting powder and blasting caps for safety reasons, must be stored in separate locations, a smaller and somewhat similarly constructed building was located a short-distance from the Powder House. This was used for storage of blasting caps (The Cap House).

All that remains of the Powder House is a rectangular concrete foundation, 17' X 22'. Three interior concrete support pads, 2' high, are seen, (probably for support of the roof). Ventilation openings 6" X 6", five on a side, were placed in the foundation. Bits of lumber, tin and metal fragments are scattered over the area.

The Powder House is located near Powder House Saddle, at the junction of Roads 500, 560, and 582 in McDonald Forest. It is on an ungraded road that parallels Road 582 for about 200'.
According to the U.S. Inspector, Civilian Conservation Corps, the storage facility for powder was a "... Standard Forest magazine, isolated, and bullet proof. All powder work supervised by experienced men." Although safety procedures were stressed by the CCC dynamite crew of Camp Arboretum, a blast killed one Camp Arboretum enrollee in 1935.

The Powder House was used for the storage of explosives by the State Forestry Department until 1970. Because of repeated problems with vandals, the building was destroyed in 1974 (See discussion in Chapter 6, Conservation theme).

Compartment No. 11
(Sec. 36 and 25)

H-1 The Cap House

The Cap House was built about 1937 by the Civilian Conservation Corps. It is located on Powder House Saddle, about 225' north of the junctions of Roads 500, 560, and 582 on Road 560. The building functioned as a storage building for dynamite caps used in blasting operations. A separate, but somewhat similarly constructed building was located some distance from the Cap House. It was for the storage of blasting powder.

The Powder House, as it was referred to, is no longer standing. Only its concrete foundation remains.

Description: The Cap House dimensions are 14' X 9'. It has 8" sand filled walls; one-fourth inch steel plated door faced on inside with solid wood; 7" X 6" Douglas fir "select-structured" tongue and groove on inside walls; ceiling and floor constructed of 1 X 4" tongue and groove wood; galvanized tin roof; also, locking mechanism that required two keys, one of which was screwed in. There are no windows.

The use of dynamite was a frequent occurrence in the work projects of Camp Arboretum. A crew of twenty-five Civilian Conservation Corps enrollees and one State Forestry Department foreman regularly worked blasting rock from a quarry used for State Forestry Department road construction. Dynamite was also used for stump removal on road clearing projects.

The Cap House remains intact; it is no longer used for storage. (See the discussion in Chapter 6, Conservation theme.)
Compartment No. 13
(Sec. 36 and 25)

H-1 Unmanaged Compartment

Earlier managers and administrators reserved this area from cutting. It is still retained as an unmanaged forest.

H-2 Cronemiller Lake

Cronemiller Lake was completed in the summer of 1938. Surveyed and constructed by the enrollees of Camp Arboretum, the artificial lake supplied the Oregon Forest Nursery with irrigation water. The lake is located west of the Forestry Club Cabin on Schreiner Road in McDonald Forest. At the time of its construction, the reservoir's capacity was twenty-two acre-feet of water.

Construction of the artificial lake's dam, Calloway Dam, was started in 1937 by CCC enrollees; it was constructed of earth and rock. It is about sixteen feet thick at its base, and ninety feet in width.

In the process of the lake's construction, the site was cleaned with a drag-line, and according to one source (McDaniel), its rich sediment sold for $1,000.00. Vernon McDaniel, former Oregon Forest Nursery superintendent, recalls that at the time of construction, the reservoir had a bottom width of 225 feet. Constructed on the floor of the lake was a 4' X 4' concrete core. Concrete bulkheads are located on opposite ends of the lake. Six concrete wings reinforce the core. A four inch main pipe line, 2,000 feet in length, transfers water from the reservoir to the Nursery. After the completion of Cronemiller Lake, the construction of an automatic overhead irrigation system for the Nursery commenced.

The site of Cronemiller Lake was chosen by Dean George Peavy, Mr. Lynn Cronemiller, State Forester, and Vernon McDaniel.

The site was "... just a big sink bowl ... Maples and cascar and muck and stuff." Other School of Forestry faculty had proposed another site for the reservoir, which was located near an old mill site in the Arboretum. The surveying work was begun by the Civilian Conservation Corps, under the supervision of Frank Jarvis, State Forestry Department Foreman.

The man for whom Cronemiller Lake was named was Lynn F. Cronemiller. Mr. Cronemiller was a 1914 graduate of the Oregon State School of Forestry. During Mr. Cronemiller's
working life, he was employed by the U.S. Forest Service as a ranger in the Fremont National Forest. He was managing editor of the Lakeview Examiner, a log scaler for the George Palmer Lumber company in La Grande, and a logging superintendent of the East Oregon Company, in Enterprise. Mr. Cronemiller was appointed Deputy State Forester of Oregon in 1924, and subsequently became State Forester.

The completion of Calloway Dam and Cronemiller Lake was a major contribution of Camp Arboretum CCC enrollees to the Oregon Forest Nursery. With the availability of Cronemiller Lake water, the Nursery was able to expand its production of seedlings to meet increasing demands of Oregon farmers.

Compartment No. 14
(Sec. 25 and 30)

H-1 Early Brothel Site

According to Vernon McDaniel and other sources, there was a brothel that operated at this site during the late 1800's and early 1900's. No first-hand informant could be located to corroborate this. McDaniel thought that the "ladies of the night" sought their clientele from the sawmill that was operating nearby. He was told that the structure mysteriously burned, and that it was generally believed that certain married women had caused the fire. No evidence of structures remains today. The site is located just outside the Nursery boundary fence in the extreme southern part of the compartment. Remnants of an early road leading to the site can be seen.

Compartment No. 19
(Sec. 36 and 35)

H-1 Early Fire Lookout

A fire lookout was built on the highest point in this compartment sometime during the 1930's. It had a radio antenna attached to it. The date that it was dismantled is unknown. A telephone line extended from the lookout to the State Department of Forestry's office in Peavy Arboretum. Rowley remembers seeing remnants of these facilities.
Compartment No. 21
(Sec. 36)

H-1  Fred J. Schreiner Monument

The Fred J. Schreiner Monument is located at the junction of Roads 520 and 540, near the Forestry Club Cabin in McDonald Forest. The native stone monument was crafted by Civilian Conservation Corps enrollees from Camp Arboretum. A bronze plaque which is mounted on the stone base was made by the Art Department at Oregon State College.

Description: Made of stone, mortared with concrete; measures 35" x 43" at the base and tapers up to a point; 68" high; contains a bronze plaque with an engraved design (surveyer using a transit). The plaque reads: "This Road Dedicated To The Memory Of Fred Schreiner 1900-1934." The monument was erected about 1935 (sources do not agree--see the discussion in Chapter 6, Conservation theme). Schreiner was a graduate of Oregon State College (Forestry) who taught in the Forest Engineering Department for seven years. Also dedicated to Schreiner is a peak in the Mt. Hood National Forest. The dedication of Schreiner Road was held on February 19, 1936 during A-Day. Peavy addressed the more than 300 students and faculty who were in attendance. Schreiner was well-liked by his students and colleagues.

