LIFE AND THE WILDERNESS

by

Samuel J. Mammano

A thesis

Presented to the School of Forestry in Partial Fulfillment of Requirement For the Bachelor of Science Degree.
When speaking of "wilderness areas", primitive or superlative regions, just what is the conception by Mr. Average Citizen? Does he think of something practical and fundamentally natural? His idea of a wilderness area is comparable to that of the man who when asked what a forest ranger was replied, "He's one of those fellows that saws limbs off the trees in the park." This is not perhaps a fair measure of the extent of public knowledge, but it is true that the normal urban citizen feels that the idea of setting aside huge scenic wilderness areas is simply another armless brain-child of a heavenly dreamer.

"Life and the Wilderness" is written for the purpose of clarifying these misty conceptions of a wilderness area and to suggest a definite workable plan through which the federal government can set aside our few remaining wilderness regions in harmony with its present economic and public policy. For the information briefly summarized in the pages that follow the author is indeed grateful to those who have fought long and uncompromisingly for the preservation of our heritage. Especial thanks are due to the Superior National Forest for graciously furnishing much needed information, and to the Wilderness Society for much volunteered ideas and articles. Particularly does the author wish to thank the faculty of the School of Forestry.

Samuel J. Memmeno
5/20/37

Oregon State College
# TABLE OF CONTENTS

**PART I.**

A salutation  --  --  --  --  --  --  --  --  --  --  --  -- 2  
Definitions --  --  --  --  --  --  --  --  --  --  --  -- 3,4  
Value of Wilderness Areas to Mankind  --  --  -- 6  
Arguments Against Primitive Areas  --  --  -- 9  
Evaluation of Conflicting Arguments  --  --  -- 10

**PART II. (A Plan)**

Introduction  --  --  --  --  --  --  --  --  --  --  --  -- 15  
Degree of Development: Controls  --  --  -- 15  
Aims of the Plan  --  --  --  --  --  --  --  --  --  --  --  -- 17  
Potential and Established Forest Wilderness Areas  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  --  -- 20  
A Representative Map  --  --  --  --  --  --  --  --  --  --  
Bibliography  --  --  --  --  --  --  --  --  --  --  --  -- 21
OH BLESSED WILDERNESS
(a salutation)

... Here is the melody of silence
where the song of the wind in the tree-tops,
the music of rippling brooks, the twittering
of birds, the piping of insects, the trickle
of a tiny spring—even the fall
of a leaf to the ground—may be heard.
... Help to preserve this perfect
beauty. Keep this spot unsullied, that
weary ones may find its peace, that
joyous ones may hear its laughter,
and that all may receive its message
and its blessing. We plead for this
as we pass...
"How we berate past generations for its shortsightedness in the use of national resources so shall the next generation berate us."
I.

When Horace Greeley commanded that men go West he was not thinking solely in terms of gold dust in a money belt but was striking instead at the core of all great human achievements—the quest for new adventures. The conquest of the wilderness is as old as man. The encroachment and destruction of America's fine timber lands was sound philosophy during the days of our forefathers. Timber had to be cut, land had to be cleared and water corralled for the sole purpose of self-preservation and protection.

I say this philosophy was sound in the days of our ancestors but not so today. The last twenty-five years has seen a period of rapid change in the life of the country. No longer is the quest to wrest a livelihood from the soil of paramount importance. Civilization to the people of the present is an everyday, commonplace matter. Good roads and modern improvements and luxuries are the regular order of things. A spot where such things does not exist, where a sparkling stream flows unmolested and virgin nature still reigns supreme, has become novel, interesting, and valuable. The out-of-doors as a place to play has increased three-fold.

The saving of Nature is not a new idea, for Thoreau, more than 80 years ago, wrote: "Our life would stagnate if it were not for the unexplored forests and meadows which surround it. We need the tonic of wilderness. We can never have enough of Nature. We must be refreshed by the sight of inexhaustible vigor, vast and titanic features, the sea-coast with its wrecks, the wilderness with its living and decaying trees."16

Before going any further with this discussion let me clearly define some of the apparently ambiguous terms which have already been used and will continue to be throughout this paper:

1. "Wilderness Areas" are regions which contain no permanent in-
habitants, possess no means of mechanical conveyance, and are sufficiently spacious that a person may spend at least a week or two of travel in them without crossing his own tracks. The dominant attributes of such areas are that visitors to them have to depend exclusively on their own efforts for survival, and that they preserve as nearly as possible the essential features of the primitive environment. Therefore, they are large roadless areas where primitive pioneer modes of travel and outdoor life may be enjoyed. The size may vary from 200,000 acres to 500,000 acres, or more.

2. "Primitive Areas" as used here are synonymous to wilderness areas.

3. "Natural areas" differ from wilderness regions in that they are set aside primarily to preserve typical examples of the original virgin forest for purposes of ecological and silvical research. These areas will be of much smaller acreage from which recreation users as well as economic users will probably have to be largely excluded.

