The McDonald Forest, Peavy Arboretum, 
and the Oregon Forest Nursery 

by 

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Introduction

In the preparation of this thesis, a number of sources of information were consulted. "The Annual Cruise" supplied a large amount of material. It has recorded quite faithfully the acquisition and development of these forestry projects. Details once forgotten are recalled in this annual.

No previous work on this topic has been found, so in the collection of data a number of people were contacted about incidents, recorded history, and the earlier stories which have been handed down orally since the time of the earliest settlers.

Professor T. J. Starker supplied the start and suggested persons to interview. The writer journeyed to Philomath and visited Mark Phinney, WPA historian, who has a great number of recorded interviews with older settlers. The author used these freely. Mrs. Jerry Henkle of Philomath brought out a lot of interesting information concerning early day logging and the vegetation present on the hills when the first white settlers arrived. Several elderly settlers living near Philomath also contributed information.

This thesis is prepared for the purpose of supplying a source of information on three contiguous forestry projects, the Peavy Arboretum, the McDonald Forest, and the Oregon Forest Nursery, located on the west-side Pacific highway seven miles north of Corvallis.

The need for such a leaflet arises constantly. A number of outdoor clubs visit the properties each year, and there is no condensed information which they may use for reference in visiting parts of the areas which interest them. Casual visitors, guests, and recreationists would profit greatly through such a leaflet.

With the passing of time many incidental stories and historical accounts will be forgotten. This paper attempts to draw together in condensed form all the
many stories which at the present are not available in any presentable form. As new facts, additions and corrections are made certain, this thesis can be the foundation for future work.

Originally planned in two parts—(1) a comprehensive account, and (2) a proposed printed form—this thesis comprises only the informative record.

This thesis is not designed to be voluminous, fact-finding, or the condensation of research data. Items presented herein are judged to be of an interesting nature to visitors especially, therefore generalization rather than specialization is the theme of the paper.

Mary J. L. McDonald

It is of paramount importance in a thesis describing the McDonald Forest to present a brief summary of the life of the person who made possible the acquisition of this area.

Very little is known authentically of the early life of Mrs. McDonald. Her husband was J. L. McDonald, a Nevedan who amassed his fortune in mining. He retired early in the present century and later became interested in Oregon timberlands. He made many purchases both in northern California and southern Oregon. Upon his death his business became the property of Mrs. Mary J. L. McDonald. She became interested in the conservation movement, then gaining momentum under the guidance of Theodore Roosevelt. As the result of this interest she made bequests in the form of forestation scholarships, at first at the University of California and later to the School of Forestry at Oregon State College.

The School was given a $10,000 fund for a forestation scholarship and was given a tract of 640 acres near Prospect, Oregon. The Fellowship is known as the Mary J. L. McDonald Fellowship in forestation, the income from the fund totaling nearly $500. It is awarded annually for graduate studies in reforestation. Mrs. McDonald also authorized the Dean of the School to purchase additional lands near
the Peavy Arboretum and at the time of her death the area aggregated over 3,000 acres.

Her will provided that her Oregon forest property was to go to the School of Forestry. Funds are now in sight for the sale of these properties to enlarge the McDonald Forest to 6,000 acres. The residue will be used for additional scholarships in the School of Forestry.

Historical Accounts

1. The Indians

The first residents in this territory were the Calapooia and Luckiamute Indian tribes. All early settlers relate that the Indians were most friendly to the whites but were constantly warring upon each other. The Indians did not follow the white man's line of travel; their trails followed the ridges and climbed directly over the higher peaks. This was necessitated by a constant watch for possible enemies. Some Indian activity apparently centered close to the McDonald Forest area. A camping ground or shop was located near a spring close to an old pack trail approximately a mile north of the entrance. Here they made many arrows, and arrowheads are still being found in great abundance at this site. (1)

Earlier residents of Soap Creek, on the north side of the main ridge of the forest, mention hearing the funeral diges of Indians as they wound their way down the mountain trails at night to their burial grounds on the Soap Creek flats. This occurred around 1847. Forest Peak, formerly Wrightsman's Peak, rises sharply to the northward from Soap Creek and has some reported Indian fortifications near its summit. Coffin Butte, two miles north of the entrance to the Forest, was named because of its fancied resemblance to a coffin, and because according to Hudson's Bay Company employees, an Indian had been buried on its summit. (4)

Apparently no Indian legends have been recorded. The tribes wandering in this vicinity were removed to the Grand Ronde and Siletz reservations in 1857-58, following the Indian wars of 1855-56. Earlier residents passed down stories of
watching the Indians as they were moved over the California pack trail, bordering the Peavy Arboretum, to their reservations. This was a colorful and memorable occasion as braves, squaws, and families paraded down the trail built by settlers.

Preservation of the Indian names locally is noted in the Luckiamute river, a drainage basin for several creeks originating within the Forest, and the Calapooia, a tributary entering the Willamette from the east, near Albany.