H-2  Forestry Club Cabin

This structure was built after the first cabin burned in 1949. It and its predecessor have occupied a central role in the instructional and recreational life of the School of Forestry. The Cabin, which measures 68' X 42', was built under the direction of Marvin Rowley. (See the discussion in Chapter 7, Recreation theme for a description of the events relating to both cabins.) It continues today to be an important part of School of Forestry programs.

Compartment No. 23
(Sec. 31 and 36)

H-1  Archaeological Site

See report of archaeological investigation carried out by Sandy Snyder, O.S.U. Department of Anthropology.

H-2  Bachelors' Residence

According to Vern McDaniel, this dwelling was constructed by the State Department of Forestry to house unmarried men who worked in the Nursery. The date of construction is unknown.
H-3 Residence

This house is located approximately one mile northwest of the Nursery complex; near it is a smaller house—the Timber Harvesting Systems Laboratory for the Department of Forest Engineering (O.S.U.). This building originally housed the infirmary for Camp Arboretum, according to Vernon McDaniel. Its date of construction is probably about 1935, as an infirmary would have been one of the first buildings constructed for the camp (the camp operated from 1935 to 1942). McDaniel thought that it was moved from the Camp Arboretum site to its present location in the mid-1950's. It is currently used as a residence.

H-4 Storage Building

This small building is located on a service road, approximately 3/4 mile northwest of the Nursery complex. It is not presently used for storage (it is empty); the door is not locked. McDaniel believes that the Camp Arboretum CCC carpenters also built this structure, because like the residence above (H-3), it was moved from its original location in the Camp Arboretum complex. Description: 8' X 6'; all walls galvanized metal; one door on the northwest side; no windows; board floor; wood sign on the southwest wall, reads, "#31".

H-5 Sheds

Two small structures are located on the same service road, close to the storage building described in H-4. McDaniel referred to these buildings as "haul-ins," because they were transported to the Nursery from elsewhere. During the period when the Oregon Forest Nursery operated (1925-1963), these sheds were used by tree-pulling crews as a rest and lunch area. Description: About 10' X 15'; board walls; wood shingles; both sheds have several windows. Condition: deteriorating and surrounded by high grass.

H-6 Upper Residence

The house known as the Upper Residence was constructed in 1938 and 1939. It was built by CCC enrollees at Camp Arboretum for Nurseryman McDaniel of the Oregon Forest Nursery. (See the discussion in Chapter 6, Conservation theme.) Description: 49' X 26½'; frame construction; cement basement; faces southeast; shiplap siding; decorative shutters on windows with CCC tree motif; rock fireplace on east side; small back porch; recent galvanized gutters and downspouts; board and batten under gable roof; stone pathway around residence; painted green; composition shingle roof; exterior unchanged
from original design. There is also a two-car garage behind the residence. It is 20' X 22' and faces northeast; cement foundation; board and batten under gables; shiplap siding; painted green. Both structures are in good condition. Vernon and Mary McDaniel moved into the Upper Residence in December, 1939. They remained there until McDaniel's retirement in August, 1964. The residence is currently occupied by a forestry technician, Ivan Cutsforth.

H-7 Warehouse

The Warehouse was constructed in 1937 by the Civilian Conservation Corps for the Oregon Forest Nursery. It initially functioned as a warehouse and as the first tree storage building for the Nursery. It is located in the central Nursery complex. Description: 58' X 21'; frame construction; main floor is cement, the second floor is wood; faces east onto service road; a 10' X 8' roller mounted door is on the front; 3 windows on front (east), south side has 6 on top and 2 on bottom level, no windows on north side; shiplap siding; green composition shingle roof; painted green; galvanized gutters and downspouts; board and batten under gable; generally in good condition.

During its first shipping season in 1927, the Oregon Forest Nursery shipped 44,000 trees to farmers for the purpose of establishing wood lots, shelter belts and wind breaks. By 1936 the number had increased by 518,465. Because of the growing demand a ten-acre tract was purchased by the State Board of Forestry to accommodate the increase in seedling production. Also, an improvement program was begun that was to provide the construction of a water storage reservoir, residence, garage, crew house and a combined cold storage and packing house (now known as the Warehouse). The purpose of the cold storage facility was to retard the spring development of the seedlings until conditions were favorable. From 1937 to 1949 the ground floor of the Warehouse was used for the shipping process: sorting, counting and packing of trees. The rear portion on the ground floor was equipped with cold storage facilities. The Annual Report Of The State Forester For The Year Ending December 31, 1937 well described the operation:

The cold storage room is 22 by 40 feet, with capacity of several hundred thousand seedlings.

... It is of 8-inch concrete construction, embanked with earth on three sides for insulation purposes. Ventilators are opened at night, bringing the inside temperature to approximately that of the minimum outside. The ventilators are closed early into the morning before the temperature starts
to rise, thus maintaining a fairly constant minimum. In case the required minimum cannot be maintained through this process, ice will be used during the few weeks necessary to retard development (p. 43).

On completion of the Packing and Refrigeration Building in 1949, the storage and shipping process was transferred from the Warehouse to the new building. The Warehouse is still used today as a maintenance and storage building.

H-8 Nursery Office

The building which now houses the Nursery Office was initially a double garage. The construction date is unknown, but it is thought (by McDaniel) that it may be the oldest building in the Nursery. Its original use was a garage, tool room and workshop for the Oregon Forest Nursery. After the arrival of the CCC's the building was remodeled by enrollees in order to accommodate a small office in one side. Description: 25' X 23'; faces east; two barn-sash windows on north; entry door on east side (front); gable roof with composition shingles; original wooden gutter with newer galvanized metal downspouts; garage door to left of main entry door; cement foundation; painted green; sign over door, "Office." Generally in good condition.

As the nursery expanded it became necessary to have an office in the Nursery complex. Prior to this McDaniel used a desk in his private residence for all necessary office work. The second floor of the Packing and Refrigeration Building also had a small office. The other side of the garage was used for a garage by the resident living next to the building, in the Lower Residence. Lenore Hawks, who continues to reside in Corvallis today, was the first secretary employed by Nurseryman McDaniel. The building is now used as an office by the School of Forestry.

H-9 Lower Residence

The Lower Residence was the first residence built for the Nurseryman of the Oregon Forest Nursery. It was built by a private contractor, who completed it in the summer of 1927. This residence was the home of Vernon and Mary McDaniel from 1927 until 1939 when the Upper Residence was ready for occupancy. Description: 36½' X 26'; faces east; composition shingle roof; small extension has been added on the west side that serves as an entryway and storage area; brick chimney on north side; shiplap siding; small dormer on east (front) side; original porch on east side of house was enclosed creating an alcove;
built on a slope, thus the entry is about 3'-5' from ground level; has basement. McDaniel used the basement for a period as his office. Painted green. The residence is currently rented.

