

OREGON'S AGRICULTURAL DEVELOPMENT:

A HISTORIC CONTEXT

1811-1940



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TABLE OF CONTENTS

	Page
INTRODUCTION.....	1
Theme.....	2
Temporal Boundaries.....	2
Spatial Boundaries.....	2
HISTORICAL OVERVIEW.....	3
(1543) - 1811.....	3
1812 - 1846.....	4
1847 - 1865.....	7
1866 - 1883.....	10
1884 - 1913.....	13
1914 - 1940.....	17
Prominent Individuals.....	19
Related Study Units.....	22
Bibliography.....	23
IDENTIFICATION.....	33
Methodology.....	33
Previous Surveys.....	33
Resource Types.....	34
Distribution Patterns of Resource Types.....	37
(1543) - 1811.....	37
1812 - 1846.....	38
1847 - 1865.....	40
1866 - 1883.....	41
1884 - 1913.....	44
1914 - 1940.....	45
EVALUATION.....	48
Registration Requirements.....	48
Assessment of Resource Types.....	49
Registration.....	50
TREATMENT.....	53
Survey and Research Needs.....	53
Activities.....	55
Goals and Priorities.....	57
APPENDICES.....	59
Appendix A: Statewide Inventory Data Base.....	60
Appendix B: Agricultural Census Data.....	61
Appendix C: Agriculture Resource Types (NV & WA).....	63
Appendix D: Century Farm Program Data.....	70

Cover: Stauffer Farm (from National Register file)

LIST OF FIGURES

Figure	Page
1. Linear Multi-Unit Farm.....	35
2. Rectangular Multi-Unit Farm.....	36
3. Methodist Mission Log Cabin (1834-1843).....	39
4. R.C. Geer Farm (1850).....	41
5. Pete French Round Barn (1883).....	43
6. Edwin and Anna Starr House (1889).....	45
7. Hayse Blacksmith Shop (1914).....	47

Oregon's Agricultural Development: A Historic Context

INTRODUCTION

Agriculture has always been one of Oregon's leading industries. While the State of Oregon can be divided into several agricultural zones, this study will focus on the overall chronological development. The resource types associated with the development of agriculture are widely distributed across the state. The preservation of barns, outbuildings, farmsteads and ranches are an important link to the contributions of agriculture to the initial settlement and development of Oregon. Agricultural resource types have increasingly been threatened by technological advances in farming practices and urban expansion.

The ability of the State Historic Preservation Office to offer guidance for the preservation of these resources is directly linked to the historic context of agriculture. The contextual approach leads to the identification and evaluation of associated resource types. A goal of this historic context is to provide a starting point from which further research, survey, and inventory can be directed to assist evaluation and preservation treatment activities.

There are four components associated with this historic context: 1) a historical overview of the development of agriculture in Oregon; 2) identification of Oregon themes and resource types associated with agriculture; 3) assessment of the general status of the resource types; and 4) an initial list of treatment needs and activities for the preservation of agricultural resources.

The Willamette Valley has proven to be the "veritable Garden of Eden" as described by the first Euro-American settlers of the 1830s. The first settlers took up land adjacent to the Willamette River, pushing settlement south from the point of entry, at the confluence of the Willamette and Columbia Rivers. The broad alluvial plain and mild climate provided excellent conditions for producing a variety of crops and livestock.

Agricultural development spread south through the Willamette Valley by the 1850s, to the California border. The gold rush in Southern Oregon spurred this southward progression. The main agricultural activities which have developed in this region are sheep and beef cattle, dairying, orchards and horticulture.

The Coastal and lower Columbia plains were settled only in small communities near transportation ports until the state highway system was completed at the turn of the century. The coastal climate is not generally conducive to agricultural, although dairying is extensively practiced and supported by its accompanying processing industries. The coastal area began

developing specialty items by the 1880s including cranberries, lily bulbs, holly, and mink.

The eastern portion of Oregon encompasses twice as much land area, but was slow to be settled because of the rugged mountains in the northeastern section and high desert to the south. The area along the Columbia River is a major agricultural belt utilizing dry farming techniques for wheat and irrigation methods for potato and orchard crops. Dairying is practiced in concentrated pockets along with potatoes, onions, sugar beets, and seed crops in the Snake River drainage basin. The majority of the southeastern Oregon region is retained in open grassland which is used by range cattle and historically, sheep grazing.

Theme: BROAD THEME -- Agriculture

Temporal Boundaries:

The time-frame for agriculture encompasses the period from 1811 to the present, but will only be developed in this context to 1940. Agriculture began in earnest as a subsistence activity in Oregon in 1811. Agriculture developed at a rapid rate throughout the 19th century. The rich soils of the Willamette Valley and irrigation of the eastern high desert and Columbia basin provided Oregonians with vast tracks of land with agricultural or stock raising capabilities.

Spatial Boundaries:

The geographic limits of this study are the boundaries of the State of Oregon.

HISTORICAL OVERVIEW

The historic context for the Broad Theme -- Agriculture has been devised to meet the expanding needs for documentation pertinent for planning procedures. Agriculture is one of nine Broad Theme categories and eight chronological periods identified in the State Plan and "Handbook to Historic Preservation in Oregon". The themes and chronology framework provide a method for organizing research efforts in Oregon. Chronological periods are used to arrange the vast amount of information on agriculture for the ease of research, resource type identification and public review. Therefore, each of the following chronological periods sets the intermediate parameters for the Historical Overview, the Identification of themes and resource types, and Registration.

(1543) - 1811 "EXPLORATION":

Native Americans are known to have grown tobacco and to "manage" the grass seed resources which they collected for food by seasonal burnings of the Willamette Valley. Yet, the native inhabitants did not view agriculture as a basis for subsistence, but rather utilized the abundant natural resources on a seasonal gathering cycle which coordinated with their residential movement.

The first true crop production in the northwest was not by the hand of a farmer, but out of necessity by fur traders. In May of 1811, the men representing the Pacific Fur Company of John Jacob Astor planted the first garden at Fort Astoria. "Immediately in front of the fort was a gentle declivity sloping down to the river side which had been turned into an excellent kitchen garden" (Carey 1922:241). Although Astor's enterprise was short-lived on the West Coast, the subsequent traders of the Northwest Company and Hudson's Bay Company (HBC) continued the tradition of subsistence level gardening. By 1825 Fort Astoria was maintained only by a small staff as the Hudson's Bay Company had moved its headquarters to Fort Vancouver (in present-day Washington).

The stock animals originally brought to Oregon arrived with the Astorians who imported "cereals and domestic animals from California principally, and also from the Sandwich Islands" (Carey 1922:277).

1812 - 1846 "FUR TRADE AND MISSION TO THE INDIANS":

This period was dominated by the fur trade under the leadership of the Northwest Company until 1821, and the Hudson's Bay Company from 1821 to 1846. Agricultural activity was directly tied to the subsistence needs of the trappers working at the company outposts or as an extension of the fur trade. By the late 1820s Fort Vancouver and other HBC outposts were raising grain, vegetables, fruit, cattle and hogs. Established in 1833, Fort Nisqually (in Washington), a livestock operation was begun and successfully directed by Dr. William Tolmie for many years (Lindeman and Williams 1985:4).

There were several small trading posts established in Oregon (Willamette Post, McKay's Fort) at which gardening was accomplished. The clerk at McKay's Fort managed the gardens and by "1847, the fort consisted of five permanent buildings, a stockade 12 feet high and 90 feet square, with 80 acres of land under cultivation" (Pullen 1978:2). Horses were maintained in large herds on the grassy plains surrounding the Willamette Post.

Determining the first farmer who settled permanently in Oregon is controversial but is directed toward three French-Canadian fur trappers who retired from the service of the Hudson's Bay Company around 1830. The first American to establish a farm was John Ball, who farmed for only one season in 1833.

Nathaniel Wyeth, a New England merchant on a business venture toured the Willamette Valley in January of 1833 and recorded the progress of the first farmers:

22 miles from the falls are 3 to 4 Canadians settled as farmers they have now been there one year have Hogs, Horses, Cows, have built barns, Houses, and raised wheat, barley, potatoes, turnips, cabbages, corn, pumpkins, melons (Young 1899:236).

Wyeth's initial enterprise failed and he returned to Boston where he prepared for a second attempt to break into the western market. Wyeth returned to Oregon in 1834, bringing agricultural implements and supplies to set up a farm. Travelling with Wyeth were the first missionaries to settle in Oregon.

The group of Methodist Missionaries were led by Jason Lee, they established a farm during their first winter. "A field of thirty acres was ploughed and enclosed by a rail-fence, and in the spring was planted and sown in wheat, corn, oats, and garden vegetables. For the security of the prospective crops a barn was erected thirty by forty feet, of logs" (Bancroft 1886:80).

The population of the Willamette Valley grew slowly throughout the 1830s as more Americans and retired trappers took up farming. Yet, while the implements and seeds to start a farm were easy to purchase, livestock was not. The only cattle in the region were owned by the Hudson's Bay Company who had established a policy in 1825 whereby cattle could be leased, but the increase returned to the ownership of the Company. By 1837, there was sufficient numbers of settlers anxious to maintain their own stock that the Willamette Cattle Company was formed and subscription collected for the purpose of purchasing cattle in California and driving them overland to Oregon. Ewing Young led this enterprising expedition to a successful conclusion driving 630 head of cattle into Oregon for the valley residents.

Lt. William Slacum, on a tour of the Oregon country in 1837, gives a brief report of the condition of the settlers in the Willamette Valley. Slacum lists thirteen French-Canadian farmers with a total of 541 acres under cultivation, primarily wheat. Only three Americans are reported to have land in cultivation while another thirteen Americans are listed, six of which are associated with other occupations. Slacum also listed the missionaries progress which consisted of "500 bushels of wheat, 40 bushels of oats, 200 bushels of pease, 4 1/2 bushels of corn, 3 1/2 bushels of beans, 319 bushels of potatoes, and plenty of other vegetables" (Slacum 1912:22).

All initial settlement within the period 1812-1846 was contained within the Willamette Valley and on the Clatsop Plains at the mouth of the Columbia River. Solomon Smith is credited with being the first farmer and dairyman on Clatsop Plain in 1840. Agricultural pursuits followed a typical pattern of initial settlement, clearing land and planting a "cash" crop of wheat while maintaining a "subsistence" garden and farm animals for family consumption.

The Hudson's Bay Company built a receiving station at Champoege between 1841 and 1844 for the convenience of the local farmers. Prior to this the settlers had to transport their wheat to Fort Vancouver, a rather difficult trip because of the falls at Oregon City. The construction of shipping points for grain developed along the Willamette River at various locations, many becoming commercial centers and present-day cities.

The movement west of thousands of settlers during the 1840s inundated the Willamette Valley and is one of the most romanticized periods of Oregon history. The pioneers were induced by exaggerated descriptions of the farming potential of the Oregon country. The attention of easterners was captivated by speeches, travel guides and newspaper accounts which reported the climate and vegetation of the Willamette Valley as if it were pertinent to the entire Northwest territory.

Oregon was directly linked by this influx of settlers to a worldwide economic and political arena. The generous land use laws for agriculture during initial phases of settlement was a procedure steeped in nearly 200 years of American tradition. An underlying theme to the movement of agriculture into the hinterland was the legitimacy of squatters rights (Schlebecker 1975:14). "Technically, settlement before purchase had long been illegal... In 1841, the Preemption Act allowed farmers to settle legally before they purchased their land" (Schlebecker 1975:63).

Crops reported during this period include; wheat, corn, potatoes, oats, peas, beans, beets, carrots, turnips, squashes, melons, onions, broom corn, summer and winter squashes, pumpkins, cucumbers, etc. Specialty crops were tried along with the more stable crops included hemp, sweet potatoes, hops, flax and tobacco. "Tobacco furnishes an example of a crop that received a moderate amount of attention but that ultimately failed to become an established product" (Olsen 1970:115). The first peach trees to be planted in Oregon were transported from the Juan Fernandez Island on board the Owyhee in 1829 (Carey 1922:410).

Livestock importations were an important contribution to the livelihood of the settlers, such as the cattle brought overland from California in 1837 by Ewing Young. A few cows were also brought by Nathanel Wyeth who probably got them at the Sandwich Islands. Thoroughbred sheep of various breeds, Cheviot, Southdown, Leicester and Merino were in small quantities imported from England and kept at Hudson's Bay Company outposts in Washington. In 1840 the Hudson's Bay Company had a large number of California sheep brought into the territory. Improved breeds of hogs were also brought to Vancouver from London (Carey 1922:277).

The settlement pattern of the first settlers to plant most of their acreage in wheat with a smaller kitchen garden reflects the needs of the frontier lifestyle. For many years (until 1849) the basic currency of the Oregon country was wheat, beaver skins or peas. Thus, in order to purchase supplies the settler found it necessary to grow wheat as a medium of exchange. The kitchen garden and fruit trees were tended to by family members while the livestock which included horses, cattle, and hogs roamed wild. "Most farmers provided no shelter for these animals and let them forage for themselves" (Olsen 1970:73). The Spanish cattle brought to Oregon in 1837 were well-suited to running wild, foraging and protecting themselves from predators by their long-horns. Cattle were rounded-up each year and branded. Hogs also adapted well to foraging on camas and acorns which grew abundantly in the Willamette Valley (Bowen 1978:80-81). Sheep and dairy cattle were slow to be established in Oregon and were not usually included in this early period of settlement.

This chronological period closes at 1846 with the Willamette Valley settlement growing from a few retired fur trappers to a bustling agricultural community of predominantly American settlers. Wheat was the main cash crop in the Willamette Valley and continues to be an important commercial crop in Oregon. The supporting diversity of the kitchen garden and farm animals has also proven to be a continuing pattern in Oregon agriculture.

1847 - 1865 "SETTLEMENT, STATEHOOD, AND STEAMPOWER"

The perplexing problem of the imperial ownership of the Oregon country was resolved in 1846 and statehood finalized in 1859. While these political events did not directly effect the agricultural development of Oregon they did provide impetus for settlement. Immigrant arrivals to Oregon continued at a steady pace throughout the 1850s with surges created by waves of miners attracted to new strikes.