2. The Settlers

The densely forested hills north of Corvallis were at one time nearly bare of tree growth according to stories of settlers and farmers. Scattered old-growth firs grew on these hills with a mixture of oak, maple and hazel brush. An old-timer relates that he could jump over everything that grew on one hill adjacent to the forest, and the whole valley was referred to as a prairie country. In fact, a settler living close to the present forest was forced to obtain his fence rails from a woodlot several miles distant. Oregon bunch grass grew in great abundance, sometimes reaching above a man's waist. (2)

The earliest white settlers arrived in the 1840's following the original pack trail which joined Dallas, Tampico and Corvallis and ran through to California in the days of '49. "With the main road nearly crossing the northwest corner of the present arboretum, it was in an enviable position to record the struggles of those early and sometimes hopeless days,.....but far more important are the thoughts that sped along Oregon's first telegraph which passed by Calloway Creek and followed along the old turnpike.....The only evidence of this early activity, partly grown over staples, can still be seen on some of the trees along the route."

Established in 1856, the line had a short life, due to the intermittent service occasioned by persons cutting the wire and to the shifting of traffic to Albany and Independence.

An incidental story connected with this line concerns the activities of notorious Dave English and his gang of outlaws who were credited with some of the wire snipping. His demise occurred later in Idaho, when, after robbing his best
friend, he was hung by vigilantes.

With the development of rail transportation and the building of the west and east side highways came the decadence of Tampico and the once oft-traveled road became useless. The telegraph line fell into disrepair and the well-worn ruts gradually filled, leaving only a faint line along the hillside where once an important road directed the steps of stuffy pioneers to and from Corvallis and Portland.

Tampico was once believed to be the coming metropolis of the valley. Its importance declined with a shift in traffic and Marysville assumed a more important status. This early name was changed to Corvallis because, as history relates, mail was mixed with that intended for Marysville, California, and vice versa. The name was changed on petition to the provisional government. (1)

Of interest is the account of Grandma Carter (Mrs. Angeline Belear Carter) who lived in the Wells community a few miles northeast from the property. Her father was a Methodist minister who settled at Dallas in 1845. On one occasion he walked from Dallas to the Stewart home near Corvallis, delivered the first sermon in Benton County, and after having dinner returned to Dallas. The only other method of travel was by ox team which would have been slower.

Most famous of early day legends is that of the miner's boot, which was filled with gold. Some would have us believe that it is still intact and is buried somewhere in the Arboretum tract. The detailed account of this happening is as follows:

"In the year 1855 or 56 there came to Corvallis a miner from the gold fields of California. He was on his way to Salem to see his sweetheart but stopped at the Corvallis saloon for spiritual aid. As his stomach filled with spirits his soul became mastered with a feeling of brotherly love. In the due course of time he told the assembled gathering of his successes in the gold industry in California.

"The road to the north led along the foothills toward Tampico, that now
deserted and almost obliterated pioneer town. As our miner reached Calloway Creek, he left the road a short distance and buried his gold. Further acts of the miner cannot be determined at this late date. He was never seen further in this region, it was reported.

Dame Rumor has it that an honest, law-abiding citizen of the Soap Creek district was winding his weary way homeward from what is now the city of Corvallis. As he approached Calloway Creek, he heard strange sounds and determined to investigate. He came upon three men diligently digging as if in search of something. As he stood watching the strange episode, he swears he saw a miner's boot uncovered and that this boot was full of gold. With the successful termination of their labors, the diggers turned and perceived their fellow pioneer. Immediately steps were taken on the part of the former diggers to "shovel out the brains" of the onlooker, who was able to save his head only through a forceful and rapid use of his pedal extremities." (5)

Mark Phinney, WPA historian, in an interview with Jerry Henkle, an old time resident of Philomath, related that although there was little timber next to the Willamette valley, there was good timber on Rock creek (east slope of Mary's Peak) and a growing demand for lumber. The first sawmill in Benton County was started by Jerry Henkles' father in 1853 and located nearly one half mile up the Rock Creek road from its junction with the Waldport-Corvallis highway. The mill first used a sash saw, later obtaining a circular saw. The Philomath College was built in the 1860's with lumber from this mill, as were many of the earlier residences (a piece of the sash sawn lumber from Philomath building is in the Forest School Museum).

An interesting circumstance occasioned by severe weather occurred in the McDonald Forest presumably in 1881. The prairie country of the valley was suited primarily for the raising of cattle. Stockmen relied upon the lush growth of bunch grass and low browse for year around forage, cutting no winter hay for their cattle. This practice continued for many years until 1881 when a very
heavy snow covered the existing browse and brought about a serious shortage in food. "Cattle began to die off like flies." (1) To provide cattle food, the farmers cut many oaks and hauled them down to feed the buds and twigs to their stock. Oak stumps remaining in the Forest are evidence of this cutting. Incidentally, 1881 recorded the heaviest rainfall at the Albany station from the period 1879-1930.

Historical notes about the property are lacking between this early date and 1911. The hills were now becoming rapidly forested with second growth fir and were reportedly good hunting grounds, especially for blue grouse.