H-10 Packing and Refrigeration Building

The Packing and Refrigeration Building was constructed in 1949 by a private Corvallis contractor named Carl Doughty. It was the second building to be built as a refrigeration facility; the first cold storage building (now the Warehouse) was built in 1937. Increased demand prompted the State Department of Forestry to expand its cold storage facilities. Description: 69' X 29'; faces northwest; has two levels, the main floor is cement; brick chimney on southeast side; under gable on each side there are two windows (9 panes each, painted); 2 windows on northeast side; six windows on west side (9 panes each); composition roof; galvanized metal gutters and downspouts; front roller-mounted door; board and batten under gable; painted green. Building is in good condition.

During its use by the Nursery, the front portion of the building was used for a sorting, packing and shipping room. This room's temperature was maintained at 34.5 to 35 degrees Fahrenheit by an electric refrigeration unit. A room in the rear of the building was used for the storage of trees. This room was kept at a constant zero degree temperature. Storage in this environment preserved the seeds in good condition for several years. The upper floor was used for general storage and, at one time, for a women's restroom. The building is still used for these same purposes i.e., cold storage and general storage.

H-11 Restroom

This small one-room restroom is located in the Nursery complex next to the Machine Storage building. Because of the similar architecture it is probable that it was built around 1937. Description: 6'3 X 6'3; faces southeast; 10 feet to the top of the center span; gable roof; original wood shingles; shiplap siding; entrance door on southeast; plumbing was connected to a septic system (not an outhouse) but no longer functional (lavatory and toilet still in place); painted green; one window on back wall, one on northwest wall; concrete floor; deteriorating wood lattice screens the entry; no longer used as a restroom. Condition is poor.

H-12 Storage Building

The CCC's built this small storage building for the use of
the Oregon Forest Nursery. The exact date of construction is unknown, but it is thought to have been between 1935 and 1942. It is situated next to the Gas House, in the Nursery complex. Description: 6'3" X 8'3"; frame building sheathed with galvanized metal; one door on south-west side; no windows; no foundation; structure sets on two parallel rotting logs. During its use by the Nursery, it was used as a storage building for paint and poisoned grain. The structure is still used for storage.

H-13 Gas House

The Gas House was constructed in 1937 following completion of the Machine Storage Building. Built by the Civilian Conservation Corps enrollees from Camp Arboretum, it functioned as an oil and gasoline building for the Nursery. Description: frame construction; 12' X 14'; faces southeast; one door 81" X 42" with two windows on each side 30" X 35" (one pane); board and batten under the gable with shiplap siding; cement foundation; roof has original shingles. The exterior appearance of the Gas House is unchanged from its original design. The building is still used for the storage of gasoline.

H-14 Machine Storage Building

The Machine Storage Building was constructed in 1937 by the CCC's at Camp Arboretum. It is located in the Nursery complex. Description: frame construction; 63' X 24'; faces southeast, six doors mounted on rollers, each 107" X 117"; no windows in front, four on west side (9 panes, painted green), four (nine panes) on east side (44" X 33"), six on east side (nine panes) (38" X 45"), cement foundation; painted green; roof is composition shingles; generally in good condition. From its establishment in 1925 to the construction of the Machine Storage Building in 1937, the Oregon Forest Nursery expanded its physical plant to meet the increasing demands for tree seedlings. The construction of this building occurred during a period of expansion. The Warehouse, Gas House, Machine Storage Building and Cronemiller Lake were all under construction in 1937. Forty-four thousand two-year old trees were shipped from the Nursery in the spring of 1927. By the fall of 1941 and the spring of 1942, over one million seedlings were being shipped from the Nursery to farmers in and outside Oregon. This operation necessitated much equipment and heavy machinery.

H-15 Post Farm

T.J. Starker's Post Farm was one of the earliest experi-
ments carried out on a systematic basis in the School Forests. Started in 1928, its objective was to determine the relative durability of different species and treatments for fence posts. The research continues today. (See the discussion in Chapter 7, Research theme.)

H-16 Memorial Grove

A grove of madrones were planted in the Nursery as a memorial to the thirty-three foresters who died in World War II. The names of the deceased are enscribed on a bronze plate set in rock.

Compartment No. 25
(Sec. 36)

H-1 Ponderosa Pine Race Study

One of the earliest research projects on School lands; initiated in 1928 and continues today under the direction of Roy Sileen, Forest Sciences Laboratory (O.S.U.). (See discussion in Chapter 7, Research theme.)

H-2 Oaks Felled To Feed Livestock

During the severe winter of 1881-1882 the oaks were felled along these foothills to feed the leaves and buds to starving livestock. Stumps still exist from this period (see discussion in Chapter 7, Settlement theme).

H-3 Pine Race Trail

Access trail to research area.

Compartment No. 28
(Sec. 31 and 36)

Camp Arboretum's Buildings and Sites

Camp Arboretum (1935-1942) was located at the entrance to Peavy Arboretum west of Highway 99W and ¾ miles north of Corvallis, Oregon. The central part of the camp was located between the two gravelled roads that lead into the Arboretum (see map). Other buildings, such as the large two-story Sign Shop, were located west and northwest from this central cluster. Most of the buildings that were constructed for use by Camp Arboretum have been dismantled or destroyed. In walking over the site, one encounters evidence of other structures, such as foundations, and rockwork. Two cement platforms have been located. Cement platform #1 is located in a grassy area between
the entrance to Peavy Arboretum and Peavy Lodge. Platform #2 is located between the former State Department of Forestry Residence and the CCC Sign Shop. The identification of the buildings that once stood on these two platforms is not known by the researcher. The platforms have been identified as being associated with the CCC by one former Camp Arboretum enrollee (Sekermestrovich, 1980).

Most of the buildings that made up Camp Arboretum were constructed in 1935 by civilian carpenters and fifty Emergency Conservation Work enrollees. By 1939 Camp Arboretum contained thirty-nine buildings. During the existence of Camp Arboretum enrollee strength was maintained at 150 to 200 men. At the time of its construction, the camp was the largest Civilian Conservation Corps installation in Benton County, Oregon, and was considered a model camp. According to M.J. Bowen, (Special Investigator, CCC) "...the camp site is not only a good one but the buildings are the last word in camp construction. The camp grounds too, are in excellent condition (1935)."

The following is a list of the buildings known to have been part of the Camp Arboretum complex. Very little information has been uncovered concerning the individual buildings. In most instances, the only fact known about a building is that it did exist.

Camp records indicate that all the buildings were of frame construction, wired for lighting, and adequately heated; commercial power was used for lighting. Flush toilets were installed throughout the camp.