Agricultural activity was primarily focused in the Willamette Valley and the Umpqua and Rogue Valleys of Southwestern Oregon. The coastal Oregon counties began to receive a share of settlers when the more fertile areas of the interior valleys filled (Olsen 1970:109). "The massacre at Whitman mission in 1847, and the generally unsettled conditions among the Indians east of the Cascades afterward, retarded the agricultural development of the interior" (Carey 1922:793).

Until 1854, the farmers who settled in the Oregon Territory could acquire land only under the terms of the Donation Land Act of 1850. The Donation Land Act allowed eligible male settlers over 18 years old to claim 320 acres of land if they had settled in the territory before December 1, 1850. If married, their wives could claim 320 acres also. Later arrangements raised the age limit to 21 years old and reduced the number of acres allotted to 160. The liberal land donation policy marked the beginning of an epoch in the settling of the West, yet the large tracts acquired by the first families were in reality too large to be fully improved by them. Thus, "for more than a generation fertile districts were retarded in development by the fact that the land holdings were too large" (Carey 1922:807).

In 1854, Congress extended the provisions of the Preemption Acts to federal lands in the Oregon Territory.

In the Willamette, Rogue and Umpqua river valleys, the General Land Office granted final patents on 7,432 claims, the average size of a claim was about 350 acres. After the expiration of the Donation Act in 1855, settlers who wanted good agricultural land

had to purchase it or rent it. They could take unoccupied federal land under the terms of the Preemption Act of 1841, but such land...was mostly covered with brush and was located some distance back from major rivers (Olsen 1970:110).

The low-lands of the Willamette Valley were settled first, with later settlers forced to take up claims in the foothills or adjacent smaller valleys. Small communities grew around milling operations or commercial centers which served the needs of the new settlers. Enclaves of extended families, religious, or ethnic groups often gravitated in to neighborhood groupings. "More than half of Oregon's pioneers were accompanied by relatives or former neighbors and examples of clan migrations are numerous" (Dole in Vaughan 1974:79). The social character of neighborhood settlements had an impact on Oregon's buildings, as there was a tendency for sub-regions to take on distinct traits; often reflecting a conservatism towards the area from which they migrated. Because of the influx of settlers from nearly every Eastern state, there developed rich and varied architectural dialects in the Willamette Valley of the 1840s and into the 1850s (Dole in Vaughan 1974).

The discovery of gold in California in 1848 had a drastic impact on the small communities in the Oregon Territory. Oregon was transformed from a subsistence level of agriculture to a export producer, supplying the needs of the miners, within one year.

After the first flush of excitement, in which two-thirds of the able-bodied men of the territory left hurriedly for California...By the spring of 1849 a large inflow of gold had created a circulating medium which gave life to commerce; markets had been established which promised a certain and profitable outlet for all that farmers and lumbermen could produce; flour mills and sawmills flourished whenever they could obtain hands to operate them (Carey 1922:505).

Horticulture began in Oregon during this period. The first settlers in the region relied on wild fruit or on fruit trees raised from seeds supplied by the Hudson's Bay Company orchards. However, the fruit trees raised from seed rarely produced fruit which was true to the parent stock and was often inferior.

The first successful attempt to bring grafted fruit trees to Oregon was by Henderson Luelling in 1847. Luelling brought slips from apple, pear, quince, plum, peach and cherry trees and grape vines and berry bushes, starting out with about 700 trees and arriving with about half that number. Luelling's careful

preparation of a special soil mixture and wagon in which the slips were planted contributed to the success of his "travelling nursery". "The trees, ranging in height from twenty inches to four feet, leafed out during the journey; the nut seeds germinated and the berry bushes flowered and set berries" (Olsen 1970:134).

Farmers, nurserymen and others with orchards marketed their fruit, especially apples, in California until the early 1860s. Shipment from the Willamette Valley was funneled through Portland, then by sea to California; "the Rogue and Umpqua river valleys usually shipped fruit by wagon to northern California; the coastal counties, particularly at Coos Bay, shipped directly to San Francisco" (Olsen 1970:144).

Flax-seed was first established in 1844, but did not become a stable crop for the manufacture of linen products until the 1850s when general industrial growth was on the increase (Carey 1922:805). Linen production was generally too expensive to manufacture and flax fiber mills usually operated for only a short time.

The farmers of Yamhill County in 1853 organized the first county agricultural society, which led to the formation in 1858 of the Fruitgrower's Association of Oregon, and in 1860 merged into the Oregon State Agricultural Society. The State Agricultural Society sponsored the first state fair held in Oregon City in the autumn of 1861 (Carey 1922:803). Interest in "modern" advances in agricultural practices produced several publications, such as the Oregon Farmer, which circulated from 1858 to 1863. The Morrill Act of 1862, spurred the agricultural education movement.

Dry farming of wheat was started in Umatilla County by Andrew Kilgore in 1863. "As a supplement to dry-farming, irrigation was begun in a small way, in Umatilla County in 1869" (Carey 1922:805-6). The discovery of gold in 1851, in northeastern Oregon, caused the near instantaneous development of wheat and livestock farming in that region.

In the 1850s livestock raising became a primary activity of many farmers west of the Cascades, predominantly cattle (Olsen 1970). John Wilson brought in a herd of high-bred shorthorns from Illinois in 1847, which greatly upgraded the valley's stock. Each succeeding immigration, especially that of 1852, brought large numbers of cows as well as oxen (Carey 1922:794).

Dairying became a very lucrative business on the coastal plains, in counties such as Tillamook, Clatsop, Columbia, and Coos. The first settlement on the southern coast was in the 1850s, but was restricted to areas where river transportation was readily available. Along with milk for local use, farmers formed

cooperatives and processed butter for export to California.

Sheep production became a viable enterprise between 1850-1860 because of the mining boom and development of woolen mills. The first pure-bred Merino rams came from Ohio in 1851, and consisted of three head which were driven overland by Hiram Smith. A larger flock was brought in 1853 by R.R. Thompson and David P. Thompson. Of even greater importance was the introduction of a flock of thorough-bred Merinos from Australia by Martin Jesse of Yamhill County, in 1857 (Carey 1922:795). John Minto purchased this flock and with it started a world-class blood-line of Merinos. However, the boom production of sheep was shortlived in the Willamette Valley. The sheep industry moved to the east-side of the Cascades where it developed on a larger scale on the open range (Olsen 1970:124).

Horse raising was tied to the production of farm work, oxen were favored into the 1850s, with draft horses, such as Clydesdales and Percherons more useful to pull the field machinery of the later periods. However, the raising of horses has never been a major concern in Oregon.

In 1854, John Davenport of Marion County was the first to successfully bring honey bees in a hive to Oregon, the earliest attempt was in 1846. By the mid-1850s there were several farmers involved with bee-keeping.

By 1865, the period of initial settlement had come to a close in the western valleys; the most desirable land adjacent to waterways and transportation routes was homesteaded. Property values for Willamette Valley farmlands increased dramatically, making large-scale cattle raising too costly. The orchard business was initiated, peaked and declined within this period. By 1860, California was able to supply its own needs forcing Oregon's over-expanded fruit and nursery industry into a decline. Wheat farming once again took precedence over livestock and horticulture. The eastern half of the state was just beginning to attract the attention of agriculture and land speculators. Passage of the 1862 Homestead Act which allowed any U.S. citizen to file on 160 acres spurred the initial movement of settlers east over the Cascades. Mining strikes also contributed to the movement of ranchers and farmers to eastern Oregon.

1866 - 1883: "RAILROADS AND INDUSTRIAL GROWTH"

Agricultural development in Oregon, was in an expansive mode throughout this era. Although the Civil War and Depression of 1873 slowed progress and local markets were soon glutted as demands for goods were met; the momentum of new mining discoveries promoted the production of agricultural goods. The

state's new county divisions reflected the increasing population and developing urban centers, as the Willamette Valley, northern coast, and southwestern areas took on their present-day configuration. The number of farms for each county increased dramatically according to agricultural census data (Appendix B).

The Willamette Valley continued to be the center of agriculture, producing primarily wheat as an export crop and a variety of secondary crops. "Over half of all farmers were also involved in raising other crops or livestock"...Oats and potatoes were secondary staples, while "buckwheat, Indian corn, rye, barley, peas, beans were less important. Individual farmers tried experimental crops on a small scale, such as hops, flax, sweet potatoes, tobacco, sorghum, peanuts, and alfalfa" (Olsen 1970:158-159). Agricultural activity in other parts of the state followed the typical pattern of establishing a "general" farm then developing a secondary more specialized operation.

Creameries and cheese manufacturing stimulated dairy production on the coastal plains. Silos were first making an appearance on the rural landscape by about 1873. Although silos may not have been introduced in Oregon that early, the superb quality of silage for feed was advertised throughout this period. "In addition, the silo greatly reduced the storage space needed for feed. It was easier to fill than a barn" (Schlebecker 1975:183).

A large wheat growing industry developed along the Columbia Plateau with the Columbia River providing easy transportation. The sale of wheat in England in 1868 spurred the commercial development of the crop. Wheat was soon the major farm product of the counties along the Columbia River. Oregon's initial "cash" crop, wheat, has remained as its primary agricultural industry.

Many of the settlers who moved to Eastern Oregon were children of original pioneers who had emigrated to the Willamette Valley in the 1840-1850s. The eastern Oregon farmers were at first limited by the low annual rainfall and need for irrigation. Settlers soon found that the open rangeland was particularly suited to cattle and sheep grazing. Large ranch operations such as the Peter French ranch in southwestern Oregon established the importance of livestock in the state's economy. "In California, around 1870, the old Mexican land grants were breaking up and cattleman looked for open rangeland into which they might expand" (Walton 1971:1). Peter French drove 1200 head of shorthorn cows to his ranch in Harney county from California in 1872. Peter French's extensive livestock empire is represented by National Register listings of a ranch complex and a very distinctive round barn (see Figure 5). Although the listed properties are only remnants, they present a strong image of the ranch lifestyle.

The Klamath Basin area was first settled in the 1860s, but it was not until the 1870s that the cattle and sheep raising industry attracted many settlers. Farming was limited to hay and feed for livestock. Irrigation has improved the variety of farm production, but stock raising activities still dominate.

The agricultural implement business also aided the expansion of crop production as improved plows, disks, reapers, threshers, and combines increased productivity. The wheat farms in the Columbia basin especially responded to the use of new mechanized equipment. Railroad connections developed during this period eased the shipping needs of both ranchers and farmers by providing a consistent, nationwide market.

Land policies have had a profound effect on the historic landscape of Oregon. The Carey Act (1894) allowed for the sale of public lands for irrigation projects. The Homestead Act of 1862, the Timber Culture Act of 1873 and the Desert Land Act of 1877 provided individuals with huge tracts of land at very low cost. Many of the land policies proved to be useful only for fraud and speculation, as the large, isolated tracts made actual homesteading extremely difficult and the failure rate quite high.

The Swamp Land Act (1849, amended 1850, 1860) provided for the transfer of inundated lands to the state to encourage reclamation projects. Where tens of thousands of acres of swamplands existed on the margins of the remnant Pleistocene lakes in central and southeastern Oregon, the potential for individuals to obtain vast tracts of state swamplands was great. In 1870 the State of Oregon began disposing of these properties. However, difficulties in assessing the status of such land caused fraud and litigation (Minor 1987:125-126).

Stock production took on a greater importance as attention was given to upgrading the wild range cattle with pure bred lines. Simeon Reed played a major role in introducing and promoting good breeding stock to Oregon. "Doubtless the shrinking of the grazing area, the shift in some districts to the breeding of cattle in connection with farming operations, and an increasing tendency in the places of large operations to resort to enclosures may have altered considerably the outlook of cattlemen" (Oliphant 1947:226). The quality of beef cattle was also considered to be important as improved transportation increased competition between various regions of the Northwest and Great Basin.

Raising of range cattle in eastern Oregon became more prevalent throughout this period. Cattle were raised to

yearlings in the mild climate west of the Cascades then driven to the open range of eastern Oregon which provided less expensive pasturage for large herds (Oliphant 1968). However, the winter of 1880-81 was very severe and cattle perished in great numbers, the loss was estimated at 70% of cattle and sheep, though some men lost their entire herds. Eastern Oregon counties were heavily impacted. The extreme winter weather forced cattle operators to grow and store feed for their herds, which necessitated the construction of barns and sheds.

Hog and goat raising was always a small scale interest, either at a home-use level, or as a secondary experimental project. William Riddell of Polk County successfully raised angora goats from the 1880s to the turn of the century (Olsen 1970).

The period of 1866 to 1883 closes on an optimistic note for agriculture. Connection by rail to the national marketplace established a consistent demand for Oregon products. In the counties west of the Cascades, the widely dispersed family farm was being encroached upon by commercial centers, forcing the intensification of farm lands for specialized crops. Whereas, the eastern portion of the state was still only sparsely populated and agricultural activity was dominated by open range grazing for livestock. The eastern Oregon agricultural and commercial centers were typically arranged along river systems and in areas of mining activity.

1884 - 1913: "PROGRESSIVE ERA"

The Progressive Era is marked by an interest in social reform, humanitarian activities, and the beginning of a statewide road system; however, the history of agriculture suggests a rather rocky beginning to the 20th century. While the Willamette Valley was entering the mainstream of industrial development, eastern Oregon was torn by bitter range wars and failed homesteading attempts.

The Willamette Valley, the area first settled, and the agricultural mecca of the early pioneers was becoming more commercially and industrially oriented. The cities along the Willamette River, Portland, Salem, and Eugene were growing rapidly and beginning to spread into the surrounding countryside. And, for the first time farms were being divided into smaller parcels, rather than adding land into the farm land base. For example, Marion County in the heart of the Willamette Valley's fertile farm land, listed 736 new farms in the 1910 census with no additional land added to the total acres farmed. Lane County saw an increase of 456 farms in 1910, and a slight decrease in the amount of acres farmed.

During the 1880s up through the 1920s, hop production in the Willamette Valley became a boom commodity. "From no production at all in the 1860s and 1870s, the farmers of the Willamette Valley shifted considerable amounts of acreage and energy into hop growing at the end of the century" (Minor 1980:126). The hop industry was focused in the Willamette Valley and was never a widespread practice, but rather a cash crop which surged and receded with the market. Prohibition nearly wiped out the hop industry in Oregon in the 1920s.