"In 1911, lumbering activity was renewed for a short while when an Irishman named Mahoney built a six to seven thousand bd. ft. capacity sawmill on Calloway creek, just east of the present arboretum. For the first time the arboretum experienced the dull thud of the axe, the screech of the saw, the crash of falling timber, the grunts and curses of sweating men--and the further coughs of the steam engine as it turned the shrieking saw which rent the logs and turned out ties which were hauled to the Southern Pacific railroad at Calloway Creek. In 1916 this activity ceased, but eighty acres of the future arboretum had been logged." (5)

A state of dormancy apparently existed from 1916 to 1925 and it was not until T. J. Starker began to cast his eagle eye about, and his heavy footstep resounded upon the hill, that activity again commenced. Our sketchy account of the past is thus brought to the near present, and the record of acquisition and development begins.

Acquisition

An introduction to the history and subsequent development of the McDonald Forest and Peavy Arboretum may be taken from the address of T. T. Munger, on January 23, 1926, when the Peavy Arboretum was dedicated. He said: "'The groves were God's first temples'. Is it profane to say, in the same breath, that the
woods are the forester's real laboratory? Every live son of Adam, be he country-
man or city bred, gets inspiration, refreshment, spiritual exhilaration from the
woods. He likes the trees whether he knows their names or not. He finds them
fascinating. There is something interesting at every step that whets his curiosity;
brings out his primal instincts and shears off the artificial. If he be of a
reflective turn of mind, he will find as Shakespeare did, 'tongues in trees,
books in the running brooks, sermons in stones.'

"This tract is going to serve, and serve most admirably as I see it, a three-
fold purpose. First, it is going to be a classroom with life-size models, with
a hillside as the teacher's blackboard. Second, this is going to be a research
laboratory. Experiments will be tried here that will add to the world's store
of knowledge. ...... Third, this is going to be a demonstration forest, which
should radiate lessons in forestry all over the countryside. ...... Farmers and
timberland owners should be attracted to it to learn how such woodlots should be
handled." (3)

In the dedication of this forestry project is summed up the purpose of the
forest and arboretum. From a beginning of 80 acres, the Peavy Arboretum now con-
tains 188.61 acres. The McDonald Forest has expanded beyond early expectations
to its present (1939) acreage of 4,741.00 acres.

The history of this acquisition is interesting and in a brief summary we shall
trace the story. "The Annual Cruise," yearbook of the School of Forestry, is
responsible for much of the information presented.

The growth of these forestry properties did not mushroom as a spontaneous
idea, for it was apparently in the minds of faculty and students when the school
was first organized twenty-nine years ago. Enrollment in the school increased
and the need for a school-owned property near the campus became evident. "An
arboretum for the School of Forestry—an outdoor laboratory in which experiments
with various tree species and silvicultural practices could be conducted, and a
botanical garden of trees—has long been dreamed of and planned for by the faculty
and students of the school. Definite action toward the realization of this dream
is one of the noteworthy achievements of this year." The writer in the 1924 "Cruise" continues his story. "Though it is recognized as a worthy project, college funds have never been available for such a purpose. Early this year a few of the old grads, headed by T. J. Starker and Sinclair A. Wilson, instituted a campaign to raise money among the alumni and students of the school, with the aim of purchasing a tract of about 100 acres of land close to Corvallis suitable for such forest experimental purposes. A committee representing the alumni, the faculty, the forest club, and Xi Sigma Pi, is conducting the drive."

This Arboretum committee, organized in 1924, spread the need for a school forest and became so active that a member of the board of regents, George M. Cornwall, became a militant champion of the arboretum idea. Through his efforts the board of regents appropriated a special sum in 1925 for the purchase of 80 acres on which is now located the forest club cabin. A short time later, the same group gave another sum to purchase an additional 261 acres which lay to the west of the original tract. As the land had no access to the highway except through other property, 12 acres was purchased to connect the arboretum with the Pacific Highway. Funds contributed through students and alumni were used to purchase this tract. The committee handling the work consisted of Earl Mason and S. A. Wilson, representing the alumni, T. J. Starker, the faculty; James Mielke, Xi Sigma Pi; and Clayton Morse, the forest club.

Besides the Spaulding tract of 160 acres near Mary's Peak, the only other forest operated by the school was an acre plot in the rear of the forestry building. This was a small nursery containing about sixty different tree species. Some of these were used in stocking the arboretum.

The area of the McDonald Forest in 1930 was 392 acres, the arboretum committee buying the additional acreage. Mrs. Mary J. L. McDonald, the principal donor of funds to the area, became interested at this time and gave $3,000, for which 300 additional acres were purchased in 1931. As mentioned by the "Cruise" of that year, "This is a very gratifying start toward the 3,000 acre minimum which has been set as an objective."
McDonald Forest was the official title given these green clad hills in 1932 by the Oregon State Board of Higher Education. The forest totaled 1,300 acres during this year. Later, in 1933, this grew to 1,614, from funds being received from the donor, state-appropriated funds, and through gift of the original arboretum committee.

In this manner, the forest grew from an 80-acre beginning to 2,502 acres in 1935, 3,262 in 1937, and 3,310 acres in 1938. There was a large increase in 1938-39, making a total of 4,741 acres.

