Lost Forest is Known as
"A True Oddity of Nature"

The Lost Forest of Northern Lake County, the
subject of current discussions regarding establish­
ment of a recreational area, is known to foresters
and geologists as a true oddity of nature. The 9100­
acre stand of ponderosa pine trees not only is far
removed from the normal pine forests of the Central
Oregon region, but is situated in an area far more arid than
the ponderosa normally inhabits.

Adding to the interest in the Lost Forest are the ad­
Jacent Shifting Sand Dunes, parts of which are invading
the forest itself, and the nearby Fossil Lake, site of many
finds of bones of prehistoric animals, shells of fish, and
other tell-tale signs of ancient life.

On Thursday, April 18, a group of men and women in­
terested in seeing some sort of recreational development
at the Lost Forest gathered at Christmas Lake Lodge and
from there they made a tour of the forest itself, and dis­
cussed means whereby camping and picnicking facilities
might be installed. Present were officials of the Bureau
of Land Management, the Oregon highway department's
parks division, the Interior Department's new Bureau of
Outdoor Recreation, the Izaak Walton League of Burns, res­
idents of the Fort Rock and Christmas Valley areas, the
State Game department, the Lake County Chamber of
Commerce.

Attending from Lakeview were George Lea, manager of
the Bureau of Land Management's Lakeview district, and
Harold Baughman, president of the Lake County Chamber
of Commerce and chairman of

presented last year in a 291­
page thesis, "An Ecological
Study of a Disjunct Ponderosa
Pine Forest in the Northern
Great Basin in Oregon."

The thesis was written by
Dick Wallace Berry, then a
graduate student of the Ore­
gon State University and now
an assistant professor of for­
estry at the University of Ariz­
ona. His study was publish­
ed as his thesis for a Ph. D.
degree in forest management
and was made during the
summers of 1959 and 1960
when he and his family spent
much time living and study­
ing in the area with scholar­
ship assistance from the Wey­
erhaeuser Company. The
document contains many de­
tailed tables of soil and wa­
ter compilations, plus photo­
graphs and other illustrations
of the area.

Berry concluded that the
Lost Forest is a relict (sur­
vivor) of a larger forest which
once covered an extensive
area. A main interest in the
study was the determination
of how the ponderosa pine
trees, native to the higher
and wetter mountain areas of
Central Oregon and other
Western States, could sur­
vive in the comparatively dry,
sandy "Sagebrush desert."
The Lost Forest is at least
35 miles from the main stands
of Lake County's ponderosa
trees.
the Lake County parks advisory board. The meeting was held at the instance of the Burns Izaak Walton League, which had suggested steps be taken to develop a recreational site at the Lost Forest.

The suggestion had been made in past years, also, especially by residents of the North Lake County area. It had been made to the National Park Service and to the Oregon Highway Department's park division. The Bureau of Land Management, which administers the public domain on which the Lost Forest stands, has prepared a plan for a Lost Forest recreational development, but to date this agency has no funds for such work.

After the April 18 tour of the forest, the group gathered at Christmas Valley Lodge again for discussions. Here it was brought out that the National Park Service is not at present interested in the site, having many other major projects to occupy its attention. The parks division of the State Highway Department reported that the site is too far removed from the highway system, and there are many park sites closer to the highways to take that division's funds and effort.

It was the consensus of opinion at the meeting, said Baughman, that the most likely agency to develop the area would be the BLM which already owns the land and which has plans in readiness for such a project... lacking only the funds. It was pointed out, also, that the BLM is in a position to do some road work in the area on the basis of range improvement and maintenance.

What is the Lost Forest, why is it there, how does it subsist? These questions have long interested both geologists and foresters, as well as lay people who have visited the spot. The most recent answers and probably the most comprehensive were

Berry found several things:

First, while the Lost Forest pine seedlings show no greater survival ability than other ponderosa seedlings, the seeds of the Lost Forest trees do germinate faster; second, the native rabbit brush gives the seedlings protection from weather, shifting sands, bugs, and animals during infancy; third, the fine sand which covers the area provides a soil cover which helps to preserve the scant moisture from evaporation, and the sands also help to hold other vegetation to a minimum—vegetation which otherwise would compete with the trees for the moisture in the soil.