1. Four barracks buildings that contained approximately fifty beds each.
2. Army Office
3. Mess Hall and Kitchen
4. Recreation Hall (furnished with a pool table and ping pong tables).
5. Infirmary. Five-bed ward, one isolation ward, fulltime contract surgeon. Building presently located near nursery complex.
6. Officers' Quarters
7. Forestry Office: Presently located in Philomath, Oregon, Department of Forestry, West Oregon District (see site report)
8. Booster Heater House (2)
9. Wood Shed
10. Radio Station
11. Garage, Technician Service
12. Army Truck Shed
13. Tool Room
14. Garage (2)
15. Salvage Building
16. Wash rack
17. Grease rack
18. Oil House
19. Sign Shop: Remains on original site (see site report).
20. Lumber storage
21. Machine Shop
22. Storage Room
23. Forestry Department Residence: Remains on original site (see site report),
24. Gas Pump
25. Vegetable Room; 6' X 8'
26. Storage Building
27. Powder House
28. Cap House - remains on original site.
29. Blacksmith Shop
30. Lumber Shed
31. Education Building: Dimensions were 20' X 80'; completed in 1939. The building contained a 20' X 14' stage, library, reading room, assembly room, office, educational advisor's quarters. The interior was finished with "firtex" and plywood. The plywood was stained driftwood grey. Two classrooms were also located here, (96 square feet each). This building had a total area of 1600 square feet.
32. Portable Education Annex: three classrooms (400 square feet each), one classroom (330 square feet), one darkroom (70 square feet).

H-1 Sign Shop

The Sign Shop was built in 1936 by the CCC enrollees of Camp Arboretum. During the existence of this camp, the building functioned as a workshop for the construction of wood signs. These were used throughout Oregon by various State agencies.

The exterior of the Sign Shop has not been altered. Description: 80' X 29'; two stories; faces northwest; frame construction; 16 windows on the west side (12 panes), and 15 windows on the east side (12 panes) (windows are 44" X 47"). On the east side is a large sliding door and an ordinary door. Cement foundation; board and batten to the bottom of the first story windows; four feet, 9 inches shiplap to board and batten construction; original shingle roof intact; brick chimney; three windows on northwest side (six panes) and two 10' 5" roller-mounted doors; seven windows on southwest side. Structure sets on logs resting on cement pillars. The color of the building is light green.

The Sign Shop was the last building to be constructed at Camp Arboretum. The first floor of this building was used as a workshop for the construction of wooden "rustic" and painted signs. State organizations, such as the Northwest Oregon Forest Protective Association and the State Forestry Department, used these. The Sign Shop was designated as the sign headquarters for the State Forestry Department.

A work crew of twenty-five Civilian Conservation Corps enrollees were involved in the construction of most signs from the selection of the timber to their installation. Logs were gathered from Peavy Arboretum and other state owned land. Hundreds of signs of standard forest service specifications were crafted for various uses: section line
markers, directional markers, road and trail markers and large identification signs for lookout stations, guard stations and headquarters complexes. The second floor of the shop was used as a paint shop.

During evening hours the building was used as a crafts center for Camp Arboretum; enrollees made wood and leather-craft items.

Immediately after Camp Arboretum was disbanded, the State Forestry Department used the building for the drying and cleaning of tree seed. Oregon State College began using the building around 1963. It was then used for overflow storage by the Forest Genetics Laboratory, which is its present function.

The condition of this building is good, but it appears somewhat neglected due to some broken windows.

H-2 State Forestry Department Residence

Little information could be found pertaining to this building. According to one source, this residence was built by the CCC's sometime during the existence of Camp Arboretum (1935-1942). The dwelling was used for the residence of the State Forestry Department personnel who worked at the camp.

The house is located a short distance to the north of Peavy Lodge. Description: 52' x 21'6"; faces north; two doors and seven barn-sash windows in front; ten barn-sash windows of varying sizes on southern side (back). A storage area about 6'3" x 5'6" on north side is attached to building. It does not rise to the roof line; composition roof over original wood shingles; recent galvanized gutters and down spouts; fireplace on front of structure is 5 feet at base, constructed of native stone, reinforced on roof by supporting steel rod. The house is painted green, trimmed in grey; it rests on concrete blocks.

Approximately seven to fifteen State Forestry Department personnel worked with various CCC work crews at Camp Arboretum. Each twenty-five man crew was supervised by at least one State Forestry Department foreman. It is not known if all foremen lived in the house, but it is probable that many did. The structure is now rented by the School of Forestry, as a residence.

H-3 Two Bigleaf Maples

The two large maples located at the entrance to Peavy Arboretum are thought to have been planted by Thomas Read in the 1870's (see discussion in Chapter 7, Settlement theme). There
are many references to them in School of Forestry records. In recent times they have suffered somewhat from woodpeckers and aging.

State Forestry Department Office

This building is now located at the Department of Forestry, West Oregon District Philomath Office, on Highway 34, west of Philomath, Oregon. Its original site was the Camp Arboretum complex, Peavy Arboretum. The building was moved to its present site in 1964.

Description: 20' X 36'; faces northeast; exterior walls are shiplap; four windows on the northeast side, two windows and two entrance doors on front; four windows of various sizes on back wall; northwest side, two windows; composition shingle roof; new gutters and down spouts; concrete foundation; painted green, with darker green trim.

This building is now used as an office building for the Engineers Office, and Forest Practices Office of the State Forestry Department, West Oregon District. The exterior of this building has not been altered since its removal from Peavy Arboretum.

This office building was the original State Forestry Department office during Camp Arboretum's existence (1935-1942). The structure was probably built in 1935 by civilian carpenters during the construction of Camp Arboretum.

VINEYARD MOUNTAIN TRACT

(T 11S R 5W)

Compartment No. 3
(Sec. 35)

H-1 Horse-logged Compartment

Prior to acquisition by the School of Forestry, this compartment was horse-logged, according to Marvin Rowley.

Compartment No. 6
(Sec. 3)

H-1 Early Skid Road

This compartment contains an old skid road used by horse-
loggers to haul timber to a sawmill on Soap Creek. The skid road was still visible in 1966 (Rowley), but nothing can be seen today.

Compartment No. 7
(Sec. 3 and 2)

H-1 Horsed-logged Compartment

Prior to acquisition by the School of Forestry, this compartment was horse-logged, according to Marvin Rowley.

Compartment No. 8
(Sec. 2)

H-1 Harwood Spring Hunting Cabin

A small cabin at Harwood Spring was still standing in 1940, but has since deteriorated completely. It may have been a homesteader's dwelling that was abandoned and subsequently became a shelter for hunters. Nothing remains at the site today.

Compartment No. 11
(Sec. 3)

H-1 Horse-logged Compartment

Prior to acquisition by the School of Forestry, this compartment was horse-logged, according to Marvin Rowley.