While this acquisition was going on, development, road building, and research was being conducted. Camp Arboretum gave the needed impetus to road building, clearing and other necessary improvements. However, before the coming of the CCC's, the main road was being built slowly but surely. In 1933 and 1934 government works administration men carved a road up the canyon sides to the ridge top. Later public works men and fernhoppers during arboretum days and spare time extended the ridge road to Vineyard Hill. The miles of truck trail traversing the present forest and most of the improvements result from activities of the CCC men at Camp Arboretum.

The McDonald Forest

The map of the McDonald Forest on the preceding page shows its extent today. Points of interest: roads, trails and the date of acquisition, are shown. The original copy of the map from which the cut was prepared was made by Herbert Sampert and was also used in the 1939 "Annual Cruise".

The larger portion of the forest is second growth Douglas-fir which has grown during the past century. As one commentator puts it, "The beginning of second growth stands dates from the time the Indians ceased burning." Ages of the fir average between 60 and 100 years, although many of the old growth "wolf trees" may be several centuries old. As shown by the densely stocked younger stands, these gnarled veterans played their part well in foresting the area.

Students under the National Youth Administration have nearly completed a timber survey of the entire acreage. The following volume and site data have
been secured, although a final checking is yet to be made. Figures for 80 acres in Section 8, Township 11 South, Range 5 West, are not yet available, therefore the figures are for 4,661 of the 4,741 total.

<table>
<thead>
<tr>
<th>Species</th>
<th>M bd. ft.</th>
<th>Poles</th>
<th>Cords</th>
</tr>
</thead>
<tbody>
<tr>
<td>Douglas-fir</td>
<td>39,306.09</td>
<td>47,384</td>
<td>17,118.45</td>
</tr>
<tr>
<td>White fir</td>
<td>1,530.45</td>
<td>1,060</td>
<td></td>
</tr>
<tr>
<td>Oregon maple</td>
<td></td>
<td></td>
<td>11,891.43</td>
</tr>
<tr>
<td>Oregon oak</td>
<td></td>
<td></td>
<td>4,495.49</td>
</tr>
<tr>
<td>Red alder</td>
<td></td>
<td></td>
<td>15.50</td>
</tr>
<tr>
<td>Oregon ash</td>
<td></td>
<td></td>
<td>160.00</td>
</tr>
<tr>
<td>Madrone</td>
<td></td>
<td></td>
<td>14.30</td>
</tr>
<tr>
<td>Poplar</td>
<td></td>
<td></td>
<td>6.00</td>
</tr>
<tr>
<td>Willow</td>
<td></td>
<td></td>
<td>2.32</td>
</tr>
<tr>
<td>Yew</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Volumes**

**Site Summation**

Acreages and percentages of site were roughly prepared to portray site conditions. Site is the forest growing capacity of the land measured by taking the height of the dominant trees with respect to age.

<table>
<thead>
<tr>
<th>Site</th>
<th>Acreage</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>234</td>
<td>3.8</td>
</tr>
<tr>
<td>II</td>
<td>1394</td>
<td>24.2</td>
</tr>
<tr>
<td>III</td>
<td>2839</td>
<td>46.6</td>
</tr>
<tr>
<td>IV</td>
<td>1479</td>
<td>23.2</td>
</tr>
<tr>
<td>V</td>
<td>134</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Total in Study</strong></td>
<td><strong>6080</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The above data give a good picture of species represented and the relative forest-producing capacity of the forest. Net volume per acre is not high, nor the site the best, yet forestry practices being conducted over the acreage may eventually produce results which can be applied to similar land best suited to forestry.

1. **Road Development**

The fall of 1939 will see the completion of the road following the main ridge which runs northwest and southwest through the entire forest. Eventually a network of branch utilization roads will follow the streams and ridges. There are now four entrances to the forest: one from Lewisburg on the Pacific highway, one by way of Sulphur Springs, the main entrance on the highway above Lewisburg, and
the new entrance by way of Oak Creek on the west boundary. The last-named portal is only five miles from the campus.

2. Fire History

In 1938 a study of stumps of wolf trees was made to determine fire history on the Forest. It was discovered that the Forest has been subject to fire for at least 291 years or since 1647, further, that no 50 year period has been free from fire. The most severe fire seems to have occurred in 1848, a fact borne out by the large number of second growth trees of approximately the 90 year age class. (A cross-section of one of the fire-history trees is on display in the basement of the Forestry building.)

3. Trail Development

As shown on the map (p. 9a), there are numerous trails which lead to all parts of the forest. Forestry students use these on field trips, botanists in nature study, and wildlife students in making surveys. One trail is called the "nature study trail." It starts on the west side of the nursery lake and ends on the ridge road, the total length being about a mile and a half. Botanists have marked many of the native plants with name plates, as an aid to identification of the plants. In emergency the trails may be used for fire protection.

Research

Located throughout the forest are numerous research plots. To attempt to describe the many experimental areas either roughly or in detail is not within the scope of this thesis. The major plots accessible by road or trail are briefly commented upon here. In many of the plots, not enough time has elapsed for any definite conclusions. Records are being made yearly, and eventually results can be shown.