While the staple crop was wheat, farmers were also involved in raising other crops or livestock. Oats and potatoes were also main crops while grains, vegetables and fruit were less important. Individual farmers tried experimental crops on a small scale, such as flax, sweet potatoes, sorghum, peanuts, alfalfa, hemp, teasel and kaffir corn (Olsen 1970:158-59).

Teasel deserves special mention...During the late 1880s and early 1890s at least one farmer successfully raised teasel...Clackamas county was the only center of teasel production west of the Mississippi and one of the few areas of cultivation outside of New York and Pennsylvania (Olsen 1970:160).

The first cranberry bog was established in Coos County in 1885 by Charles McFarlin. The cranberry industry has maintained itself and is presently a leader in the national production of this crop (Peterson and Powers 1952).

"The completion of the railroad along the south bank of the Columbia River in 1881, and the arrival of threshers and other harvesting equipment speeded expansion almost over night" (Toepel, et al, 1979:149). The division of counties along the Columbia River during this period reflects the establishment of communities centered around the production of wheat and later stock. "In 1900, farmers in the Willamette Valley produced less than 25% of the total wheat production in the Pacific Northwest" (Olsen 1979:154). The Columbia River drainage basin east of the Cascades took over the lead in wheat production, and has retained its hold on the market share to the present.

The Enlarged Homestead Act (1909) and the Stock Raising Homestead Act (1916) "sparked the wild influx of settlers into central Oregon between 1900 and 1920" (Minor 1987:136-37). Settlers were motivated by irrigation projects, several wet winters, land speculators, advertising, near completion of railroad lines, and passage of the land acts. Although thousands of people took up claims in the eastern basin the arid conditions soon forced settlers to give them up. Nearly half of the postal

offices established between 1870 and 1920 were abandoned by the end of this period (Minor 1979).

The founding of towns such as Bend (1903) and Redmond (1905) in the heart of the irrigated lands reflected the rush of settlers seeking land from developers operating under the Carey Act. The Pilot Butte Development Company, later called the Deschutes Irrigation and Power Company, was the chief developer of the Bend area irrigation segregations while the Central Oregon Irrigation Company promoted reclamation in the Redmond area (Toepel, et al 1979:153).

However, Central Oregon was still isolated until the railroad connection was completed to Bend in 1912 (Minor 1987).

The Klamath Basin flourished as reclamation projects, at the beginning of the 20th century, proved the area to be immensely fertile, especially for potatoes and onions.

In the Northwest "between 1880 and 1900, the annual value of fruit production nearly doubled" (Olsen 1970:242). Improvements in transportation and in the processing and production of fruit and nuts contributed to this increase. Thomas Prince of Dundee planted one of the first commercial walnut groves in 1897. The prune industry expanded during the 1880s and 1890s because of the adapted use of hop dryers to process the fruit for consumers. "Prune dryers borrowed the method of evaporation from hop dryers, unique to Oregon, built dryers similar to hop dryers except on a smaller scale, retaining the principle of forcing hot air through the fruit" (Olsen 1970:244).

In 1903, George Dorris brought the first filbert trees to his ranch on the Willamette River in Lane County and began cultivating filberts. Dorris also developed a method for successful propagation and raised nursery stock. "It was from this small start that growers all through Oregon and Washington - where 98% of the nation's filberts are grown - have acquired their planting stock. Now (1951) more than half the commercial filbert trees in American can be traced to the original plot established by George Dorris" (Horvat and Melnick 1987:7-4).

The open range system for cattle in eastern Oregon was impeded by several years of severe winters which had a devastating effect on the herds. Ranchers were forced to provide winter shelter and feed for their herds, and in so doing were forced to maintain restricted range boundaries. The bunch grass was reduced because of over-grazing, which caused competition between cattle and sheep for natural forage. In the 1890s, conflict between sheepmen and cattlemen was intense and reached a

climax in 1904-05. The cattle and sheep war was further perpetuated on the myth that cattle would not graze where sheep had been. The creation of the national forest reserves, after 1906, somewhat stabilized the stock industry and eased the "range wars". The livestock industry has primarily turned to Public Domain lands managed by the BLM and Forest Service for open range rather than competing for the land settled by farmers. The peak years for the sheep industry were between 1890 and 1910.

Poultry production on an industrial level began in the 1880s. Prior to this poultry had only been produced on a general farm, family usage level. The advent of turkey ranches and large chicken operations producing for urban consumers is an important trend in Oregon livestock.

In the 1890s the United States Department of Agriculture attempted to introduce the fiber flax industry into twenty states, one of which was Oregon. The flax industry experiment was not successful. However, a second attempt was made to introduce the product in 1938. Experiments were also attempted in the production of silk. The Southern Oregon Silk Station was founded in Coos County, in 1893-97. Eighteen breeds of silk worms were introduced, but production was extremely low and costs high for this labor intensive crop (Peterson and Powers 1952:336).

The initial development of agriculture was drawing to a close by the turn of the century. The success of agricultural pursuits was apparent as various agricultural industries became commercial and farmers began to specialize in the production of commercial crops. There was less emphasis on the general farming practices (Carey 1922:277-78).

Thus, with the end of this period, also ended the frontier agricultural experience. The western portion of the state had long been tied to international markets; but with the completion of the transcontinental railroad, eastern Oregon was also connected to a consistent market. Consequently, every aspect of agriculture developed and expanded, as farmers began to specialize in one or more cash crops according to market demands. The range wars were over and the livestock industry stabilized. Many homestead efforts continued to fail because of the arid conditions and land fraud, but community centers on the east-side were beginning to take on established, urban characteristics. The irrigation projects in central Oregon, for the most part, proved successful.

Farm life was not idyllic of course; it never had been. But if an urbanized American of the Twentieth Century recalls fondly his nation's

agricultural background, his memory is of farm life as it was in western Oregon,...during the later decades of the Nineteenth Century. A good farmer then made a little money, raised a family and was a respected and influential member of his community (Olsen 1970:178).

1914 - 1940: "THE MOTOR AGE"

During this period identified as the "Motor Age", Oregon agriculturalist saw the greatest changes to their livelihood brought about by the advent of gasoline powered equipment. The gasoline tractor was becoming popular by 1912, although "the majority of farmers harvested by horsepower before 1914" (Schlebecker 1975:196). Gasoline power replaced animal power by the 1930s and had a radical affect on the appearance of most farms. Draft animals and their associated barns, feed storage sheds, corrals, blacksmith shop and fenced pasturage were replaced by machine sheds.

The first half of this period was extremely prosperous as war-torn Europe demanded American agricultural products. "From 1914 to 1919, overall crop prices more than doubled, with wheat, for example, rising from 98 cents to \$2.16 per bushel. This boom period continued for a couple of years after the war ended" (Lindeman and Williams 1985:8). However, the second half of this period saw the depths of the Great Depression and the collapse of the independent family farmer.

The arable land base in Oregon was nearly completely settled by the 1920s. The Willamette Valley's population was increasing rapidly, but the populace was drawn to urban centers rather than to agricultural activities. With a restricted land base, farming practices turned to more intensive use of acreage, and a trend toward consolidating family farms into commercial operations.

The cheese industry along the coastal counties continued to prosper. "Oregon supplies practically one-third of the entire Pacific Coast market with cheese" (Carey 1922:864). The coastal counties also prospered during the war years when lily plants were not being produced in Europe; Oregon developed into a leading lily and daffodil bulb producer. The general trend in the 20th century, along the coast, is towards smaller more intensively operated farms. Specialty crops have also gained importance such as cranberries, or mink.

"Mink farming first started in the early 1930s when the standard dark mink was used for pelt production and has increased steadily to 1945" (Clatsop County Extension Service).

Clatsop, Tillamook, Columbia, Marion and Multnomah counties produce mink.

The settlement of central Oregon is tied to grazing and livestock. "It is now geared to livestock and the production of alfalfa hay and pastureland. Small grains, mint, and potatoes are important cash crops" (O.A.C. 1968:3).

The policies of the New Deal had a profound affect on agricultural practices. "The Agricultural Adjustment Administration (AAA),...paid subsidies for what farmers did not grow, and encouraged the planting of alternative crops" (Lindeman and Williams 1985:8). The family-owned farm was faced with the collapse of traditional markets and forced into a close reliance on government support which has continued to the present. "The Farm Credit Administration (FCA) provided funds enabling farmers to make payments on mortgages and crop loans, and to acquire necessary machinery and supplies" (Lindeman and Williams 1985:9).

Electricity in rural areas also had an impact on the arrangement of the farm. Dairying was especially transformed "when automatic milking machines began supplanting the traditional hand-milking methods" (Lindeman and Williams 1985:10). The mechanized dairy equipment often required the old dairy barns to be completely remodeled to accommodate the modern machinery.

Because of World War II which closed off overseas imported products a ready market was developed for the flax fiber industry. Oregon enjoyed a slight surge in the production of flax fiber for the production of linen during the war.

In the 1920s the fruit industry was dominated by prune production, with apples close behind. The apple industry had high production peaks in 1900-1912 and 1920-1930. The development of refrigerated rail cars and steamers, greatly expanded the market for small fruits and apples (Olsen 1970:246).

Basque sheep herders arrived in northeastern Oregon about 1920. Stock raising peaked in numbers of operators by 1918-19 when an extremely severe winter and the depression of the early twenties decreased the number of stockmen.

The poultry industry has continued to increase into a booming Oregon industry. An egg-taking station was listed on the National Register of Historic Places, reflecting the growth in poultry production during this period.

The agricultural development throughout the "Motor Age" is directly tied to worldwide events. The World War and Great Depression are reflected by the rapid expansion to fill market needs, and then foreclosures of over-extended farmers. The

changes in technology made many farming practices obsolete and created larger, consolidated operations and fewer buildings. Metal implement sheds have replaced barns, while equipment yards replace the traditional collections of chicken houses, granaries, and milking parlors. Many abandoned farmsteads are reduced to remnant barns or sheds (Loy 1976). The trend which began during this era continues to the present-day, with increasing industrialization of farms and consequently the alteration of the rural landscape.

PROMINENT INDIVIDUALS:

Prominent individuals are derived from the historical overview and have made a significant contribution in the agricultural development of Oregon. Seven of the individuals herein have properties associated with them listed in the National Register of Historic Places. The property and county are presented parenthetically at the end of each individual discussion.

Ball, John: First American to raise a crop in the Oregon Country. His 1833 cabin and farmstead have never been located, although it is thought to be within the boundaries of the Champoeg State Park Archaeological Area, which is listed in the National Register.

Dorris, George: Early orchardist, nurseryman and innovator of filbert propagation between 1892-1936. The Dorris Ranch is the oldest continuously operated filbert orchard in Oregon. (Dorris Ranch -- Lane County)

Hume, Robert D.: One of the most successful early settlers of Curry County; by 1886 had built up his sheep herds to 1,600 head.

Geer, Ralph C.: Nurseryman and livestock importer, he settled in Marion County in 1847 where he started a nursery business with apple and pear seedlings brought across the plains. In 1858 he imported sheep from England and became a pioneer in flax growing in the Willamette Valley (Corning 1956:97). (Geer, R.C., Farmhouse -- Marion County).

Gilchrist, Charles Adams: Settled in central Oregon in about 1880. The G.I. Ranch was a stopping place for the Meek and Elliott emigrant parties as well as the Wallen and Steen military expeditions.

Lambert, Joseph Hamilton: Pioneer nurseryman, by 1870 his orchards had become the most noted in the state, with the celebrated Lambert Cherry (Corning 1956:140).

Lee, Jason (Methodist Missionaries): Visionary who led first missionary group to Oregon to settle in the Willamette Valley. The reduced native population caused a re-direction of the mission towards agricultural activities. (The Willamette Station of the Methodist Mission).

Lewelling, Seth: Pioneer nurseryman with his brother, Henderson. Seth propagated the famed Black Republican, Bing, Lincoln and Lewelling cherries, and other fine fruit species of the pioneer age (Corning 1956:146).

Luelling, Henderson: Pioneer nurseryman, brought first substantial nursery stock overland from Iowa in 1847. Established nursery in northern Willamette Valley (Corning 1956:153).

McLoughlin, John: As Chief Factor of the Hudson's Bay Company for nearly 20 years, he influenced the settlement and agricultural process in the Willamette Valley. By allowing retiring servants of the company take up land in the valley, and supplying them with agricultural implements and seeds he helped to establish the farming area of French Prairie. McLoughlin also aided incoming American settlers in much the same manner. (The McLoughlin house in Oregon City is a National Historic Landmark).

Meek, William: Pioneer nurseryman who was partner with Luelling brothers. Operated second nursery near Salem (Corning 1956:164).

Minto, John: Pioneer sheepman, legislator and author; raised award winning pure-bred Merino sheep which greatly effected the stock in Oregon. Also wrote many articles on sheep raising, horticulture, and early farm life in Oregon.

Reed, Simeon: Portland financier and philanthropist; he advocated the breeding of blooded cattle and horses.

Settlemer, George and Jesse H.: Pioneer nurserymen, George (father) who settled near Mt. Angel, and Jesse (son) who took over nursery business moving it to Woodburn (Corning 1956:219). (The Settlemer, J.H. House).

Smith, Solomon: First settler (1840) on Clatsop Plains, drove first cattle and horses to coastal area. Operated first dairy farm on Clatsop Plains (Corning 1956:228).

Somers, Frank: In 1880 became one of the first stockmen in Hell's Canyon area. Somers Creek is named for him.

Thompson, R.R.: Drove band of Merino sheep across the continent in 1853, assisted by his brother David. The band of sheep

added substantially to the breeding stock in Oregon (Corning 1956:243).

Watt, Joseph: He drove a flock of sheep from Missouri to the Willamette Valley in 1847. Built the first woolen mill on the Pacific Coast; shipped the first cargo of wheat and wool to a foreign market in 1868. Later in life he turned to orchard production, growing pears in Yamhill County (Corning 1956:260).

Wyeth, Nathaniel: American merchant who tried two attempts to break the Hudson's Bay Company monopoly of the trade in the Oregon country. Wyeth's contributions include bringing agricultural implements and the Methodist Missionary group to Oregon. Wyeth established a trade post and farm on Sauvies Island near Portland, which has been tentatively identified through archaeological testing.

Young, Ewing: Early settler, who took claim in Chehalem Valley, and led Willamette Cattle Company on its venture to bring cattle into the Oregon country, overland from California. Young also operated a sawmill and trading post. Young's sudden death and estate left intestate spurred the formation of a civil authority and funded the Provisional Government organized two years later. (The site of Ewing Young's ranch is under consideration for National Register listing and for a county park).