Berry's study, in which he found ponderosa pollen in the pumice dust from the Mount Mazama (Crater Lake) explosion, showed that the forest existed at that time... at least 6400 years ago. He also determined that precipitation in the area has been much the same for the past 600 years, with the most severe drought from 1920 to 1936.

Of great interest, also, is the existence of the Shifting Sand Dunes just south of the Lost Forest. The dunes have a large-publie interest and present an opportunity for playground development.

Also of great interest is the Fossil Lake. A few years ago, in an article in The Examiner, the late Herbert Aldrich of Ustick, Idaho, a former Lake County sheepman (circa 1900) told of the time (about 1893) when wagonloads of fossils were hauled away from Fossil Lake by a group of professors and students from the University of California.
The Lost Forest of Northern Lake County, long regarded as a true oddity by foresters and geologists, is a relict (or survivor) of a larger forest which once covered a large area, according to the conclusions of Dick Wallace Berry who made intensive studies of the ponderosa pine trees, shrubs, sands and soils of the 9,100 acre area during 1959 and 1960. Now an assistant professor of forestry at the University of Arizona, Flagstaff, Berry conducted his studies as a graduate student of the Oregon State University, and his study has been published as a thesis for Ph. D. degree in forest management.

"An Ecological Study of a Disjunct Ponderosa Pine Forest in the Northern Great Basin in Oregon," is the title of Berry's thesis. In typed form, the document contains 291 pages including many soil, water, and other tables, numerous photographs and illustrations, to provide the most comprehensive study ever made of the Lost Forest.

How this stand of pine trees could have survived in the "Sagebrush Desert" has long puzzled professional and lay people alike, for the ponderosa is native to the higher, wetter mountain areas of Eastern Oregon and other western states. Adjacent to, and even invaded by the shifting sand dunes of Fossil Lake, the Lost Forest is 35 miles from the more naturally situated ponderosa forests of this region.

Berry's studies brought him to a number of conclusions as to how the forest survives:

1. Although the Lost Forest seedlings show no greater survival ability than the seedlings of other ponderosa pine stands, the seeds of the Lost Forest trees do germinate faster.

2. The native rabbit brush in the area does provide the young seedlings with a favorable habitat. During their several years of infancy ... protecting the seedlings from enemies such as weather, shifting sands, bugs, animals.

3. While the Lost Forest is situated in a more arid region than ponderosa trees usually inhabit, the sands provide a soil cover which helps to preserve the moisture for the trees; also, the sands help to hold other vegetation to a minimum ... vegetation which otherwise would compete with the trees for the available soil water.

Berry reasons that the original forest was established when much of the Great Basin was covered with vast lakes, a time when there was much more rainfall in the region. His excavations in the sediments from the Mt. Mazama (Crater Lake) volcanic explosions of 6400 years ago, discovered ponderosa pine pollen among the volcanic dust, giving him evidence that the forest existed where it is at that time; and he further concludes that the forest existed at least on the higher points of the area during the late Wisconsin glacial period.

His studies showed Berry that precipitation in the area has been much as it is today for the past 600 years, with the most severe drought from 1920 to 1936. He says:

"The climate was much cooler and wetter during the Wisconsin glacial period but gradually warmed up and became drier until about seven thousand years ago. A warm dry period, the Hypsithermal, persisted for approximately three thousand years. The dry and warm trend was reversed at about four thousand years ago toward the cooler and warmer climate of the present." (The only puzzle we found in Berry's thesis was that last statement about the "cooler and warmer climate of the present," he obviously meant "cooler and wetter." Editor.)

In making his studies, he and his wife living at the Lost Forest much of the time, Berry was assisted by a special grant from the Weyerhaeuser Company. The Examiner is grateful to J. R. Dilworth, head of the Forest Management Department, Oregon State University, who loaned a copy of the thesis.