1. Ponderosa Pine Race Study.

Perhaps one of the most interesting of all the plots in the forest is the race study being carried on in cooperation with the Pacific Northwest Forest Experiment Station. Ponderosa pine planting stock grown from seed taken on ten
different localities throughout the natural range of this pine were planted together on several experimental areas in the Pacific Northwest. One such area is located on an extremely dry site in the McDonald Forest.

The purpose is to find the relative growth rates of a series of geographical races of ponderosa pine. The study was started in 1927, some additional races being planted in 1929. Striking differences in branching habit, color of foliage, number of needles, as well as rate of growth, are already noticeable.

2. Ponderosa Pine Pruning Study.

In December, 1954, several rows of ponderosa pine in the race study plot were pruned to determine the effect of removal of different amounts of crown. Where more than one third of the live crown is removed the resulting reduction in leader growth apparently overbalances the gain in production of clear wood.

3. Selective logging.

Fifteen acres occupying the ridge on top of the Soap Creek divide have been selectively logged. Subsequent snow breakage and blowdown are apparent.


Closely adjoining the selective logging plot are the slash disposal experiments. Various methods of slash disposal were carried out. The resulting differences in establishment of reproduction are being checked to compare the effectiveness of the method of slash disposal.

5. Plant Succession on Douglas-fir Burn.

Ten plots were established to study the steps in natural re-vegetation of a burn on cut-over land. The study has been kept up during succeeding years, and records are accumulating to show the invading species which re-establish on the areas; and their effect upon reproduction.


Soutrage is the litter on the forest floor. Removal of this litter may influence growth of trees on the area. Such results will necessarily be determined only after a long period of time, but present evidence shows surface soil to be in much better condition on check plots than on plots where soutrage was removed.
7. Wolf tree eradication.

A number of old growth firs were girdled to cause gradual death and deterioration of these very branchy trees. When felled, they knock over a large number of adjoining young trees, but when girdled they fall apart slowly and do not injure small trees in the understudy. The critical factor is the time required to reduce these snags to a point where they will not represent a fire hazard.

8. Borggreve thinning.

This is a system of thinning in which the largest dominant trees, as well as the suppressed trees, are removed. The suppressed trees are removed before they become a total loss, the largest merchantable trees are taken out, and the remaining trees which have been self-pruned in the stand remain to produce a high proportion of clear lumber.


Another thinning experiment is being carried on to determine the effect of pruning and thinning to see if total increment as well as quality, is increased by pruning and thinning.

A forestation survey is now in progress on the forest to determine whether natural conditions will suffice to restock the area, what species are best adapted to the site, site deterioration, and special uses which should be considered in management plans.
Property in McDonald Forest

Following is a list of purchases of property now included in the McDonald Forest.

<table>
<thead>
<tr>
<th>Year</th>
<th>From</th>
<th>Sec.</th>
<th>T.</th>
<th>R.</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1926</td>
<td>M. R. Elliott</td>
<td>35-36</td>
<td>10S</td>
<td>5W</td>
<td>261.79</td>
</tr>
<tr>
<td>1927</td>
<td>T. J. Starker</td>
<td>35</td>
<td>&quot;</td>
<td>&quot;</td>
<td>40</td>
</tr>
<tr>
<td>1930</td>
<td>J. Carnegie</td>
<td>36</td>
<td>&quot;</td>
<td>&quot;</td>
<td>80</td>
</tr>
<tr>
<td>1930</td>
<td>G. &amp; W. Read</td>
<td>36</td>
<td>&quot;</td>
<td>&quot;</td>
<td>40</td>
</tr>
<tr>
<td>1931</td>
<td>R. C. Thompson</td>
<td>35-36</td>
<td>&quot;</td>
<td>&quot;</td>
<td>140</td>
</tr>
<tr>
<td>1931</td>
<td>H. Auld</td>
<td>36</td>
<td>&quot;</td>
<td>&quot;</td>
<td>40</td>
</tr>
<tr>
<td>1931</td>
<td>S. Smith</td>
<td>34-35</td>
<td>&quot;</td>
<td>&quot;</td>
<td>330</td>
</tr>
<tr>
<td>1932</td>
<td>S. Gardi</td>
<td>3</td>
<td>11S</td>
<td>&quot;</td>
<td>165.51</td>
</tr>
<tr>
<td>1932</td>
<td>R. Davenport</td>
<td>3</td>
<td>11S</td>
<td>&quot;</td>
<td>160</td>
</tr>
<tr>
<td>1932</td>
<td>J. Carnegie</td>
<td>25</td>
<td>10S</td>
<td>&quot;</td>
<td>160</td>
</tr>
<tr>
<td>1932</td>
<td>P. Carlson</td>
<td>3-10</td>
<td>11S</td>
<td>&quot;</td>
<td>195</td>
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<tr>
<td>1933</td>
<td>Albany State Bank</td>
<td>9</td>
<td>11S</td>
<td>&quot;</td>
<td>310</td>
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<tr>
<td>1933</td>
<td>P. Harwood</td>
<td>2</td>
<td>11S</td>
<td>&quot;</td>
<td>78.70</td>
</tr>
<tr>
<td>1934</td>
<td>C. Lawrens</td>
<td>25</td>
<td>10S</td>
<td>&quot;</td>
<td>80</td>
</tr>
<tr>
<td>1934</td>
<td>A. Stevenson</td>
<td>4-9</td>
<td>&quot;</td>
<td>&quot;</td>
<td>240</td>
</tr>
<tr>
<td>1937</td>
<td>F. Vincent</td>
<td>4</td>
<td>11S</td>
<td>&quot;</td>
<td>80</td>
</tr>
<tr>
<td>1938</td>
<td>Johnson ) or</td>
<td>5</td>
<td>11S</td>
<td>&quot;</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>Owen ) Vincent</td>
<td>5</td>
<td>11S</td>
<td>&quot;</td>
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<tr>
<td>1938</td>
<td>Cockerham estate</td>
<td>17-18</td>
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<td>1938</td>
<td>M. Ruminski</td>
<td>4</td>
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<td>H. Auld</td>
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Total: 4741.00