RELATED STUDY UNITS:

Throughout the development of Oregon, agriculture has played a dominant role, but along with agriculture is interwoven the related themes of:

Native - Euro-American relations: conflicts

Settlement: Oregon Trail

Agriculture: irrigation, agricultural implements, prominent individuals, floriculture, horticulture, stock raising

Transportation: shipping, railroad, wagon roads, highways

Commerce: community centers, gold rushes

Industry: grist mill, saw mill, flour mill, flax fiber mill, miller, carpenter, wheelwright, stone mason, mining, cheese factory, creamery, canning, fruit drying, tannery

Manufacturing: blacksmith, linseed oil plant, cracker plant

Government: land use laws, agricultural legislation

Culture:

Science & Technology: refrigeration, food processing

Government: Provisional, State, Local, Federal

Education: Agricultural colleges, extension services

Social Movement: granges

Religion: missionaries

Ethnic: French-Canadians, Finnish, Chinese, Basque

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IDENTIFICATION

Methodology:

Information contained within the IDENTIFICATION section is focused on the identification of themes and resource types. The Oregon Statewide Inventory of Historic Properties data base served as a system by which to identify types of resources and define the gaps in survey and research efforts. The National Register of Historic Properties listings associated with agriculture also served as a form of resource type verification.

The Broad Theme category had not been entered originally into the Statewide Inventory data base coding format, so it was necessary to look for key words in the Historic Name and Function categories. The Historic Name category often reflects the name of a ranch, farm, nursery, vineyard, or garden. The Function category includes barns, farmhouse, agricultural outbuildings, agricultural fields, farm site, garden, orchard, and site/archeological. The Style category also indicated Agricultural and Utilitarian building types. While a total of 885 resources were discovered in this data base, there are others which did not meet the general requirements which allowed for easy recognition, such as isolated residences associated with agriculture, but recorded simply as a residence. Therefore, the 885 resources discussed in this document are not a complete sample of all agricultural resources within the counties studied. The Statewide Inventory data base which was used in this study to compile the resource types in Oregon, is based on a sample of twelve counties. All properties associated with agriculture and listed in the National Register were also incorporated into this study.

Previous Surveys:

There have been a series of inventories performed in Oregon, the first survey in 1976 was a year-long project covering the entire state. The 1976 survey was at a reconnaissance level of documentation. Out of a total of 36 counties in Oregon, 14 have received additional survey and inventory attention, while six counties have produced inventory data created from city-level surveys. The survey data information used in this document was refined to include only those counties where secondary countywide survey's had occurred and the records were part of the SHPO data base (12 counties).

The results of the analysis of the Oregon Statewide Inventory data base are presented in Appendix A, and discussed below. Survey needs and priorities will be discussed in the TREATMENT section of this document.

Resource Types:

The agricultural landscape has, of course, changed dramatically with technological advances and urban development in the 20th century. These demands have accelerated the rate of property loss on many farmsteads. Early farm buildings have become obsolete and replacement of deteriorating wooden structures with pre-fabricated metal sheds is a common, practical solution.

In order to address the need of describing the farm unit for identification and evaluation a basic format is suggested. For evaluation purposes, the farm-unit with the most intact features would, of course, be considered a rarer example, and thus of greater significance. However, the original size and functional operation of the farm must be described in order to understand the configuration of the remaining farm ensemble. For example, a small family farm operation with a house, barn and several sheds would be significant if only the house and barn have survived. Whereas, a large stock raising operation with several barns, loafing shed, hay shelter, windmill, cook house, main house, bunkhouse, corrals, etc. would need to maintain enough structures to accurately convey the feeling of an extensive cattle raising ranch. The following three tiered division of a farm group simplifies the definition of a farm and follows a format used by historian, Stephen Dow Beckham (Harbour and Beckham 1982):

- 1) Basic Farm: house and one outbuilding, usually the barn.
- 2) Multi-Unit Farm: the Basic Farm with the addition of other outbuilding(s).
- 3) Isolated Agricultural Buildings: only one remnant farm building from the original ensemble, such as a single barn or residence.

The overall configuration of the farm grouping also follows a patterned response to either topographic, farming particular, or ancestral influences. The multi-unit farm is usually designed in a linear or rectangular arrangement (Harbour and Beckham 1982; Dole 1965; Carter 1941):

- 1) Basic Farm: A perpendicular setting, barn-back-of-house. The distance between the two buildings is usually between 50 - 200 yds.
- 2) Multi-Unit Farm: (distance between house and barn remains the same as in the basic farm format.)
 - a. Linear: Farm buildings are arranged along a road

way, or strung out in a linear fashion, with the density of buildings highest close to the house (Figure 1).

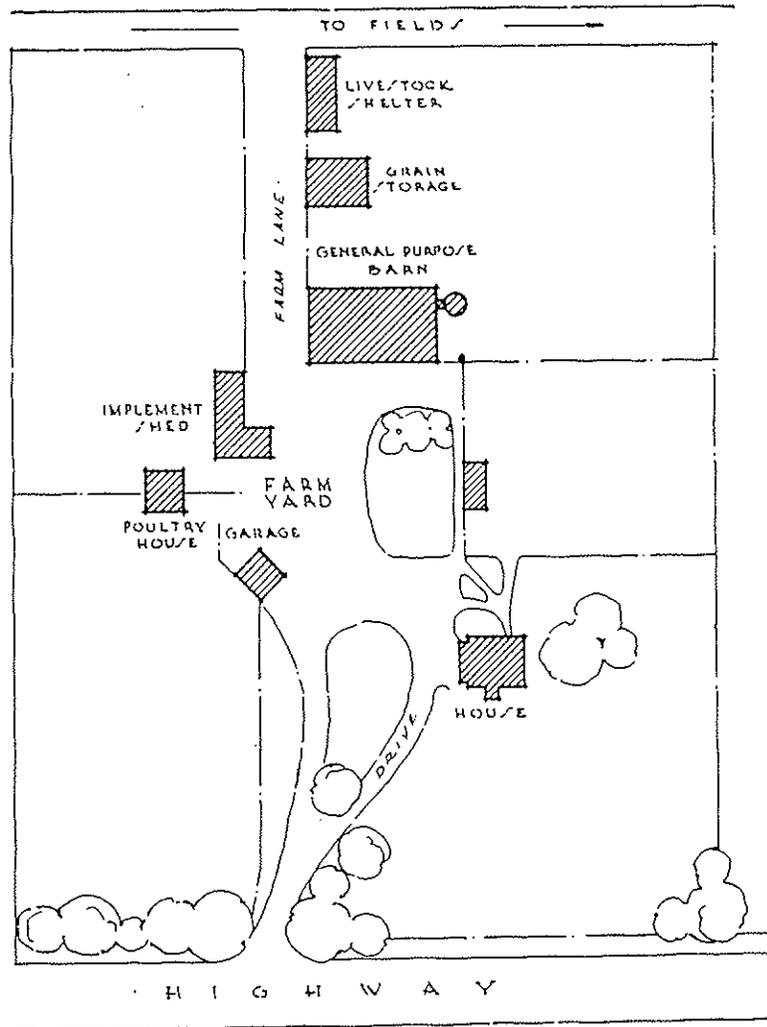


Figure 1. Linear Multi-Unit Farm Arrangement.
(Carter 1941:163)

b. Rectangular: farm buildings arranged around the perimeter of an open yard (Figure 2). "The total overall length of a large size but typical farm's building group might be 500 feet along a width of 150 feet which would include paths and the road or yard off which were serviced the successive buildings" (Dole 1965:41).

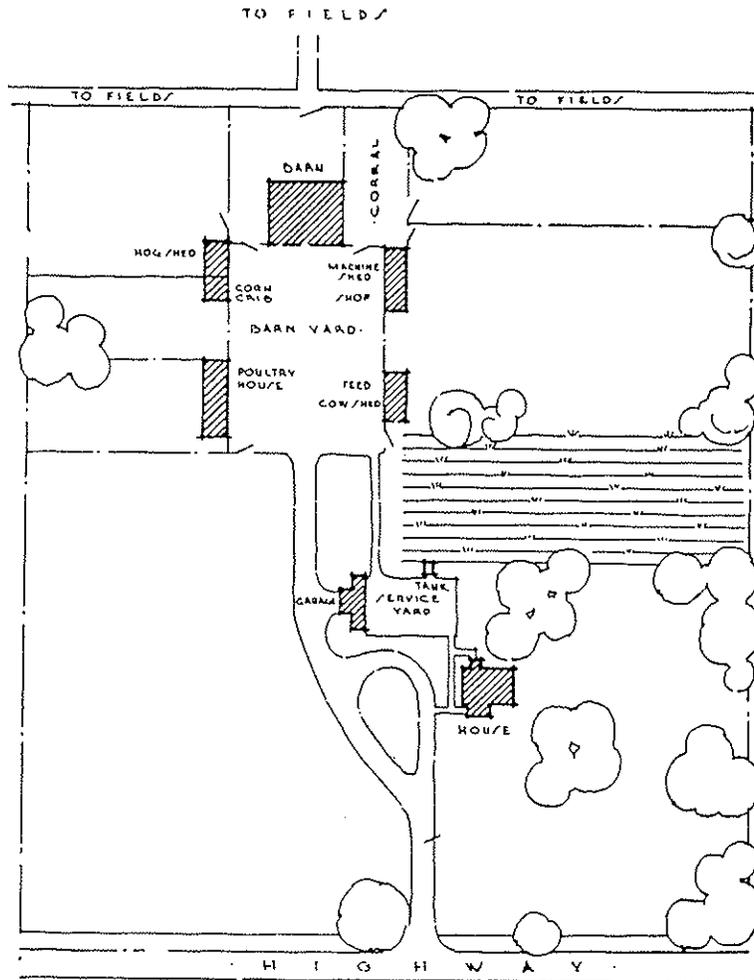


Figure 2. Rectangular Multi-Unit Farm Arrangement.
(Carter 1941:165)

The farm unit is the primary resource type associated with the Broad theme of agriculture. The farm unit can be a complex assortment of structures, buildings, landscapes and archaeological features. It is not the intent of this study to examine in detail the range of property types for each farmstead.

Rather, emphasis is placed on defining the farm unit as a whole. However, definitions of agricultural property types drawn from the Nevada Ranching/Farming historic context (1988), other secondary sources, and the property types defined in the Washington Agriculture historic context (1985) are presented in Appendix C, to guide future research and survey efforts.

Distribution Patterns of Resource Types:

The pattern of agricultural resource types are widely distributed across the state of Oregon. However, by tracing the chronological development of agriculture a general view of the range of resource types can be derived. This discussion of resource type distribution is based on National Register of Historic Places properties associated with agriculture in Oregon and properties maintained in the SHPO data base system of the Statewide Inventory of Historic Properties. No field check of the data base or counties without a completed inventory was accomplished during the production of this historic context. Therefore, the resources discussed herein are based on the twelve counties surveyed. The information was gathered through a variety of volunteered and SHPO subgrant awards over the past ten years or so.

Of the counties used in this discussion half are from the Willamette Valley region of the state (6 out of 12). One coastal county, three southern counties, and three eastern counties complete the areas inventoried. Thus, there is an obvious bias in the sample towards Willamette Valley farming practices which are not reflective of the entire state. The Willamette Valley was, however, the first area settled and is a primary agricultural region of the state. Therefore, while the survey information is not complete, it at least covers the earliest and most intensive area of agricultural development. The areas not well documented are the coastal and eastern counties. The eastern counties are especially under-represented, since only three out of eighteen counties (16%) have completed survey information. The inventory data for the twelve counties is presented in Appendix A.

The following discussion is organized according to chronological periods, and suggests resource types which may be present. Emphasis is given to farm units, as described above and focuses on the Basic Farm, Multi-Unit Farm and Isolated Agricultural Buildings. Also, each of the farm unit designations can include landscape and archaeological features.

(1543) - 1811:

The only agricultural resource type identified for this time period is the archaeological site. While the garden at Fort

Astoria has been identified other early gardens of explorers or castaways may be documented in the future. The distribution of sites would typically fall along the coastline and be associated primarily with maritime exploration.

1812 - 1846:

This early period of agricultural history which was centered in the Willamette Valley is not represented by any standing structures. The moist climate of the Willamette Valley has caused wooden structures to completely deteriorate. There are now only two resource types associated with this period of settlement and farm development, landscape and archaeological features.

Through the journals, diaries and reminiscences of early pioneers and travellers a sketch can be drawn of the types of structures built on the first farms. The primary building material was wood in round log and split or hewn log variations. Split shake roofing material with single pen simple cabins predominated the housing styles. Architectural detail was limited to distinctive framing systems adopted by the French-Canadian farmers (post-in-sill) and the corner notching pattern favored by most American households. Barn construction followed the design of the cabin with either log or plank materials. Brickmaking did not begin in the Willamette Valley until 1841, thus early farmsteads used local clay for constructing chimneys and hearths, or for chinking. Building materials such as hardware, nails, and window glass were expensive and available in limited amounts through the Hudson's Bay Company.

The small, utilitarian log or pole cabin was usually constructed quickly and was meant for only temporary shelter until a more substantial building could be constructed (Figure 3). "The cabin of unhewn logs seems to have been soon superseded by houses built of hewn timbers, heavy frame, or plank construction" (Ross 1956:34).

The "second" or hewn log house was more substantial and carefully built with square logs up to 6" thick, with flat inner and outer walls. The house plan would be divided into one or two rooms with a sleeping loft above, and would include glazed sash windows, doors, a fireplace, a staircase and one or two porches. The building process often required several months time and a raising crew to help out (Dole 1975).

Once the crops were in and livestock settled, the pioneer turned to the other work necessary in making and tending their farms. "They dug wells, built stables, and storehouses and split rails for fences" (Olsen 1970:90).