Compartment No. 15
(Sec. 3)

H-1 Dean Peavy's Cabin

Sometime during the early 1930's (sources do not agree) alumni and students decided to build a cabin for Dean Peavy. Some sources claim that it was completed by 1932; others hold that it was not finished until 1935. It was about 20 X 38' and had two rooms; it had a large fireplace with inlaid petrified wood, and a large porch overlooked the valley. It was used for a retreat, meeting place, and recreation for Peavy, students and staff. After Peavy died, it began to deteriorate and in the
early 1960's Bill Davies razed it. Concrete was poured where the wooden floor had been. Today only the concrete floor and the fireplace remain. (See the discussion in Chapter 7, Recreation theme.)

Compartment No. 16  
(Sec. 3, 10, and 4)  
H-1 Early Trail  
Remains of an early trail that ran the length of the Compartment.

JACKSON PLACE TRACT  
(T 11S R 5W)

Compartment No. 1  
(Sec. 4)  
H-1 Early Road To Sulphur Springs  
Sulphur Springs has been a destination point for many years. This was one of the early routes to the springs. (See the discussion on Sulphur Springs in Chapter 7, Recreation theme.)

Compartment No. 2  
(Sec. 4)  
H-1 Early Road

Compartment No. 3  
(Sec. 4 and 9)  
H-1 Early Road

Compartment No. 6  
(Sec. 9 and 4)  
H-1 Early Trail  
Early trail from Lewisburg Saddle to Oak Creek.

Compartment No. 8  
(Sec. 9 and 4)  
H-1 Early Road
Compartment No. 9
(Sec. 10 and 3)
H-1 Early Road

Compartment No. 10
(Sec. 9)
H-1 Early Trail

Early trail from Lewisburg Saddle to Oak Creek.

Compartment No. 14
(Sec. 8 and 9)
H-1 Early Trail

Compartment No. 16
(Sec. 17, 16, 18, and 9)
H-1 CCC Rock Pit

Road building was one of the primary tasks the CCC crews carried out during the period from 1935-1942 (Camp Arboretum). This necessitated vast quantities of rock. This was the location where rock was obtained for Patterson Road.

Compartment No. 18
(Sec. 16 and 9)
H-1 Telephone Line

A telephone line paralleled the lower boundary of this compartment during the 1930's. It served the residents of the Jackson Place.

Compartment No. 19
(Sec. 9)
H-1 F.E.M. Robinson Tract

This 40-acre tract of land was the last addition to McDonald Forest. It was purchased from F.E.M. Robinson in 1962 for $2000. The source of funds was the McDonald Forest account. No land has been added to the School Forest system since then.

Compartment No. 23
(Sec. 16)
H-1 CCC Shelters

Very little is known about the three log shelters located
off Road 512.4 on the southern end of McDonald Forest. The records for the period suggest two possible origins: the CCC's from Camp Arboretum, and a 1941 National Youth Administration project. (See the discussion in Chapter 6, Conservation theme.)

The shelters are log and pole construction with post foundations. All face southward; one has completely collapsed from damage caused by a fallen tree. The other two are still standing, but leaning dangerously. Their dimensions are 16' X 26'; they are about 72' apart. Both have one side open (6' X 15'). The infrastructure consists of horizontal logs resting on support posts. The flooring is 1 X 12" sawn lumber. The roof has an overhang of about 3½'; walls are made of logs. Board and batten under the gables. Corner joints are held together with wooden pegs and nails. The original shingles are covered with moss.

The presence of these log structures has not been widely known. Occasional horse-riders and day-hikers visit them.

Compartment No. 26
(Sec. 18)

H-1 Jackson Place

Little is known about this residence. It was acquired when the land was purchased from the Jackson Estate in 1938. School of Forestry records mention refurbishing the residence and renting it. Today it is rented to non-School persons. The structure had been modified considerably, thereby losing any historical integrity it may have had. School records show that in the 1950's the house was 30' X 30', with an "E1", 15' X 17', with a total of 1155 square feet. It was valued at $6,317,85.

Compartment No. 31
(Sec. 16 and 15)

H-1 Early Orchard

The remains of an orchard are easily visible on this site. It was probably associated with the Jackson Place during an earlier period.
SOAP CREEK TRACT

(T 11S R 5W)

Compartment No. 1
(Sec. 6)

H-1 Early Trail

Early trail to Price Creek.

Compartment No. 31
(Sec. 5)

H-1 Early Trail

Early trail Oak Creek - Sulphur Springs.

H-2 Sulphur Springs

Sulphur Springs has played a continuing role in the history of the School Forests. Since before the turn of the century Sulphur Springs has been a recreation site for people from the surrounding area. People have been attracted to the site for picnicking, camping and general day use. In the 1890's some bicycled to the springs; camp meetings were held there, particularly on holidays. During the 1940's the School of Forestry, with the help of the CCC boys from Camp Arboretum, developed a recreation facility. Picnic tables, restrooms, garbage pits and other developments were installed. Ultimately, during the 1950's, the vandals so destroyed the developments, that they were removed by School personnel. One story holds that a resort was once located at this site on Soap Creek, but little evidence was found to support this claim. Today, nothing but the concrete encased spring exists at the site.

Compartment No. 33
(Sec. 7)

H-1 McCulloch Peak Radar Site

This site represents an interesting episode in the history of the School Forests. In 1960 the Science Research Institute at O.S.C. obtained permission to install radar equipment on this peak in order to monitor weather patterns. Most of the equipment was surplus; it developed many maintenance problems. Several structures, vans, a radar unit, and much other equipment were hauled to the site. Data was collected by graduate students from about 1960 to 1966 or 1967. By 1968 the site
was abandoned due to problems with vandals, maintenance, and the loss of funding from the Signal Corps and the National Science Foundation. McCulloch Peak derived its name from this association in that it was unnamed prior to these events; Fred Decker of the Department of Atmospheric Sciences labeled it, "McCulloch Peak" in honor of Dean Walter McCulloch. Little remains today of this research activity. (See the discussion in Chapter 7, Research theme.)

Compartment No. 34

H-1 Early Trail

Two early trails intersect in this compartment: trail to Price Creek and trail to Alder Creek.

OAK CREEK TRACT

(T 11S R 5W)

Compartment No. 2
(Sec. 7)

H-1 Sawmill Site

This sawmill located on the west fork of Oak Creek probably operated in the 1910's and 1920's. Remains of the milling activity--firebricks, stumps, pieces of metal, cable, etc.--are still to be seen at this site. The flume that followed the west fork of Oak Creek down to Oak Creek and toward the Marys River, originated at this mill. Several individuals in the School of Forestry have seen this site (O'Leary, Davies, Rowley). (Visited by Rowley and Jackson in July, 1979.)