The Peavy Arboretum contains 188.61 acres.
Peavy Arboretum

On January 23, 1926, was dedicated the George W. Peavy Arboretum. The Annual Cruise of that year contained on its dedication page: "In honor of our newly acquired laboratory which we love and cherish doubly so because of the name it bears—that of our Dean, friend and brother to all foresters."

With the acquisition of additional land, the present acreage of 188.61 was set aside for arboretum purposes.

The arboretum begins at the main entrance to the school property. As one drives along the graveled road through this botanical garden of trees he notices larch, pines of all description, redwoods, bamboos, big trees, among the many others planted there. While still young, they will in time form an avenue of trees.

Enclosed by the arboretum is the Oregon Forest Nursery, an account of which follows: Located also in the arboretum are many experiments. For the purpose of finding these readily, a map of the arboretum and the experiments, is included.

1. Plots, Plantings and Experiments

1. Second growth Douglas fir (Pseudotsuga taxifolia) with a scattering of oak (Quercus garryana) ash, (Froxinus Oregona) and madrone.

2. Methods of planting Ponderosa pine. (Pinus ponderosa)

3. Black Locust planting (Robinia pseudoacacia)

4. Chinese elm (Ulmus pumila) Osage orange (Toxylon pomiferum) Caragana (Caragana arborescens), with interplanting of pine.

5. Forest Club cabin.


7. Institute of Forest Genetics pines.

Seed for this valuable study was received from the Institute of Forest Genetics in 1929 and planted in February, 1931. The purpose of this study is to find fast growing vigorous pines resistant to insects
disease and drought. Tragically, fire destroyed part of this experiment in 1938.

8. Western white pine (Pinus monticola)
11. Institute of Forest Genetics pines.
12. Atlas cedar (Cedrus atlantica)
13. The Post Farm.

A full account of this experiment has been published as Oregon State Experiment Station Bulletin No. , by T. J. Starker. This valuable study was established during the college year of 1927-28, and is located on a site of uniform character contiguous to the northwest boundary of the nursery. Posts of uniform size and number have been planted to determine the lasting qualities of different species of wood. In contact with the soil some are treated with preservatives, others are untreated.

15. Northern white cedar (Thuja occidentalis), Patagonia cherry, Japanese elm (Ulmus japonica) Balsam fir (Abies balsamea), Ginkgo tree (Ginkgo biloba), Junipers, and a Manchurian ash, (Fraxinus Manchuria).
16. Big cone cypress (Cupressus macrocarpa), Italian cypress (Cupressus sempervirens), Junipers, Cypress species, Hinoki cypress (Chamaecyparis obtusa), Japanese Sawara tree (Chamaecyparis pisifera), Chinese juniper (Juniperus chinensis), Oriental arborvitae (Thuja orientalis), Macnab cypress (Cupressus macnabiana), and Northern white cedar (Thuja occidentalis).
18. The Pinetum.

These firs were planted at different spacings to determine the spacing best for growth and for production of knot-free lumber.


22. Ponderosa pine.


24. Black Walnut (Juglans nigra).

25. Big tree (Sequoia washingtoniana).

26. Redwood (Sequoia sempervirens).

27. Chinese elm (Ulmus pumila).


29. Oregon myrtle (Umbellularia californica).


31. Ponderosa pine.

32. Port Orford White Cedar (Chamaecyparis lawsoniana).

33. Douglas-fir.

34. Camp Arboretum (CCC Camp)

35. Western larch (Larix occidentalis) and Oriental cedar (Thuja orientalis).

36. European larch (Larix europea) and Oriental cedar.

37. European larch (Larix decidua).

38. Larch (Larix dahurica).

39. Cascara (Rhamnus purshiana)

40. Red alder (Alnus rubra).

41. Mixed conifers.

42. Northwest conifers.

43. Big tree.

44. American arborvitae (Thuja occidentalis).
45. Slash pine (Pinus caribaea).
46. Pinus holopensis and Chestnut (Castanea dentata).
47. Port Orford White cedar.
48. Mixture of spruce, white pine and cedar, replanted in 1933 to maritime pine (Pinus maritima).
49. Black locust.
50. Port Orford cedar.
51. Ponderosa pine.
52. Maritime pine.
53. European larch and Norway spruce (Picea excelsa).
54. European larch.
55. Atlas cedar.
57. Ponderosa pine.
59. Ponderosa pine.
60. Spruces: Norway, Black, Engelman, Colorado blue and Exotics, Picea obovata and Picea glehnii.
61. Juniperus virginiana, Eastern red cedar.
Oregon Forest Nursery

The nursery was established in the fall of 1925 under the Clarke-McNary Act, Section 4, and is conducted cooperatively by the State of Oregon Forestry Department and the United States Forest Service. All administration is centered in the office of the State Forester at Salem.