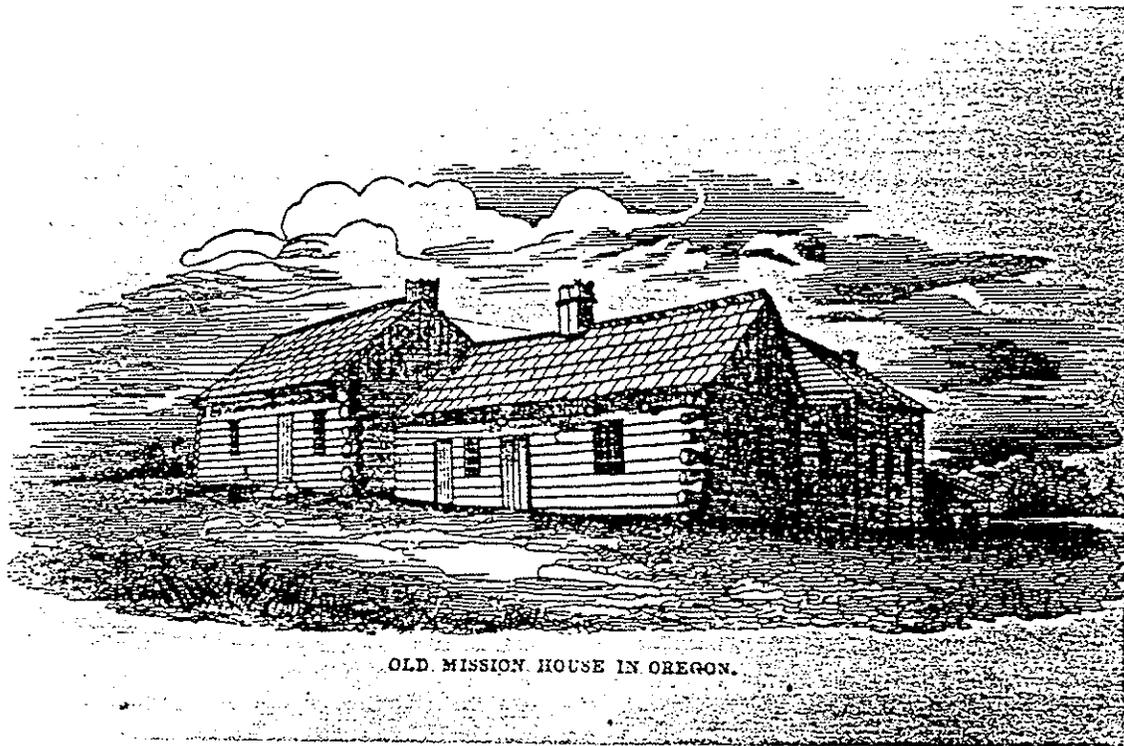


Figure 3. Methodist Mission Log Cabin 1834-1843.
(Sanders, et al. 1983:20)

The archaeological sites of this early settlement period have characteristics in common, based on investigations at sites of comparable age, function and setting in the Willamette Valley. The cultural material recovered from these sites reflects a close reliance on Hudson's Bay Company supplied goods, especially domestic items such as ceramic tableware. Structural remains of the buildings are minimal, as no wood remains, but includes window glass, a few nails and clay daub or brick. Personal items such as tobacco pipes, alcohol bottle fragments, buttons and beads are also quite frequently present. This characteristic pattern of material culture closely associated with Hudson's Bay Company goods indicates a pre-1850 Oregon settlement site.

The Statewide Inventory data base lists five farm sites, and one landscape feature; two in Washington County and three in Yamhill County. A National Historic Site is listed for this period and one other historic site is pending inclusion in the National Register. All of the counties with significant agricultural resources, identified to date, are located in the northern portion of the Willamette Valley. This distribution reflects an early settlement pattern close to the Willamette

River with easy access to the commercial hub of Fort Vancouver.

1847 - 1865:

The period 1847 - 1865 reflects not only an increase in population in Oregon, but also a closer association with worldwide influences. The architectural influence of Andrew Jackson Downing in Gothic Revival, Italian Villa and Classical Revival styles in a romanticized farm setting are present in Oregon. However, the occurrence of a "high" style house in a rural area was rather unique, the more common arrangement was to apply architectural details to a vernacular farmhouse. Construction of the "lumber house" was usually predicated on the availability of shipped mill work or local saw mills.

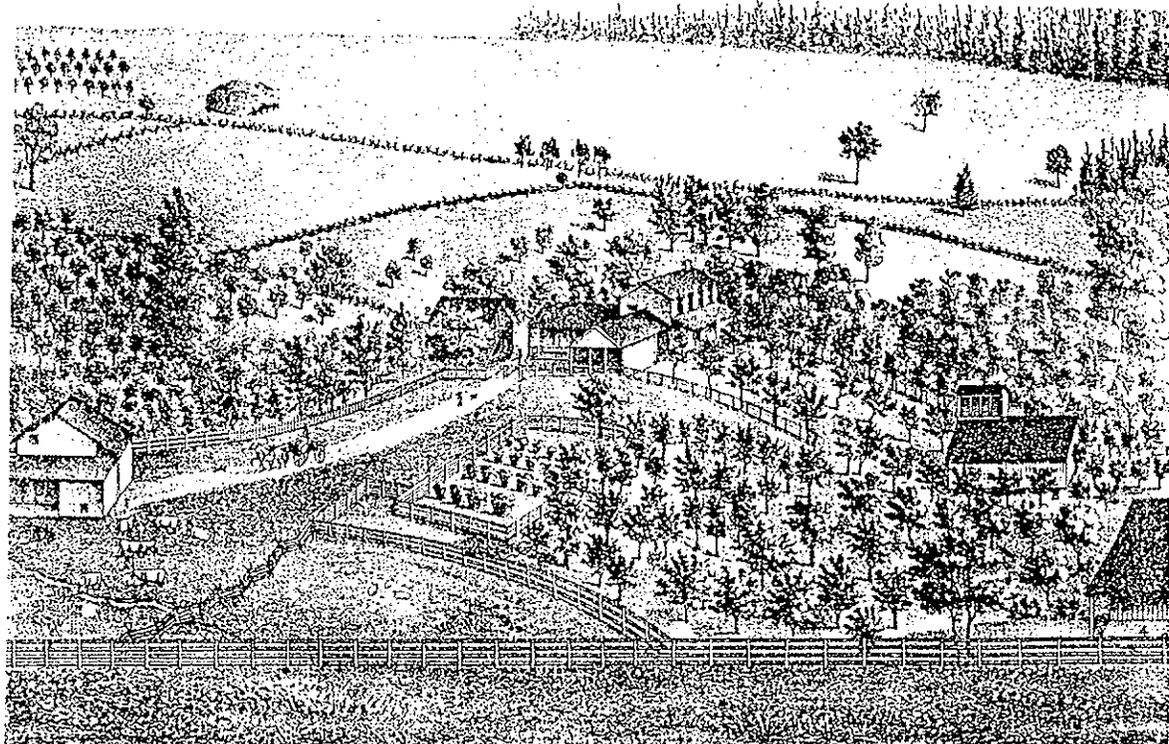
The architectural style of the house was rarely expressed on the agriculture outbuildings. In fact, the permanent barn was usually constructed before the house. "The earliest we can expect a hewn frame barn to appear would be two or three years after the claim was taken" (Dole in Vaughan 1974:86).

The Statewide Inventory data base presents 39 resources encompassing a variety of types. The resource type -- barn is the most prevalent with 22 examples, although the only style noted was utilitarian. The residences reflect Classic and Gothic Revival details, or vernacular descriptions. Two archaeological sites on donation land claim homesites are an important link to the early settlement in the Willamette Valley. The distribution of resources statewide include: 28 in the Willamette Valley, eight in southern Oregon, and two in eastern Oregon. The resources outside the Willamette Valley are, for the most part, all very simple, vernacular barns or outbuildings.

The National Register lists twenty properties for the chronological period of 1847 to 1865. Of the twenty listings, ten properties are isolated houses which are either the last remaining building on a farm, or the only building determined to be significant for nomination. One listing is a basic farm arrangement with house and barn. Importantly, nine properties represent multi-unit farms. The nine multi-unit farms vary widely in the number and integrity of the original farmstead group. However, three of the farms maintain good integrity of the original farm arrangement: the Albright Farm Group, Hanley Farmstead, and Stauffer Farm (see cover).

The distribution of the National Register listings also reflect a bias towards resources on the west-side of the state. Out of the twenty properties only one listing is from the east-side. The historic development of eastern Oregon did not really get underway until the 1860s, therefore very few resources related to agriculture are expected in the eastern counties prior to the 1860s.

Barns and farmhouses are the most common resource type in this sample. The basic farm and multi-unit farm are represented, but are really only the remnant features of a larger agricultural unit. Outbuildings are present, but only in limited numbers and are not well documented. Isolated barns dominate the resource types, all of which are utilitarian in style.



1 HORSE HOUSE
2 HORSE BARN
3 STORE CELLAR
4 BARN.
FRUIT FARM, PROPERTY OF COLN. RALPH C. GERR, 12 MILES EAST OF SALEM, PLACE FOUNDED BY PRESENT OWNER IN 1848

Figure 4. R.C. Geer Farm (1850)
(Marion Co. Atlas 1878:42)

1866 - 1883:

The 1870-1880 period seems to be an important temporal boundary in the survival rate of farm buildings. Any buildings remaining from pre-1870 are becoming exceedingly rare because of the deterioration of the building material -- wood. Characterization of a Willamette Valley farm prior to the 1880s, suggests a surprisingly high number of associated agricultural outbuildings:

A farm was an extensive, industrial enterprise, initiated by one family. It involved not only the planning and management of six hundred acres, but also the design, construction and operation of a variety of buildings, each of which had special requirements. One may guess that a typical

farm would contain ten or twelve different structures. However, the number of kinds of farm buildings used...including all specialized types, might list as many as fifty buildings (Dole 1965:23).

The farms also included landscape features such as family gardens, orchards and fences. There were at least three types of fences on the farmstead. The "picket fence around the front garden of the house; board fences for the barnyard and for areas near the house; and miles of Virginia rail fencing zigzagging along pastures and meadows" (Dole in Vaughan 1974:214).

The development of cattle ranches occurred frequently in southeast Oregon, creating monopolies of "cattle kings" over vast tracts of property (Figure 5). Of note is the pattern emerging of "farms" on the west-side and "ranches" on the east-side. The terms reflect the very real division between crop production in the fertile valleys of western Oregon and the large tracts of suitable range land for livestock operations in eastern Oregon.

This was a crucial period for the initial settling of eastern Oregon and resources associated with this period are extremely important for documenting the development. Properties in the eastern desert regions often used local stone to construct buildings and fences. "Hundreds of farmhouses were built of locally available volcanic rocks, either basaltic or tuff" (Hart in Vaughan 1974:244-45). These rock structures withstand the natural deteriorating environmental conditions better than wood and thus, should retain their character longer.

However, evidence of stock raising should not be limited to the homestead or main ranch complex. Of importance are the more ephemeral sites associated with open range grazing. Sites such as camps, log cabins, water troughs, pole corrals and carved aspen trees provide information of the movement of herds and the individuals who tended the herds. Many of these site types have been recorded on Forest Service and Bureau of Land Management property where open grazing occurred even before the land came under federal management.

The Statewide Inventory lists 104 agricultural properties for this period (Appendix A). Seven multi-unit farms are recorded for counties in the Willamette Valley, one in a southeastern county, and one in the northeastern corner of the state. The multi-unit farms include a house, barn, and at least two other outbuildings. Several of the inventoried multi-unit farms represent fairly intact, complex arrangements of five or more buildings. The farm groups are an important resource as they reflect the original location and plan of the farm. However, isolated barns, houses or outbuildings are more frequently inventoried. One archaeological site and one

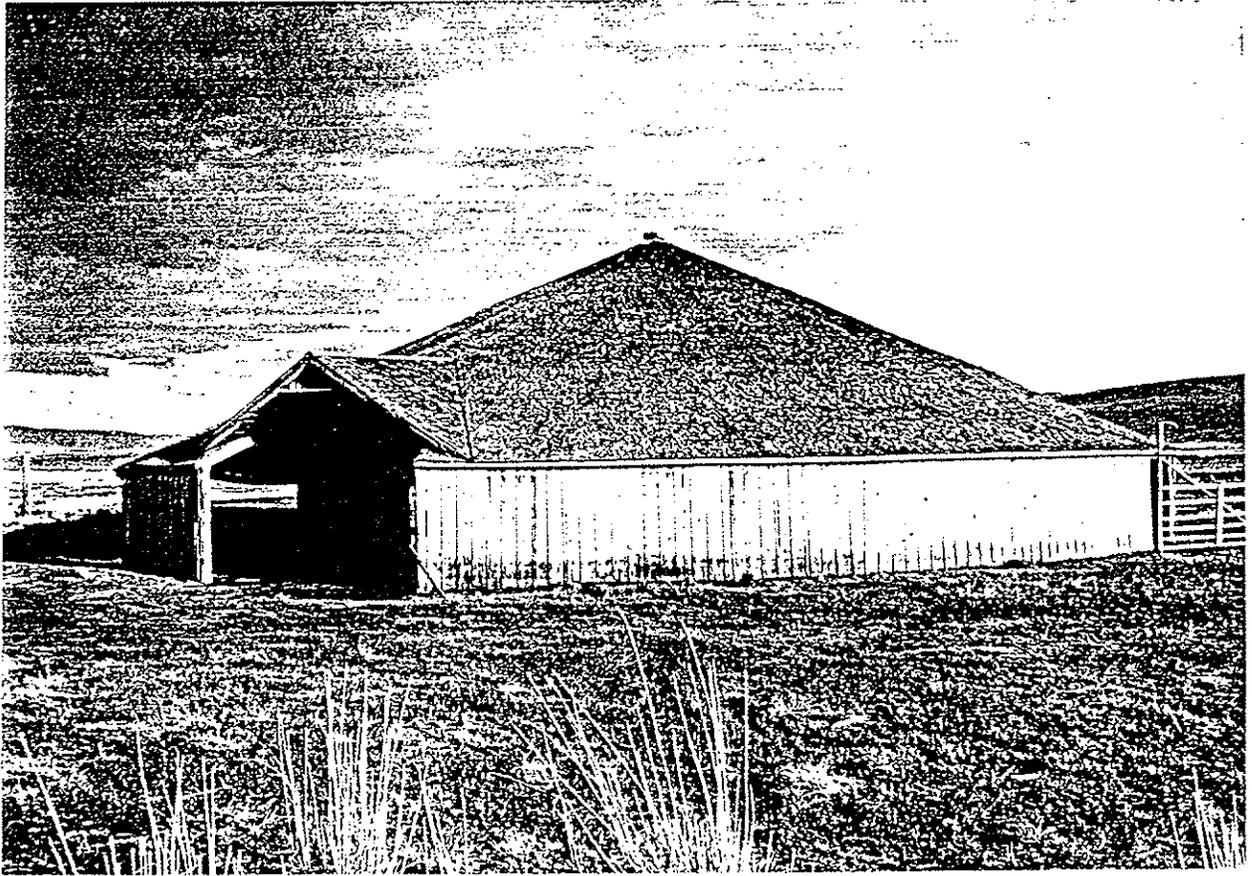


Figure 5. Pete French Round Barn

landscape feature complete the range of resource types recorded to date. While the variety of styles or characteristics are not closely examined in this document an obvious trend is towards a higher number of buildings with period stylistic attributes. For instance, seven different styles of barns and nine different house types are recorded.