Compartment No. 3
(Sec. 7)

H-1 Oak Creek-Marys River Flume

A flume once carried logs from the west fork of Oak Creek, down to Oak Creek and then to Marys River. Pieces of this apparatus were still visible in the 1960's. The flume rested on support beams set on brick foundations about 6' X 6'. All of the wooden parts have deteriorated and there is little evidence left of this activity. A 1915 map shows a "proposed route of flume", therefore it must have operated sometime after that date. (See the discussion in Chapter 7, Harvest Activities theme.)
Compartment No. 6
(Sec. 8 and 7)
H-1 Early Trail

Compartment No. 7
(Sec. 8)
H-1 Early Trail

Compartment No. 15
(Sec. 17 and 8)
H-1 Early Road

Early road to upper Baker Creek.

H-2 Sawmill Site

The only remaining evidence of a sawmill at this location is a rusty length of pipe leading into a creek, which is a tributary of Oak Creek. The pipe is located about 800 feet from Road #600. There is a faint road leading into the site. Jackson and Rowley visited this site in July, 1979.

Compartment No. 16
(Sec. 18)
H-1 Home Site

This site originally consisted of a dwelling, barn, garage, orchard and spring. Rowley and Jackson visited the site in July, 1979 and found metal debris, rotting fence posts, deteriorating bits of the structures, a depression in the earth where the basement was, and pieces of a cookstove. Rowley was told that a man named "Peterson" once lived there; he had no additional information about the occupants. The two structures that remained in the 1960's were pushed over by Rowley to hasten decomposition and eliminate unauthorized use. About 350 feet northwest of the dwelling site is the spring, which had been dug out of the hillside. The orchard was located near the spring, and is still in evidence--pear, plum, apples trees. Earlier there was no bridge over Oak Creek; people crossed it where the Fisheries Laboratory is now located, and drove in on Homestead Road during the summer. The road was named Homestead Road because of its relationship to this site. To the north of the site was an open pasture which was fenced and cross-fenced. Today it has a Douglas fir overstory. The Boy Scouts were once permitted to camp overnight at this location in McDonald Forest.
Compartment No. 17
(Sec. 18 and 17)

H-1 Oak Creek-Marys River Flume

The flume that originated on the west fork of Oak Creek (Compartment No. 3) continued in this compartment.

Compartment No. 18
(Sec. 17)

H-1 Early Road

Compartment No. 23
(Sec. 17)

H-1 Oak Creek-Marys River Flume

Continuation of the flume that originated in Compartment No. 3.

H-2 Sawmill Site

A sawmill was located here at the junction of the west fork and the main fork of Oak Creek (near junction of Roads #600 and 6020). Many in the School have known about this site. Rowley remembers a student whose grandfather worked there in about 1920. Rowley and Jackson (July, 1979) located some pieces of an old boiler, railroad iron, a pipe standing upright from the ground, and pieces of sawn lumber (one piece was $2\frac{3}{8}$" X 5 seven-eights"). There is some research apparatus on the creek at this location.

H-3 Grader Shed Site

Near the junction of Roads #600 and 6020 was located a shed that housed a grader from 1948 to 1974. The grader was used to maintain roads in the School Forests. Nothing remains at the site today.

H-4 School Sawmill Site

In 1947, through the efforts of a faculty member (Ralph DeMoisy), the School acquired for instructional purposes, a sawmill that had been designated as World War II surplus. It was assembled on Road #600 on Oak Creek by DeMoisy and others. The mill from the outset was plagued with maintenance problems, and was destined to operate for a short period—from 1947 to 1954 or 1955. It was used only on weekends; it was a teaching facility for the Department of Forest Products. Students enrolled in Forest Engineering supplied the logs for the mill. Several individuals who are now faculty members in
the School of Forestry—Krahmer, McKimmey—worked at the mill when they were students during the early 1950's. Lumber from this mill was used for the construction of the second Forestry Club Cabin in 1950.

The sawmill was powered by two six-cylinder Chrysler engines housed in a long rectangular building (28' X 100', 2800 square feet). The structure had no permanent foundation; cement blocks provided temporary support. The building was frame construction. Due to operating difficulties, expense and general safety considerations, the sawmill was discontinued and sold as salvage to the Alaska Junk Co. in Portland, in about 1954 or 1955. Nothing remains at the site today. (See the discussion in Chapter 7, Education theme.)

H-5 Home Site

Little is known about this site, other than there was human occupation at one time. It probably paralleled the occupation of the general Oak Creek area in McDonald Forest—from about the 1920's to the 1940's.

Compartment No. 29
(Sec. 18, 19, and 20)

H-1 Homestead Road

This road originally provided the access to the home site located in Compartment No. 16. The road was named "Homestead Road" for that reason. It has been developed to provide better access to this part of McDonald Forest and is currently also known as Road #6021.

H-2 Creek Ford

This was a location for crossing Oak Creek before a bridge was built. People who lived in the house located in Compartment 16 probably forded the creek here.

Compartment No. 32
(Sec. 20)

H-1 Home Site

Little is known about this site, except that it was occupied for some period in the recent past. Its period of occupation probably parallels that of the general Oak Creek area in
McDonald Forest—sometime between the 1920's and 1940's.

H-2 Oak Creek Guard Station Residence

One of the more obvious contributions of the CCC era in
the School Forests is Oak Creek Guard Station, located at
the southern entrance to McDonald Forest. It was completed
sometime between 1940 and 1942, and used as a residence for
a custodian. Initially, the occupants were graduate students
and their families who provided a "presence" at this central
access point to the Forest.

The site consists of two structures (from the CCC period):
the residence and the horsebarn. Description of the resi-
dence: Five rooms and a bathroom (living room, 2 bedrooms,
kitchen, dining room); large rock fireplace at south end of
living room; shake roof; building faces west; developed base-
ment; addition over garage now provides additional office
space for fisheries research personnel; shiplap siding;
board and batten under gables with distinctive CCC tree
motif; cement foundation; porch on back of house; CCC rock-
work around yard. The building originally measured 26' X
48' and contained 1248 square feet of floor space. When
the garage roof was raised to form a second story, the
original siding was used to better blend the addition to
the original structure. The living room is now used for
a meeting room; the dining room was enclosed to form a work
space. Color of residence is green.

The residence was occupied by several families (Sprague,
Yoder, Ellis, Long and others) until the mid-1950's when
it was converted to a fisheries research facility. Behind
the residence are the remnants of an old orchard suggesting
other human occupation at this site prior to the CCC era.
Condition of the building is good. (See the discussion in
Chapter 6, Conservation theme.)