One of the chief objectives is the production of seedlings in order to supply Oregon farmers with trees for woodlands, shelterbelts and windbreaks. Groups such as 4-H Clubs and other bodies are also served. Trees raised at the nursery are supplied at cost plus transportation.

Because the nursery site was formerly covered with a dense stand of second growth Douglas-fir, ash, oak, cascara, maple, and wild crab apple, we had a big problem in making the area workable. When brush and logs were burned the shooting of stumps commenced.-----It certainly looked good after all the hard work to see a bright plow turn the black soil under. March 25, 1926, saw the construction of the first thirty-foot seed beds. About five and a quarter acres was the original area.

"The end of the first year of the nursery showed 200,000 seedlings ready to be transplanted, and over 37,000 ready for distribution throughout the state." Such was the story by Vern E. McDaniels, who has been in charge of the nursery since its beginning.

In 1936 additional land was purchased, bringing the total acreage to twelve. 1937 saw the production of over 800,000 trees, and ultimate plans are for a million conifers and a half million hardwoods.

A large variety of trees are grown, the species varying according to the season of the year and the demand. Green ash, Chinese elm, Russian olive, Black locust, Ponderosa pine, Scotch pine, Austrian pine, Douglas-fir, Caragana, Norway spruce, European larch, Cottonwood, Poplar, Willow, Port Orford cedar, Maritime pine, Western red cedar, Big tree, Redwood, Sitka spruce, and Cascara are grown at the
nursery. In a booklet entitled "Planting and Care of Trees on Oregon Farms," Lynn F. Cronemiller, Extension Forester, Oregon State Board of Forestry, makes recommendations and suggestions for planting and growing these trees.

Buildings at the nursery are the nurseryman's residence (which will be changed into a crew house and office with the completion of a new residence on the north side of the nursery); a packing and utility shed, with cold storage department; a large machine storage shed; and a tool house.

The Skinner system of overhead sprinklers was installed in 1938 for summer irrigation of seed beds. Pipes running the length of the beds are turned by automatic water motors to distribute moisture evenly. Water is delivered through 2150 feet of 5" treated wooden pipe from the artificially created lake above the nursery (Lake Cronemiller) to the nursery, where the pipe branches into 4" wooden pipe. This water in turn is fed into the lines of the sprinkler system.

Cover crops grown in rotation in the nursery are Austrian field peas and winter barley for fall sowing and white sweet clover, Willamette strain, for spring planting.

**Places of Interest**

**A. Entrance Maples**

As one turns in the entrance to the Peavy Arboretum, perhaps the first noticeable items are the two large maples standing at each side of the road. These two maples were planted in 1876 by Tom Read. They were not planted as trees, however, but as posts in a "snake and runner" fence. Many of these small maple posts grew and became trees which were later cut for fuel because they interfered with the highway. The two remaining trees are now about 30" in diameter and both lean to the westward.

Professor Nicholas Tartar was in Oregon State College at the time that the fence was constructed and is one authority for the above information. The story is also corroborated by Kenneth Read, Forestry '41, Grandson of the man who planted the post.
B. Schreiner Memorial

Continuing further along the main road past the arboretum and nursery, the road makes a left turn. In this turn is a native stone monument at the top of which is a bronze plaque portraying a man peering through a transit. This memorial and the road leading to the top of the ridge were dedicated during Arboretum Day, 1936, in honor of Fred J. Schreiner, one time graduate and instructor at Oregon State College, who died on November 16, 1934.

In the dedication page of the 1935 Annual Cruise, the following tribute to Schreiner is given:

"In the passing of Fred J. Schreiner on November the sixteenth, nineteen hundred thirty-four, we student foresters have lost a brother; the world, a true forester. For seven years Fred, a graduate of Oregon State College, had taught his students not only the technicalities of forest engineering but the lessons of perseverance, cheerfulness and faith in a great cause. In the field or in the classroom Fred's life permeated the surroundings with the richness of wholesome living.

A fitting tribute to a forester is the honor of having a beautiful mountain peak named in his honor—for his services to the state and to the group of men with whom he worked. Schreiner's Peak raises its head above the surrounding peaks in the Mt. Hood National Forest. Perpetually will the mountain look up to its mighty neighbor, Mr. Hood, and down on the lower tree-clad slopes of the Cascades. For his services in preserving these trees which he so loved, his name shall be remembered by men."

The plaque in the memorial was made at the college foundry and the memorial itself erected by the CCC.

C. Forest Club Cabin

From the memorial, a side road leads left to the Forest Club cabin, which was designed as a meeting place and recreation center for forestry students.