The distribution of properties for the first time is more evenly distributed throughout the state. Although the period after 1865 was the beginning of the surge to settle eastern Oregon, a complete survey of counties in this region is necessary before a truly representative view of agricultural resource types is available.

The National Register currently lists eighteen properties significant to agriculture for this chronological interval. Only four of the listings are multi-unit farms, however, the P Ranch and Sod House Ranch in eastern Oregon are good examples of the extensive operations of early stock raising. Three properties are considered to be basic farms because of the arrangement of only two to three buildings incorporated within the nomination. Yet, the arrangement of only two or three buildings may reflect the remnant features of a larger operation, rather than the original plan of the farm. By far the most numerous type of

resources listed in the National Register are isolated houses or barns.

The distribution of National Register listed properties perpetuates the long-lived importance of agriculture to the Willamette Valley, as twelve properties out of eighteen are from this region. Only one example from the coast, one from the southern area, and four from eastern Oregon complete the sample.

The period from 1866 to 1883 encapsulates the very heart of the 19th century farm and livestock operations. Important trends in agriculture which had an impact on the shape or arrangement of the farm are: the use of silos, the growing number of farms, and farms which specialize in commercial products, such as hops.

1884 - 1913:

The 1880s through the turn of the century was a dynamic era in the development of agriculture. In nearly every county the number of farms increased two-or-three fold between 1880 and 1910 (Appendix B). Agricultural pursuits were well-established in most regions of the state by this time. The changes brought about by the railroad, gasoline engine and road system altered dramatically the pace of agricultural activity.

The growth and expansion of agriculture across the state is represented in the Statewide Inventory by the largest number of properties of any other period -- 508. Out of this number, thirty are recorded as farm groups or ranches suggesting that the occurrence of an intact farm group is high. The number of isolated buildings is dominated by barns (242), then houses (118), and agricultural outbuildings (116). The range of stylistic variation has increased to twelve different architectural descriptors for houses, and five barn types. All of the residential architectural styles are typical for this time period. One landscape and one archaeological feature are also present. The landscape feature is significant as it was the first cranberry bog established in Oregon and is located in a coastal county.

The number of National Register listings for this period is also higher than the other periods, with a total of thirty-one. Ten of the properties are multi-unit farms, and two are basic farms. Three of the multi-unit farms are well-documented, intact examples of farming or ranching activities. The three properties are distributed evenly throughout the western, southern, and eastern regions of the state. The Hillcrest Orchard and Dorris Ranch can be useful for defining and evaluating the features of an orchard operation. While the Cant Ranch in eastern Oregon is indicative of a livestock enterprise and is being developed into a ranching museum.

Nineteen of the National Register listings are isolated buildings, usually houses which are related to farms or important agriculturalists (Figure 6). The distribution of the 31 property listings is more evenly divided across the state. Ten are located in the Willamette Valley, two are from the coast, eight from eastern Oregon, and eleven from southern Oregon counties.



Figure 6. Edwin and Anna Starr House

1914 - 1940:

The last chronological period to be discussed by this context stretched from World War I to 1940. The era encompassed the complete change-over from animal to machine driven equipment. Technological advances besides the gasoline engine included rural electricity programs, refrigeration, and more efficient transportation. The world outside the farm was having a greater impact on farming practices and thus the arrangement of the farm group.

The changes brought about in the operation of a farm such as the introduction of the tractor, "had made it possible for fewer people to handle more land. The size of farms continued to grow, but no corresponding increase in the number of people was necessary" (Schlebecker 1975:216). In Oregon, there is an

exception to this national trend. The number of farms in the Willamette Valley continued to increase at a fairly high rate, yet the percentage of land attributed to agriculture remained the same or even decreased. Thus, the Willamette Valley is somewhat of an anomaly, with the number of farms increasing, but the size of farms decreasing, reflecting an agricultural emphasis on intensive land use. Whereas, counties in other regions of the state saw a slow increase in the number of farms, or a slight decrease by the 1935 census (Appendix B). Eastern Oregon is more typical of the national trend, with family farms consolidating into large-scale commercial operations by the end of this period.

The Statewide Inventory lists 228 properties. The most prevalent resource type is barns (114), followed by agricultural outbuildings (87), and residences (27). There are no basic farm groupings or multi-unit farms recorded for this period. The lapse in recording farm units may be a problem with the inventory technique, which may have recorded the farm in an earlier period, and only included the 1930s barn in this period; or a difficulty with the data base which put emphasis on chronological divisions. These are the obvious problems working from an in-house data base, rather than a field-tested method.

The styles of buildings are suggestive of the period with Bungalow, Craftsman, English Cottage, and Colonial documented. The more standard agricultural or utilitarian describes most of the barns or outbuildings. However, three octagonal barns were inventoried. The distribution of agricultural resources is once again biased towards the Willamette Valley because of the completed survey information.

The National Register lists eight properties for this era. Three of the properties are considered to be multi-unit farms, and are associated with nursery or orchard productions. The isolated properties are individual buildings or the single remaining feature of a farm. However, two of the isolated buildings are only peripherally related to agriculture. A rural blacksmith barn (Figure 7) and an egg-taking station are related to agriculture in Lane County, but are examples of the diverse agricultural enterprises. All of the eight properties are located on the west-side of the state.

The resource types associated with this 20th century period would encompass a variety of new structures or adaptations of older buildings. The rural electrification process allowed dairy's to incorporate refrigeration and automated milking stalls into the process. The dairying process and its accompanying barn, cooler house, and milk house were often replaced by a modern efficient structure. Thus, when documenting a historic farmstead or farm group it is important to address the changing landscape and the reasons for any new structures or re-locating

of agricultural outbuildings.

The farms from the 1930 - 1940 period, are probably not totally "new" farms, but are newer additions or updating of older farms. The construction, movement, and dismantling of farm outbuildings seems to be a continuous process dictated by the needs of the farm operation. Along with the rotation of crops, enlargement of property holdings, or a shift in the type of crop, livestock or equipment each variable has a profound effect on the farm plan.



Figure 7. Hayse Blacksmith Shop

In summary, the farm or ranch is an intricate, dynamic operation. The scale and function of the agricultural production has often changed through time as crops are rotated to preserve the soil or meet market demands. And while, early intact farms are increasingly rare and are an important resource, the farm which maintains features from a broad chronological continuum is also important. Essentially, the recording of a farm group should be emphasized in field survey and inventory projects. In this way, not only the standing structures are recorded but also any landscape or archaeological features which are a part of the changing function of the agricultural unit.

EVALUATION:

The farm unit is the primary resource type associated with the Broad theme of agriculture. The farm is most significant if it maintains the original arrangement of farm buildings, or is the last extant example of a particular farm-type. The function of the farm must also be considered when defining the character of the farm unit, i.e. include orchards, corrals, or crop fields. The rural setting of a farmstead is important, but compromise due to encroaching urban development should not be weighed against the integrity of the property.

Registration Requirements:

To be eligible for listing in the National Register, a farm or ranch must be able to strongly convey its historic character in both physical and associative ways. Evaluation of farms and ranches are characterized by the National Register Bulletin 30 which provides guidance for the identification, evaluation and registration of rural historic landscapes. Although currently only in a draft format, Bulletin 30 offers definitions for the processes and physical components which characterize the rural landscape. There are four processes and twelve landscape characteristics identified in the bulletin which should be addressed when completing a nomination project.

The evaluation of a farm or ranch entails three major activities:

defining significance, assessing historic integrity, and selecting boundaries...the data gathered through historic research and field survey are viewed in relationship to the historic contexts for the region. Significance, integrity, and boundaries depend upon the presence of tangible landscape characteristics and the evidence of the processes, cultural and natural, that have shaped the landscape (McClelland 1987:13).

An important aspect for interpreting the components of a farm as either contributing or non-contributing is the determination of the period of significance. The significant period is the benchmark from which the integrity level of the farm is measured. If the significant period is very specific then a precise representation of the historic period is warranted. Whereas, if the period of significance covers several decades, then the associated components may reflect the styles through time.

Once the period of significance is established, the farmstead or ranch is examined to determine if it retains the

original spatial and functional relationship between the various built components and landscape features to convey its historic character. "Modifications to structures completed during the period of significance may reflect the evolution of farming technology and should be evaluated within that context" (Lindeman and Holstein 1988:F-6). Additionally, alterations to historic structures must be evaluated to determine if it is at an "acceptable level". For instance, an acceptable level of alteration is a metal roof which protects the structure from further deterioration. "On the other hand, structures on which the walls, as well as roofs, have been sheathed in metal usually are extensively altered, and normally should be treated as if integrity was seriously impaired" (Lindeman and Holstein 1988:F-7).

Farms and ranches may derive part of their significance by the continuous operation of the original agricultural activity. Therefore, the addition of modern buildings, or buildings spanning a wide time range should not negatively effect the integrity of the farm as a whole. However, the modern features should reflect the evolution of farming technology and not overwhelm the farm's historic character.

Along with the structural evidence of the agricultural activity, landscape and archaeological features should be considered as part of the changing uses or ownership of the operation. Inclusion of agricultural fields is important, but emphasis should be placed on identifying the boundaries of historic fields. A crop field which has changed dimensions so as to lose its association with the historic period size and shape would not be considered a contributing feature. Continuity of the historic landscape is essential. "Boundaries should encompass intact portions of the historic unit having a continuity of historic characteristics. Peripheral areas having a predominant concentration of nonhistoric characteristics should be excluded" (McClelland 1987:28).

Assessment of Resource Types:

The most important aspect in understanding the evaluation process for an agricultural resource focuses on the farm or ranch unit as a whole. The cyclical process of crop production or stock raising effects the arrangement and plan of a farm unit. The evaluation process stresses the need to identify all of the buildings and features of a farm or ranch. Thus, the "best" example is an intact farm or ranch which reflects either a single chronological period arrangement or an operation developed through time. Examples of these two "best" scenarios are the Daniel Albright Farm group or Stauffer Farm with 1850-1860s buildings in a rural setting. Or, the Dorris Ranch which is an example of a continuously operated filbert orchard from the 1910s to the present. In the other extreme, the minimal level of

integrity for a multi-unit farm is a grouping of buildings or features which were related during the period of farm operation. In most instances, the extant features must be suggestive of the function and size of the farm or ranch to be considered under the definition of a multi-unit farm.

A secondary level of farm arrangement is the basic farm. The basic farm by definition only includes two to three structures, usually a house and barn. The basic farm allows for the documentation of at least the remnant farm group. The basic farm can also include farms which were small and perhaps only encompassed a few buildings overall. The basic farm "best" example would be a small farm operation which originally contained only a house, barn, and several outbuildings; and these features are nearly all present. The minimal level acceptable for the determination of a basic farm would be the remaining two buildings of a small farm grouping. The basic farm does not emphasize the presence of landscape or archaeological features, but the entire compliment of features should be documented.

The isolated agricultural resource contains very little associative value to a farm operation. However, by relating the isolated resource to similar resource types, or cultural values the property can be consistently evaluated. A "best" example of an isolated resource would be a property with intact features representative of the period that the building served an agrarian function. The minimal level of an isolated agricultural resource is tied closely to the property's or feature's individual integrity or to its associative or cultural values.

Registration:

The National Register of Historic Places was reviewed to determine agriculturally-related properties. A National Register atlas helped to define these resources, as of January 1988, Oregon had 74 properties associated with agriculture. Currently that number has increased to 78.

The properties listed in the National Register of Historic Places include several varieties of agricultural properties. The level of documentation has become more consistent since the 1970s when many properties were listed with little detailed or comparative information. First, the isolated farm structure is the most common "type" of listing. Usually, the farmhouse is all that remains of the original farm, or is the most outstanding feature, or is the only building the proponent wished to include in the nomination. Second, the basic farm unit is the next most common agricultural listing, with a house and one outbuilding. Third, very few multi-farm units which are examples of actual farming/ranching operations are included on the National Register. To summarize these findings, the most obvious property type is the farmhouse, which maintains architectural merit as

well. The number of intact farms with a range of original buildings is rare. Therefore, emphasis should be placed on preserving examples of intact multi-unit farms.