H-3 Oak Creek Guard Station Horsebarn

The horsebarn has been used as a utility shed, storage
building and general maintenance facility since its con-
struction. Some sources think that it may have been on
the site when the residence was built; others think it was
constructed at the same time. None of the occupants inter-
viewed (see Chapter 6) kept livestock in the building. De-
scription: Frame construction, 24'3" X 32'4" (rectangular)
about 660 square feet; about 23' to the peak of the gable
roof; siding and roof are hand-split cedar shakes; green
with brown trim; faces south; roof raises eight feet to
about a 2/3 pitch; re-roofed in 1974; upper part has loft
used for storage; cables have been installed to strengthen
walls (about 1966); cement foundation; galvanized gutters;
large double-door entrance on south side; north side has stairs built about 1975 (loft entered by interior ladder before); interior been remodeled to become maintenance shop; and, condition is generally good.
APPENDIX A

Limerock Village Historic District

FORM NO. 10-300
(REV. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

NAME
HISTORIC Limerock Village Historic District

AND/OR COMMON Same

LOCATION
IN IRREGULAR PATTERN ALONG OLD LOUIS PIKE,
WILBUR ROAD, AND GREAT ROAD

CITY TOWN Limerock
STATE Anystate

CONGRESSIONAL DISTRICT #1
COUNTY Washington
CODE 063

CLASSIFICATION

CATEGORY DISTRICT
BUILDING(S) PUBLIC
STRUCTURE PRIVATE
SITE BOTH
OBJECT PUBLIC ACQUISITION

OWNERSHIP

STATUS OCCUPIED

PRESENT USE

AGRICULTURE
COMMERCIAL
EDUCATIONAL
ENTERTAINMENT
GOVERNMENT
INDUSTRIAL
TRANSPORTATION
MILITARY
OTHER

OWNER OF PROPERTY
NAME Multiple ownership

AND MAILING ADDRESS

LOCATION OF LEGAL DESCRIPTION
COURTHOUSE REGISTRY OF DEEDS/LOC
REGISTRY OF DEEDS, WASHINGTON TOWN HALL

STREET & NUMBER 100 OLD CREEK ROAD

CITY TOWN Washington
STATE Anystate

REPRESENTATION IN EXISTING SURVEYS
TITLE Historic American Buildings Survey

DATE 1958

DEPOSITORY FOR SURVEY RECORDS Library of Congress

CITY TOWN Washington
STATE D.C.
DESCRIPTION

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DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Limerock Village Historic District comprises some twenty architecturally or historically significant buildings, three lime quarries, and the ruins of several lime kilns. Dating from the late 17th through the 19th centuries, few of the district's buildings have undergone major alterations. Limerock is located at the intersection of two rural roads and with a population of 243 retains the scale and density of a late-18th- to early-19th-century village. Primarily residential in character, the district contains two churches, two taverns, and several additional commercial structures.

Buildings and sites contributing to the character of the district:

1. Thorman-Halbig House (10 Great Road): Greek Revival, 1 ½ stories, clapboarded Doric portico.

2. Wolf Inn (17 Great Road): 19th c. doubled in size with 5 bays on the east, 2 stories, shingled, west doorway has fanlight, broken pediment, fluted pilasters.


4. Store (14 Great Road): 1 ½ stories, clapboarded (presently Herrington Studio.)

5. House of Lime Rock Bank (16 Great Road): 1823, Greek Revival, 1 ½ stories, clapboarded, Doric portico.


10. Luce House (1 Wilbur Road): 1834, Greek Revival, 1 ½ stories, clapboarded, site of 18th c. potash business.

11. Roland David House (28 Great Road): 1694, stone ended, 2 stories, shingled.


14. Wilbur Road Schoolhouse (6 Wilbur Road): c. 1850, Greek Revival, 1 ½ stories, clapboarded, high brick foundation.

15. Barnes House (10 Wilbur Road): 18th c., 1 ½ stories, shingled originally had portico.


17. Armstrong Kiln (14 Wilbur Road): cylinder on base with 4 arched openings, stove brick, iron.

18. Middle Hill Quarry: water-filled lime quarry.


21. Limerock Grange (4038 Old Louis Pike): built in 1807 as a tollhouse, 20th c. additions on south end, 2 stories, shingled.

22. Cable House (4038 Old Louis Pike): ca. 1800, 2 ½ stories, clapboarded, pedimented doorway, splayed window lintels, original outbuildings.

23. Wiggins House (1 Dynes Road): 1742, 2 ½ stories, clapboarded, pedimented Dor portico, splayed window lintels with keystone on first story.

24. North Hill Quarry or "Jointa Hole:" water-filled lime quarry named for hornblende rock in the limestone.

25. Lime kiln: cylinder on base with 4 arched openings, made of rubble stone, burnt stone, sheet iron.

26. Lime kiln: earlier than #25, single-arched, cut into edge of embankment and faced with stone.

27. Kathy's Hamburger Haven (Old Louis Pike): 1972, 1 story, glass and masonry

28. Samuel Dynes House (5 Dynes Road): ca. 1790, 2 ½ stories, clapboarded, pedimented entrance with fanlight, splayed window lintels, on west.


30. Ruins of 5 buildings.

Nonconforming intrusions detracting from the integrity of the district

27. Kathy’s Hamburger Haven (Old Louis Pike): 1972, 1 story, glass and masonry

SIGNIFICANCE

PERIOD
- PREHISTORIC
- 1400-1499
- 1700-1799
- 1800-1899
- 1900-

AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW
- ARCHEOLOGY - PREHISTORIC
- ARCHEOLOGY - HISTORIC
- AGRICULTURE
- ARCHITECTURE
- ART
- COMMERCIAL
- COMMUNICATIONS
- COMMUNITY PLANNING
- CONSERVATION
- ECONOMICS
- EDUCATION
- ENGINEERING
- EXPLORATION - SETTLEMENT
- INDUSTRY
- INVENTION
- LANDSCAPE ARCHITECTURE
- LAW
- LITERATURE
- MILITARY
- MUSIC
- PHILOSOPHY
- POLITICS - GOVERNMENT
- RELIGION
- SCIENCE
- SCULPTURE
- SOCIAL/HUMANITARIAN
- THEATER
- TRANSPORTATION
- OTHER (SPECIFY)

SPECIFIC DATES

STATEMENT OF SIGNIFICANCE

Limerock is a well-preserved New England village, with good examples of vernacular architecture dating from the 18th and 19th centuries. The village maintains a strong link to the past not only through its architecture but through its lime quarries. "probably the oldest continuous industry in America." Limerock was also the stage stop on the road between Easton and Phillipsburg in the early 19th century, and two inns still exist from this period. The district forms the center of modern Limerock Township and contains the greatest concentration of significant buildings and sites. Despite several intrusions and alterations to buildings within the district, Limerock retains the scale and ambience of a mid-19th-century village.