"The work on the cabin was started August 22, 1925. The logs were peeled from that date to September 4, and this was none too early for already the fir bark was
getting tight. The logs cut on the arboretum tract were hauled to the site and the foundation 32' x 52' was put in by September 15 when the first term of school started. The building was put up by students and faculty during week-ends and completed by January 23, 1926, the time of the official dedication of the arboretum. In 1932 a new fireplace was added to the west end of the cabin to match the one at the east end.

Arboretum Day held in May each year centers around this cabin. Here, in the grassy glade fronting the cabin, genuine bean hole beans, brown bread, applesauce, ice cream, and hamburgers are served in immense quantities every year. Steak feeds and smaller meetings are held in the cabin occasionally. The picnicking area in front of the cabin is also well utilized. In the summer of 1940 the cabin was the site of the first N.T.A. student fire fighting squad.

Recent improvements around the cabin site have been carried on by the CCC. A new rustic parking place has been completed. The sturdy cement stove is to be replaced by a kitchen; an information booth is to be built.

D. Lake Cronemiller

Following the Schreiner Road west from the forestry club cabin is the artificial reservoir known as Lake Cronemiller. This pond was formed in a natural hollow an earth fill dam in order to furnish the nursery with a summer water supply. Enrollees from Camp Arboretum did the work and also built a smaller diversion dam on Callaway Creek, with a pipe line to feed the reservoir.

The lake covers an area of two and three-quarter acres and when full contains nearly eight million gallons. The lake is expected to maintain its level even during dry summers.

The site now occupied by the nursery dam was once a swamp and was notorious as a miring down place for cattle roaming the country. A number of prize stock were lost in this quagmire and eventually it was fenced to prevent this heavy loss. A humorous touch was added when some "explorers" found some bones in the swamp which
they thought belonged to a pre-historic monster. However, when a cow bell was found among the bones, the error became apparent.

In May, 1938, the lake was stocked with Utah rainbow and Lochleven trout. When some were removed in March, 1939, they showed very marked growth; since that time, however, the fish have shown very poor growth.

E. Peavy Cabin

Located on Vineyard Hill, three miles by road from the club cabin, is a rustic stone and log cabin which was presented to Dean Peavy by alumni and students in 1935. Overlooking the Willamette Valley, this cabin has become a landmark. On a clear day, many of the snow-capped peaks in the Cascades can be seen from the site.

F. Camp Arboretum

Camp Arboretum, the CCC camp located just inside the main entrance to the arboretum, has been responsible for the majority of the projects on the nursery, arboretum and forest. The camp was built between April 1, 1935, and July 3, 1935, by a spike camp of veterans. The main camp strength arrived on May 18, when the real project work was started. Among projects completed and in course of completion are the following:

1. Thirty miles of truck trail, the last section of which should be finished in the fall of 1939. The main truck trails have been surfaced with crushed rock.
2. Artificial lake and diversion dam.
3. Cooler-packing house, a ten-car garage, a five-room residence for the nursery.
4. 3,370 rods of fence around the boundaries, repairing that already there.
5. Ten miles of telephone line from the entrance to Dean Peavy's cabin.
6. A parking place, kitchen and information booth around the club cabin.
7. Twelve miles of fire break and hazard reduction.
8. Installation of wood pipe and sprinkler system for the nursery.
9. Assisting in the nursery.

An interesting feature of the camp is the sign shop where rustic signs are made
and sent to parks, protective areas and administrative state forestry buildings. Experiments are made to determine the best finish and method of construction. Many examples of this work are evident in the Forest where plantings, roads, trails and entrance signs are marked with rustic signs.

4. Use of the Arboretum

The School of Forestry desires that the greatest possible use of the Arboretum be made not only by students, but others who are interested in trees, forestry and wild life. To secure this it is necessary to establish certain policies for the benefit of all users of the tract.

1. The axe should not be used without permission, and then only sparingly.

2. Wild flowers are a part of the forest, are very perishable after collection and give the collector but momentary pleasure. Left to grow in their natural habitat, they will multiply and give pleasure to many.

3. Fire is an enemy to the forest. Because of the many invaluable experiments in the forest we cannot take chances with open fires. They may be built only in fireplaces.

4. Clean up and burn or bury all debris. Others may then enjoy the spot again.

5. Gates and stiles were made to use. To climb over usually means a broken fence.

6. Recreation facilities are here for your direction and comfort. They should be left in proper condition for the use of others.

7. Keep all water supplies pure by observing the well-recognized rules of sanitation.

8. Over-night camping is not possible at present.

The arboretum is state property and is by law a game refuge. You are welcome to the arboretum; please appreciate the courtesy by observing the code.
REFERENCES.

(1) Blake, E.A. Farmer Sulphur Springs Road, near McDonald Forest. Interview.

(2) Henkle, Jerry, interview.

(3) Munger, T. T. Dedication Address. Annual Cruise, Oregon State College, School of Forestry, Corvallis, 1926.

(4) Phinney, Mark, Interview with Grandma Carter of Philomath

(5) Starker, T. J. Professor of Forestry, O.S.C. Interview.