Key

I = Isolate
B = Basic Farm Unit
M = Multi-Farm Unit

(1543) - 1811:

I Fort Astoria is listed on the National Register and is a National Historic Landmark. (Clatsop)

1812 - 1846:

I Ewing Young Site (Yamhill, Pending)
I John McLoughlin House, National Historic Site (Clackamas)

1847 - 1865:

I Fiechter, John, House (Benton)
B King, Issac, House and Barn (Benton)
M Albright, Daniel, Farm Group (Clackamas)
I Applegate, Charles, House (Douglas)
I Miller's Mountain House (Douglas)
M Beall, Robert Vinton, House (Jackson)
I Birdseye, David N, House (Jackson)
I Bybee, William, House (Jackson)
M Dunn, Patrick, Ranch (Jackson)
M Hanley, Michael, Farmstead (Jackson)
I Brown, Hugh Leeper, Barn (Linn)
I Spores, Jacob C., House (Lane)
I Sheep Ranch Fortified House (Malheur)
I Anderson, James Mechlin (Marion)
M Case, William, Farm (Marion)
M Geer, R.C., Farmhouse (Marion)
M Stauffer, John, House and Barn (Marion)
M Beeks, Silas Jacob, Farmstead (Washington)
I Fanno, Augustus, Farmhouse (Washington)
M Imbrie Farm (Washington)

1866 - 1883:

B Rickard, Peter, Farmstead (Benton)
M Foster, Philip, Farm (Clackamas)
B Vonder Ahe, Fred, House and Summer Kitchen (Clackamas)
M Rogue River Ranch (Curry)
I Brown, Henry, House (Douglas)
B Double-O Ranch (Harney)
I French, Pete, Round Barn (Harney)
M P Ranch (Harney)
M Sod House Ranch (Harney)
I Campbell, Robert E., House (Lane)
I Brown, John and Amelia, Farmhouse (Linn)

I Parker, Moses, House (Linn)
 I Porter-Brasfield House (Linn)
 I Beers, Oliver, House and Mission Hospital Site
 (Marion)
 I Kirk, John W. and Thomas F., House (Marion)
 I McCallister-Gash Farmhouse (Marion)
 I Minto, John and Douglas C., House (Marion)
 I Zorn, Casper, Farmhouse (Marion)

1884 - 1913:

M Maxwell, James O, Farmstead (Baker)
 I Irwin, Richard S, Barn (Benton)
 B Starr, Edwin and Anna, House (Benton)
 M Anthony, Herman, Farm (Clackamas)
 M Kraft-Brandes-Culbertson Farmstead (Clackamas)
 I Moeck, George F., House (Columbia)
 I Hughes, Patrick, House (Curry)
 B Boyd, Charles, Homestead Group (Deschutes)
 I Curry, Nathaniel, House (Douglas)
 M Weaver-Worthington Farmstead (Douglas)
 I Wimer, James, Octagonal Barn (Douglas)
 I Winston, William C. and Agnes, House (Douglas)
 M Cant, James Ranch Historic District (Grant)
 I Copple, Simpson, House (Hood River)
 I Bybee, Frank E., House (Jackson)
 I Fiero, Conro, House (Jackson)
 I Furry, Frederic E., House (Jackson)
 M Hillcrest Orchard (Jackson)
 I Hoover, George A., House (Jackson)
 I McCredie, William, House (Jackson)
 I Christie-Eismann House (Josephine)
 M Dorris Ranch (Lane)
 I Bents, Frederick, House (Marion)
 I Harding, Benjamin F., House (Marion)
 I Settlemier, John, House and Barn (Marion)
 I Wells, George, A., Jr., House (Polk)
 M Frazier, William S, Farmstead (Umatilla)
 I Vey, Joseph, House (Umatilla)
 M Townley, W.J., House (Union)
 M Anderson, Lewis, Farmhouse, Barn and Granary (Wasco)
 I Fletcher, Alfred P, Farmhouse (Yamhill)

1914 - 1940:

M Moyer, C.E. Nurseries Property (Douglas)
 M Bursell, Victor and Bertha, House (Jackson)
 M Glenview Orchard Ensemble (Jackson)
 I Van Hovenberg, Henry Jr., House (Jackson)
 I Harlow, Elmer, House (Lane)
 I Hayse Blacksmith Shop/Brogdon's Hay Feed & Seed (Lane)
 I Pacific Cooperative Poultry Producers Egg-Taking (Lane)
 I Fruit and Flower Day Nursery (Multnomah)

TREATMENT:

The treatment section of the agriculture historic context focuses on the preservation activities integral to direct future research and survey efforts. In 1973, a study was undertaken to define the condition of Oregon's prime agricultural lands (Aamodt 1973). This study classified each county's land base and devised the system adapted by the Land Conservation and Development Commission when it was formed the next year. Several conclusions of the 1973 study are pertinent to this historic context. "Agriculture is the state's second leading industry...8,000 acres of good agricultural land are being urbanized each year in the Willamette Valley alone. Much of the beauty of the state and the character of its people depends on farm life" (Aamodt 1973:23).

The resource of the farm land base which was rapidly disappearing in 1973 continues to become "urbanized". The present pace of farm land converted to commercial has slowed with the policies established by LCDC. Yet, while LCDC Goal 3 protects agricultural land, it does not establish any level of protection for historic resources associated with the land. Thus, while the farm itself may be protected by Goal 3, the historic or archaeological resources on that land falls under the aegis of Goal 5. An important step in the treatment of historic agricultural resources is utilizing both goals to protect the farm as a complete entity. For it is the integrity of the buildings, features, setting and functional aspect of the operation which adds to the level of significance of the resource.

The research and survey needs defined during the development of this contextual study establishes the initial steps from which to start the progress towards a complete understanding of the state's agricultural resources.

Survey and Research Needs:

The research needs cover a broad spectrum of subjects because very little indepth research has been accomplished on agricultural themes or resource types in Oregon. Also, the Broad Theme of agriculture from 1940 to the present needs to be developed and incorporated into the present study to fully document this thematic category. The cyclical updating of historic context information in a critical component to maintaining the utility of the document as a planning tool.

The Oregon Theme categories of farming, horticulture, and stock raising are all topics which need to be researched and prepared in to the contextual format.

The Resource Type contextual studies on the following topics would be a high priority: barns, specialty barns, multi-

unit farms, crop or livestock specific themes.

Geographic studies are particularly necessary for areas in high development threat zones, especially the Willamette Valley.

Counties which have none or very minimal survey and inventory documentation and thus which have a HIGH need for work include: Baker, Clatsop, Columbia, Crook, Curry, Gilliam, Grant, Harney, Hood River, Jefferson, Klamath, Lake, Lincoln, Malheur, Marion, Morrow, Multnomah, Polk, Sherman, Tillamook, Union, Wallowa, Wasco, and Wheeler. The counties are from all regions of the state, and while a statewide survey completed in 1976 has identified properties in each of these counties; a comprehensive and multi-level survey and inventory phased approach is required to meet preservation planning needs and LCDC Goal 5 guidelines.

The counties with the highest developmental threat currently are those located in the Willamette Valley which includes the following: Marion, Multnomah, and Polk.

Counties which have no properties associated with agriculture listed in the National Register of Historic Places include: Clatsop, Coos, Crook, Klamath, Lake, Lincoln, Morrow, Sherman, Tillamook, Wallowa, and Wheeler. Out of the eleven counties without any agricultural oriented listings, all have also not undergone any thorough survey and inventory process. This clearly shows the relationship between survey and inventory which identifies resources and the registration of these resources. Counties with historically important agricultural oriented industries are Klamath (potatoes, onions) and Tillamook (dairying), although all of Oregon's counties include ranching or farming as a primary industry.

The number of agricultural associated National Register listings are evenly distributed between the three chronological periods spanning 1847 and 1913. There are no standing structures remaining from the pre-1847 periods. The more recent time period 1914-1940 contains only a few property listings, reflecting the 50-year limitation.

The identification and evaluation sections of this document emphasize the importance of the multi-unit farm. The multi-unit farm which either represents the workings of a single period farm operation, or a continuously functioning enterprise. The multi-unit farm is also under some degree of threat because of the need to update buildings to accommodate new machinery and agricultural practices. The farm as a total entity is intrinsically important to the understanding of the state's agrarian roots. The historic arrangement of farms needs to be documented throughout the state and through the chronological periods in which agriculture has developed. Today, agriculture is still one of the leading statewide industries.

Activities:

National Register of Historic Places: The National Register of Historic Places is the official list of properties that are significant to the heritage of the United States. Designation as a National Register property provides some measure of protection through the encouragement of preservation activities.

Local Government Landmarks: Many local governments have a landmarks commission which designates locally significant properties. The commissions or review boards are involved with commenting on proposed alterations, promoting historic preservation, enforcing local preservation ordinances, and implementing cultural resource components of comprehensive planning. The Certified Local Government (CLG) program is also active in protection activities.

Interpretation: Historic agricultural properties which are appropriate for interpretation are a costly undertaking. The restoration, maintenance and exhibition of an agricultural theme is recommended for a public recreation agency or non-profit organization such as museums or historical societies. The Oregon State Parks 2010 Plan envisions "the operation of a facility which illustrates historic farming practices in conjunction with or in addition to other State Park facilities. Interpretation of livestock ranching at an appropriate location is also proposed" (2010 Plan 1988:44).

Adaptive Reuse: Adaptive reuse is an appropriate alternative to preserve the property's character defining features. Agricultural properties which have been altered to accommodate new functions include; the Oxbarn Museum (barn to museum) and the Imbrie Farm (farmstead to public house). Several barns within the surveyed counties noted that barns had been converted to houses.

Investment Tax Credits: The federal Investment Tax Credit (ITC) program may have limited applicability to most agricultural properties. However, innovative adaptive reuse of National Register listed properties may be appropriate for applying for the tax credit.

Documentation: Preservation through documentation should be to the standards of the Historic American Building Survey and/or Historic American Engineering Record in those cases when preservation in place is not possible. However, most local government ordinances maintain provisions which institute documentation prior to demolition.

Relocation: Relocating significant properties to a new site which resembles the original physical context is encouraged when preservation in place is not possible. Relocation may have

little applicability in terms of an ensemble farmstead, but may be advantageous for salvaging similar farm outbuildings in an agricultural area.

Public Awareness/Education: Through the distribution of preservation information to agricultural organizations such as the Farmland Preservation Trust, County Extension Service agents, and the Oregon State Farm Bureau public awareness can be effectively heightened towards preservation activities. Further, educationally-oriented activities such as tours, exhibits, and audio-visual presentations can provide the public with an understanding of the cultural value of Oregon's agricultural resources. Certified Local Governments or local landmarks commissions can take part in education activities.

Century Farm Program: The Century Farm program which is sponsored by the Oregon Historical Society maintains a valuable data base on continuously operated, pioneer farms. The application lists the existence and use of original buildings and crop or livestock production of the farm. Verification of early structures in a rural setting is often problematic and this may be one way of determining the age and function of structures on a farmstead. All documentation for each Century Farm application is deposited in the Oregon Historical Society Archives.

Archaeological Recovery: The archaeological manifestation of agricultural resources is a recognized resource type for the early chronological periods of Oregon history. However, the dynamic evolution of a later-period farmstead or ranch must also be investigated during the process of identification and evaluation of resource types.

Land Conservation and Development Commission (LCDC): The Land Conservation and Development Commission (LCDC) was adopted in 1974 as a planning program for land use, resource management, economic development, and citizen involvement. There are 19 goals defined by the LCDC, two of which are pertinent to agricultural resources in Oregon.

Goal 3: Agricultural lands -- "This very precise goal defines agricultural land and requires all jurisdictions to inventory such lands and then preserve and maintain them through appropriate policies and zoning" (Summary of Oregon's 19 Statewide Planning Goals).

Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources -- As its name suggests, this goal encompasses a variety of resources. The direction of this goal is not to simply preserve all of these resources, but to provide a process for resolving conflicts. The primary aspect of the goal is the concept that resources must be inventoried and evaluated to establish the particular level of significance for each of the resources.

Goals and Priorities:

Survey & Grants:

- 1) Continue to solicit and sponsor survey and inventory projects which include as part of their research methodology the identification and documentation of agricultural properties.
- 2) Solicit agricultural historic contexts in topics such as; farming, horticulture, livestock raising, or barns, multi-unit farms, irrigation, ethnic groups, and floriculture.
- 3) Encourage surveys associated with research needs which would augment the research findings allowing for the in-field verification of predictive strategies.
- 4) Update survey information on completed counties, by systematically reviewing county-wide survey data with field checks on the status of primary resources. Additional information would thus aid in understanding the integrity threshold of resources and the range of variability of condition between when recorded and when reviewed.
- 5) Incorporate all new or updated information in to the computerized SHPO data base file.

Certified Local Government (CLG):

- 1) Encouraged projects that identify, evaluate, register, and protect significant agricultural resources.
- 2) Guide CLG's in survey activities relative to the agricultural context.

National Register:

- 1) Give high priority to listing agricultural properties identified as multi-unit farms to the National Register.
- 2) Solicit the submission of agricultural property nominations from the prioritized lists, developed from more specific historic contexts.

Review and Compliance:

- 1) Provide land managers and compliance reviewers with copy of Agriculture Historic Context for use in planning and review procedures.

Planning:

- 1) Prioritize the agriculturally-oriented resources in with the SHPO work program area to be considered for annual funding, and work items.

Investment Tax Credits:

- 1) Support the use of federal tax credits for certified rehabilitation of work performed on income-producing agricultural buildings. To date, only one agricultural property has applied for the rehabilitation tax credit.

Special Assessment Program:

- 1) Continue to offer property tax abatements to owners of agricultural properties listed in the National Register.
- 2) Out of the 78 listings, 38 are currently under special assessment. Mail information to the 40 property owners defining the benefits of the special assessment program.

Education:

- 1) Encourage site interpretation.
- 2) Utilize public speaking engagements, slides, booklets, reports and exhibitions to promote education.
- 3) Undertake joint projects with state and local museums.

APPENDICES

- A. STATEWIDE INVENTORY DATA BASE
- B. AGRICULTURAL CENSUS DATA
- C. AGRICULTURAL RESOURCE TYPES (NV & WA)
- D. CENTURY FARM PROGRAM DATA

APPENDIX A: Chronological Distribution of Resource Types

Derived from Oregon Statewide Inventory
of Historic Properties Survey Data

<u>Period</u>	<u>Total</u>	<u>Site</u>	<u>Farm/ Ranch</u>	<u>Barn</u>	<u>AG/ Outbldg.</u>	<u>Landscape</u>	<u>Resi- dence</u>
(1543)-1811	1	1	-	-	-	-	-
1812-1846	5	4	-	-	-	1	-
1847-1865	39	2	-	22	3	-	12
1866-1883	104	1	9	54	11	1	28
1884-1913	508	1	30	242	116	1	118
1914-1940	228	-	-	114	87	-	27
Total	885	9	39	432	217	3	185

The survey information does not include all of the counties statewide; only twelve counties out of 36 have fairly complete and consistent survey and inventory information. The twelve counties are as follows: Benton, Clackamas, Coos, Deschutes, Douglas, Jackson, Josephine, Lake, Linn, Union, Washington and Yamhill. Survey information for Lane and Umatilla was not incorporated into the SHPO data base as of April 1989.