The Roland David House possesses the massive fireplaces, chamfered timber frame, and floor plan characteristic of late-17th-century building. The Wiggins House (1742), the Henry Ward House (ca. 1760), the Samuel Dyne House (ca. 1790), and the Cable House (ca. 1800) span over half a century in their date of construction, but their form and classical detail are remarkably similar. All are two-and-a-half story, gabled, five-bay-wide buildings, and each exhibits some combination of splayed lintels, pediment, and fluted pilasters. The Greek Revival Style reached Limerock in the 1820's and influenced the design of several small houses in the village.

Due to its central location on the Great Road between Easton and Phillipsburg, Limerock became a well-known place for travelers between the two cities. The first Wolf Tavern was licensed by Jeremiah Wolf in 1747 in the former Eleazer White House. The second Wolf Tavern (still extant) was run by Nathaniel Wolf from 1817 to 1841 and later by his son-in-law, William A. Bradley. The stages which ran daily during this period between Easton and Phillipsburg all stopped at the Wolf Tavern to change horses. In 1807 the newly formed Turnpike Company voted to erect a gate of toll at Limerock for the purpose of housing the tollkeeper and holding meetings of the company. The traffic to Easton from Phillipsburg and the commercial activity due to the lime business must have been great enough to promise large revenues, for members of all the leading families in Limerock invested in the company. The company did permit the teams drawing lime rock on the pike and turning off onto Wilbur Road to pay only half of the lawful toll.

Major Nathaniel, as he was called due to his rank in the state militia, gave legal advice at his tavern, served as auctioneer when the occasion arose, and owned considerable real estate in the eastern part of Limerock. The first Wolf in the Limerock area owned a share of 2,000 acres as early as 1666. His descendants remained influential in town affairs and local business into the mid-19th century. Today there is only one building remaining in Limerock which is directly associated with Major Wolf: the tavern on Great Road.

It is believed that the first limestone quarried and burned in America was in 1692 at Weston, a village four miles west of Phillipsburg. Reverend Gregory Lester, a distant relative of Peter Stuyvesant, owned land containing limerock southeast of the present village of Limerock. His son, Stephen, settled there in the 1670's and began burning lime at what became known as Lester Ledge. It was the Barnes family, though, which first settled and burned lime in the late 17th century in Limerock. The descendants of Thomas Barnes controlled this industry until 1823 when the Barnes Lime Rock Company was incorporated. The Lester Lime Rock Company, incorporated in 1854, later merged with Barnes to form what is today the Armstrong Limestone Company.

The lime industry, and the village of Limerock, thrived for a period of roughly 100 years between 1750 and 1850. David Barnes (1714-1797) was responsible for transforming the part-time efforts of a few individuals in Limerock into the area's major industry. By 1772 Barnes owned three kilns, and paid local residents for quarrying stone, burning lime, making hogheads, and carting the lime to market. They also sold or leased the rights to cut timber in their wood lots, as the lime kilns consumed wood in large quantities.

When David Barnes died in 1797, his lime was being sold from Boston and New York to the southern states and the West Indies, and at a good price because of its high quality. His descendants inherited the three kilns, and under their management the Barnes "Lime-rock manufactories" sold nearly 2,000 casks of lime each year until the War of 1812 and continued a high volume business after the slump caused by the War. The company's "Counting House" stood where the present Armstrong Limestone Company is located.

With the completion of the Easton and Phillipsburg Railroad in 1849 which bypassed Limerock, the village ceased to be a busy waystation. The Barnes Lime Rock Company continued to produce large quantities of superior quality lime, and as Portland cement became widely used in America in the late 19th century, the lime industry, which had been so much a part of life in this community for almost two centuries, slowly declined. Today lime is being quarried only in the South Hill by the Armstrong Limestone Company.
MAJOR BIBLIOGRAPHICAL REFERENCES


GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 240

UTM REFERENCES

A

ZONE 19

EASTING 29,728,0

NORTHING 4,616,9

B

ZONE 19

EASTING 29,725,0

NORTHING 4,614,6

C

ZONE 19

EASTING 29,560,0

NORTHING 4,614,3

D

ZONE 19

EASTING 29,560,0

NORTHING 4,614,7

VERBAL BOUNDARY DESCRIPTION

The southern boundary of the Limerock Village Historic District starts at a point 250 feet east of the junction of Simon Road and Great Road. From this point it runs west along Simon Road and continues in a straight line to the intersection of Old Louis Pike and the southern property line of the Cable House. From there it follows the property line of the Cable House northwest until it meets the property line of St. Katherine's Church. It follows the west and north property lines of St. Katherine's Church to Dynes Road. From Dynes Road it continues in a straight line 250 feet along the western

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

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FORM PREPARED BY

NAME/TITLE Veronica Spector, Architectural Historian

ORGANIZATION Anystate Historical Commission

DATE 10/24/76

STREET & NUMBER 82 Lee Street

TELEPHONE 800/237-2436

CITY OR TOWN Phillipsburg

STATE Anystate

STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL ___ STATE ___ LOCAL X

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

DATE 11/1/76

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

KEEPER OF THE NATIONAL REGISTER
property line of the Dynes House and turns east along the north property line of
the Dynes House. From the northeast corner of the Dynes property it turns north
following the west boundaries of the Armstrong Limestone Company and continues
northeast along the northern boundaries of the company, crosses both Old Louis
Pike and Route 146, and continues to a point 350 feet east of Route 146. It then
turns south along the eastern boundary of the company property until the property
lines of the Barnes House, the Wilbur Road Schoolhouse, and the Henry Ward House.
The line then crosses Great Road and continues along the rear property line of the
Roland David House, crosses Anne Road and continues along the rear property lines
(running southeast) of Mt. Airy Lodge, Smith General Store, House of Lime Rock
Bank, and the Thorman-Halbig House, to the beginning point of the boundary.
Armstrong Limestone Company (19), view from the west
Limerock Village Historic District
Limerock, Anystate
Brian Jones, Anystate Historical Commission
April 1974

South Hill Quarry, Armstrong Limestone Co. (20), view from south of quarry
Limerock Village Historic District
Limerock, Anystate
Brian Jones, Anystate Historical Commission
April 1974

Limerock Grange (21), view from the southeast
Limerock Village Historic District
Limerock, Anystate
Brian Jones, Anystate Historical Commission
April 1974

Cable House (22), view from the northeast
Limerock Village Historic District
Limerock, Anystate
Bill Wyman, Anystate Historical Commission
April 1974
Roland David House (11)
Limerock Village Historic District
Limerock, Anystate
Brian Jones, Anystate Historical Commission
April 1974

Wiggins House (23), view from the southeast
Limerock Village Historic District
Limerock, Anystate
Bill Wyman, Anystate Historical Commission
April 1974

Lime kiln (25)
Limerock Village Historic District
Limerock, Anystate
Charles Fackl, Anystate Historical Commission
April 1974

North Hill Quarry (24), view from the east
Limerock Village Historic District
Limerock, Anystate
Keith Richard, Anystate Historical Commission
April 1974