APPENDIX B: AGRICULTURAL CENSUS DATA
OF FARMS AND PERCENTAGE OF ALL LAND IN FARMS

County	Census							
	1860	1880	1890	1900	1910	1920	1930	1935
Baker	-	453	455	725	1,304	1,509	1,383	1,383
Benton	-	606	-	865	1,098	1,320	1,340	1,678
Clackamas	376	1,385	1,771	2,568	3,646	3,836	4,747	6,200
Clatsop	-	146	236	433	369	448	694	857
Columbia	77	157	358	801	813	991	1,667	2,007
Coos	-	570	627	863	1,128	1,178	1,305	1,698
Crook	-	-	-	576	1,355	561	489	534
Curry	-	170	227	290	292	339	342	507
Deschutes	-	-	-	-	-	751	824	924
Douglas	-	1,043	1,270	1,641	2,124	2,275	2,488	3,259
Gilliam	-	-	-	441	432	454	353	352
Grant	-	126	-	697	773	728	632	710
Harney	-	-	482	348	443	589	603	619
Hood River	-	-	-	-	744	878	967	1,125
Jackson	-	565	798	1,356	1,714	1,720	2,214	2,901
Jefferson	-	-	-	-	-	572	335	323
Josephine	-	270	398	557	855	727	1,164	1,778
Klamath	-	-	332	453	926	992	1,197	1,466
Lake	-	-	372	397	712	549	485	513
Lane	-	1,200	1,707	2,370	2,826	3,279	4,069	4,649
Lincoln	-	-	-	489	961	767	732	840
Linn	-	1,528	1,711	2,417	2,751	3,041	3,074	3,849

Census

County	1860	1880	1890	1900	1910	1920	1930	1935
Malheur	-	-	378	583	801	1,322	1,345	1,648
Marion	-	1,445	1,766	2,754	3,490	3,681	4,821	5,181
Morrow	-	-	700	586	614	692	628	632
Multnomah	-	505	690	1,276	1,478	1,828	1,733	2,180
Polk	-	782	882	1,192	1,557	1,761	1,882	1,966
Sherman	-	-	-	545	466	460	369	367
Tillamook	-	-	-	631	651	797	811	889
Umatilla	-	-	1,372	1,593	2,005	2,353	2,265	2,602
Union	-	-	-	-	1,309	1,279	1,276	1,339
Wallowa	-	-	-	803	1,058	1,149	952	1,030
Wasco	-	-	-	-	1,331	1,339	1,076	1,188
Washington	-	785	1,588	2,302	2,871	3,090	3,917	4,371
Wheeler	-	-	-	390	387	359	284	326
Yamhill	-	1,145	1,277	1,595	2,218	2,592	2,690	2,935

APPENDIX C: Agricultural Resource Types

The following list of agricultural resource types is derived from the Farming/Ranching Historic Context developed for Nevada, 1988, and other sources.

Farm/Ranch house: The main dwelling within a farm or ranch where the owner-operator family generally resides. The house usually reflects the period architectural style, and each addition to the house may provide an eclectic assortment of architectural details. The main house usually displays the primary architectural features of a farm unit.

Bunkhouse: A dwelling for ranch hands or laborers. Bunkhouses are generally simple, one-room structures. Although plumbing or kitchen facilities are not usually included in the structure, its function as a dwelling is distinguished by the inclusion of a wood stove and flue. The architectural style of the typical bunkhouse is limited to vernacular or utilitarian.

Summer Kitchen: A separate building designed for cooking large meals for summer farm help, or food processing.

Laundry Building: A separate structure that houses a facility for the washing of clothing.

Outhouse: Outdoor toilet that might stand independently or be attached to the side of a larger structure, such as a barn.

Line Camp Cabin: Small self-contained cabin or shack that was located somewhere on the open range, and used during seasonal herding rounds of cattle or sheep.

Barn: Barns served as a storage unit for livestock and feed. Barns are almost always the largest and most impressive structure in terms of scale and size. The plan and arrangement of space within a barn-type can be associated with the cultural background of those who built it or primary function of the barn. Traditional barn-building methods usually survive much longer than methods associated with other property types.

Lambing and Calving Sheds: Structures or lean-to's built to shelter the seasonal birthings of livestock, particularly sheep and cattle.

Slaughter House: A facility and/or structure for the slaughtering and processing of livestock. Although sited on a particular ranch, a single slaughter house might serve as a regional facility for a number of nearby ranches. A slaughter house might include a cold storage unit, smokehouse, abattoir, rendering room, kettles and/or feeding pens.

Silos: Tall cylindrical structures built for the storage of fooder for livestock.

Tack Room or House: Sometimes a separate structure, or a room in a larger structure such as a barn or stable, devoted to the storage of gear and equipment associated with horses.

Fruit House: A structure devoted to housing equipment necessary for the care, harvest and processing of orchard production.

Hop Kiln: "These are usually square or rectangular buildings, two stories in height, the first story occupied by pipes or conduits to conduct the hot air from the furnaces to the second story, on the floor of which the hops are spread for drying. The whole is surmounted by a cupola to give vent to the warm air" (Wood 1938:37).

Prune Dryer: Usually an adapted version of a hop dryer, only on a smaller scale.

Cellar or Root Cellar: A storage facility for perishable foodstuffs; sometimes built as a self-standing unit near the main house, or built directly under the main residence. Usually a major portion of the structure is generally subterranean or built into a hillside in order to provide maximum insulation.

Granary: A framed storehouse for threshed grain, usually built in a very utilitarian method.

Milk House/Dairy: Structure devoted to the milking of cows and for the storage and processing of milk and milk products.

Smokehouse: Small building used to flavor and preserve meats. Often built of wood with gable roofs, they can generally be distinguished by their comparative height, generally equivalent of 1 1/2 stories.

Sheds: Structure which comes in variety of sizes and forms, primarily built to provide storage or shelter.

Blacksmith: Includes a furnace and work area for the smithing and repair of metal items, either in an enclosed space or in a mobile open-air unit.

Pump House: Small structure meant to house the machinery involved with delivering water to other areas.

Spring or Well House: Small structure built over well or other home-use water source.

Wind Mill: Structure devised to utilize natural wind power to drive machinery.

Threshing Floor: Prior to threshing machines reaping of grain was done by hand with sickles and cradles. "Most farmers built their threshing floor outside, but some put a roof over it". One settler, "covered a space between two log sheds, which he used as barns, and also laid a wooden threshing floor, while other farmers used 'floors' of well-packed earth or gravel" (Olsen 1970:91).

Fanning Mill: Built for separating chaff and grain, in the late 1840s. Until then, farmers winnowed their grain, either by tossing it in the air or by dropping it from specially constructed towers some ten or twelve feet high (Olsen 1970:92).

Aspen Carvings: Some sheepherders, especially Basque, spent some of their spare time while watching flocks by carving on tree trunks.

Canals and Ditches: A series or network of channels that carry water from a reservoir or natural watercourse; sometimes concrete lined, sometimes simply dug out from the ground.

Cemeteries: Often a family established its own family plot, generally not far from the main house.

Corral: Circular open-air structure, consisting primarily of fencing, to confine livestock. The enclosure material can vary from rough tree trunks to dimensioned lumber.

Dam: A man-made obstruction to a natural watercourse so as to divert or store water.

Fencing: Fencing defining the perimeter of the main house is generally more ornate and decorative than the fencing that defines the outer borders of the ranch itself. Fencing surrounding the fields is probably of wood and barbed wire.

Hay Derrick: Wooden structures used to lift loose hay into piles or from field to wagon or wagon to barn.

Orchard: Any contiguous block of trees planted the same year with the same tree spacing ("Filbert Tree Report" 1985).

Overthrow: A simple arched structure spanning the main entrance road to a ranch/farm. Built of either wood or masonry, the name of the ranch is often boldly included in an arch or lintel that carries over the roadway.

Reservoir: A storage facility for the impoundment of water.

Vineyard: A planting of grapevines on a commercial scale, usually in association with the production of wine.

Windbreaks: Tall deciduous trees planted along the windward side of a ranchstead in order to break and divert the prevailing winds before reaching the ranch's dwellings and thereby help protect its residents.

The following is the list of agricultural themes, subthemes and resource types identified during the literature and site inventory review process: (Adapted from the Washington State Agriculture Studies Unit 1985)

GENERAL FARMING

1a. Diversified Farm, Pioneer Subsistence (1792 to 1870's-80's)

- Farmstead (homesteads)
- Cabin
- Small barn
- Granary
- Root cellar
- Ranch
- House
- Garden
- Site

1b. Diversified Farm, Market Production (1880's-1940's)

Homestead or farm	Garage
Ranch	Livery stable
Cistern	Icehouse
Garden	Milk house
House	Windmill
Barn	Pumphouse
Granary	Ramp and chute
Grain crib	Orchard
Machine shed	Bee hives and platform
Shop	Portable colony pig house
Root cellar	Hay derrick
Smokehouse	Stock trough
Woodshed	Fuel tank
Outhouse	Utility building
Livestock shed	Tank for chemical fertilizers or pesticides
Silo	Round-polygonal barn
Scale house	Site
Chicken coop and brooder house	

LIVESTOCK

2. Commercial dairying (1880's-present)

Homestead or farm	Fence
Dairy barn	Milk cooling tank
Milk house	Open shed
Silo	Refrigeration equipment
House	Site
Corral	

3a. Cattle ranching, open range phase (1850's-1880's)

Homestead or farm	Shed
Ranch	Cattle trail
Cabin	Spring or cistern
Corral	Cow camp
Small outbuilding	

3b. Cattle ranching, enclosed grazing (1880'-present)

Homestead or farm	Cistern
Ranch	Water trough
Cattle barn	Corral and fencing
Calving shed	Loading ramp and chute
Bullpen	Open shed
Ranch house	Pole barn
Feed storage	Feed lot
Windmill	Site

4. Horse raising (early 1800's-present)

Homestead or farm	Windmill
Ranch	Cistern
Horse barn	Hay derrick
Livery stable	Fencing
Camp	Stable Fencing
Camp	Shed
Blacksmith shop	Cabin
Corral	House
Spring	Site
Loading ramp	

5. Sheep raising (1850's-1840's)

Sheep barn	Cistern
Lambing shed	Water trough
Open shearing shed	Dipping vat
Cookhouse	Corral
Bunkhouse	Sheep camp
Feed lot	Sheep driveway
Windmill	Site

6. Small animal husbandry (early 1800's-present)

Poultry house	Pen
Swine house	Portable colony hog house
Farrowing barn	Bee hive
Grain crib or bin	House
Granary	Farm
Shed	Site

CROPS

7. Grain production (early 1800's-present)

Homestead or farm	House
Ranch	Pole barn
Grain dryer	Windmill
Barn (horse and mule barn)	Cistern
Machine shed	Tank house
Grain elevator	Fuel tank
Granary	Grain chute
Shop	Pipeline
Icehouse	Tramway
Smokehouse	Site
Garage	

8. Horticulture (early 1800's-present)

House	Machine shed
Orchard	Storage building
Prune dryer	Icehouse
Vineyard	Irrigation works
Grapevine	Garage
Cranberry bog	Shop
Tram railway	Refrigeration facility
Berry field	Farmstead
Vegetable field	Site
Barn	

9. Floriculture and nursery production (mid 1800's-present)

Greenhouse	Water tower
Garden	Outbuilding
Field	House
Nursery seed bed	Garage
Barn	Trees
Windmill	Site

10. Hop production (1865-present)

Hop kiln (curing shed)	Irrigation system
Machine shed	Outbuilding

Mechanics shed	Barn
House	Site
Pumphouse	

11. Irrigation and reclamation (1880's-present)

Dam	Power station
Headworks	Tank house
Pumping station	Waterwheel
Siphon	Windmill
Flume	Dike
Raceway	Tunnel
Canal	Drainage ditch
Ditch	Farm

ETHNIC PROPERTIES (late 1800's-present)

12a. Migrant camps

Cabin (housing)	Site
Outbuilding	

12b. Truck farming

Truck garden	Garage
Field	Tank house
House	Irrigation system
Barn	Fuel tank
Machine shed	Site
Storage shed	

APPENDIX D: Century Farm Program Data

The Century Farm Program in Oregon is sponsored through the Oregon Historical Society. The program was started in 1958 with the applications accepted for 352 farms. Since 1958 the number of Century Farm applications have declined to generally 40-50 every three to five years. The current total is 758 Century Farms in Oregon. Applications for certification are awarded on a five year cyclical basis. Table 1 presents the number of Century Farms by county; four counties have no certified Century Farms.

To qualify for the Century Farm program the farm must have been operated continuously in the same family for one hundred years or more. If the farm has ever been rented out, it will not qualify. The farm must have no fewer than 10 acres with a gross income from farm uses of not less than \$500 per year for three out of five years immediately preceding application. The applicant must live on the farm or, actively manage and direct the farming of the land. The line of ownership from the original settler or buyer may be through children, siblings, nephews and/or nieces. Adopted children will be recognized equally with blooded children.

Of importance for historic preservation and resource identification are questions in the Century Farm Program application. The questions determine if any original buildings are still in use, and what crops or livestock were produced one hundred years ago. The Century Farm program thus has important information concerning historic resources and should be used when conducting research on agricultural themes in Oregon. The application and all supporting documents providing verification of the claim are deposited in the Oregon Historical Society archives.

TABLE 1. Number of Century Farms by County and Regions

<u>County</u>	<u>Total</u>	<u>Region</u>
Benton	39	Willamette Valley
Clackamas	70	Willamette Valley
Lane	46	Willamette Valley
Linn	107	Willamette Valley
Marion	105	Willamette Valley
Multnomah	11	Willamette Valley
Polk	46	Willamette Valley
Washington	54	Willamette Valley
Yamhill	70	Willamette Valley
Clatsop	2	Coast
Columbia	1	Coast
Coos	13	Coast
Curry	2	Coast
Lincoln	-0-	Coast
Tillamook	4	Coast
Douglas	48	Southern
Jackson	26	Southern
Josephine	1	Southern
Gilliam	3	Eastern
Hood River	2	Eastern
Morrow	10	Eastern
Sherman	1	Eastern
Umatilla	27	Eastern
Wasco	14	Eastern
Wheeler	-0-	Eastern
Baker	16	Eastern
Malheur	2	Eastern
Union	14	Eastern
Wallowa	4	Eastern
Crook	1	Eastern
Deschutes	-0-	Eastern
Grant	5	Eastern
Harney	1	Eastern
Jefferson	1	Eastern
Klamath	7	Eastern
Lake	4	Eastern