4. "Wilderness Zones" are strips or zones of primitive areas along natural divisions such as the tops of mountain ridges or along the course of a particularly scenic stream. A typical example is the Green Mountain Ridge trail (Appalachian trail) which stretches along the crest of the Appalachian mountains from Maine to Georgia.

"There remains today in the United States only nine areas of 1,000,000 acres or more, eighteen areas of 500,000 acres or more and thirty-eight areas of 200,000 acres or more (see page 20) which may still be set aside as wilderness tracts without involving any serious sacrifice of commercial values, any great risk to adequate fire protection, or any major changes in existing highway plans. These tracts total about 29,950,000 acres. Approximately 8,425,000 acres in the East is almost entirely covered by forest. The 18,525,000 acres in the West includes at
least 7,000,000 acres of non-forested land, thus leaving about 20 million acres in wilderness condition. In view of the fact that 486 million acres of forest land in the country would remain subject to highway development, it would not seem unreasonable to bar mechanized development from 20 million acres. But why should we set aside so much area for the enjoyment of a few? Why not follow the present law of doing that which will bring the greatest good to the greatest number?

Before going further in answer to the above questions let us look at some figures proving the increased popularity of outdoor recreation:

<table>
<thead>
<tr>
<th>Year</th>
<th>Nat'l. Parks</th>
<th>Nat'l. Forests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1916</td>
<td>237,357</td>
<td>3,160,000</td>
</tr>
<tr>
<td>1917</td>
<td>333,268</td>
<td>3,222,265</td>
</tr>
<tr>
<td>1918</td>
<td>311,661</td>
<td>3,064,344</td>
</tr>
<tr>
<td>1919</td>
<td>594,835</td>
<td>4,832,671</td>
</tr>
<tr>
<td>1920</td>
<td>756,654</td>
<td>5,633,420</td>
</tr>
<tr>
<td>1921</td>
<td>376,567</td>
<td>6,172,942</td>
</tr>
<tr>
<td>1922</td>
<td>938,338</td>
<td>6,927,338</td>
</tr>
<tr>
<td>1923</td>
<td>1,168,886</td>
<td>10,543,893</td>
</tr>
<tr>
<td>1924</td>
<td>1,258,178</td>
<td>11,394,366</td>
</tr>
<tr>
<td>1925</td>
<td>1,495,372</td>
<td>15,279,730</td>
</tr>
<tr>
<td>1926</td>
<td>1,670,955</td>
<td>17,112,024</td>
</tr>
<tr>
<td>1927</td>
<td>2,173,120</td>
<td>18,523,888</td>
</tr>
<tr>
<td>1928</td>
<td>2,328,089</td>
<td>23,008,997</td>
</tr>
<tr>
<td>1929</td>
<td>2,496,080</td>
<td>31,758,231</td>
</tr>
<tr>
<td>1930</td>
<td>2,607,499</td>
<td>31,904,515</td>
</tr>
<tr>
<td>1931</td>
<td>2,998,451</td>
<td>32,228,613</td>
</tr>
</tbody>
</table>

There is considerable duplication in the records presented in this table. Nevertheless any resulting inaccuracy is not of serious moment in face of a 750 per cent increase in National Park use and a 920 per cent increase in National Forest use during the brief period of fourteen years! Outdoor recreation therefore is premeditated. People are conscious of a definite value received and thus seek it.

No doubt this is all admittedly so, yet one inevitably asks himself, what's the use of squabbling over a mountain range which will never be logged off; and if it isn't logged off it will probably burn up anyway. Why preserve these large areas when people are travelling in luxurious
autobikes and not with a 50-pound pack on their backs?

The question resolves itself into one of balancing the total honest happiness which will be obtainable if the few remaining unsullied areas are perpetuated against that which will prevail if they are desecrated.15

First, therefore, must be considered the extraordinary value and benefits of the wilderness to Mankind; second, to list the arguments against and disadvantages of primitive regions; third, to properly weigh the relative importance of these conflicting values; and finally, to formulate a practical and just plan of procedure.

VALUE TO MANKIND:

Benefits can best be classed under three separate headings; those of the physical, the mental, and the pure esthetic type.

To enumerate the benefits of life in the outdoors to one's health would be simply tedious repetition. In terms of dollars and cents just how much is this worth to many individuals? "Any number of well-to-do sportsmen are paying from $3,000 to $10,000 for a single big game trip to the wilderness regions of British Columbia, Alaska, Mexico, Africa and Siberia."10 How about the fellow whose pocketbook prevents him from taking these expensive excursions, and who probably has more real need of recreation? If the old wilderness hunting grounds, which have long been destroyed, still existed he could make a trip into the wilds for less than the cost of a week's hotel bill. The development of the body under majestic trees is distinguished by a soundness, stamina and élan unknown amid normal surroundings. There is no tangible measurement of these values. The fundamental urge of physical exploration, of daring the unknown, of seeking new thrills, is all a manifestation of trying to satisfy one's craving for adventure. There are numerous outstanding examples of this intense desire for new worlds to discover in men such
as Charles Lindbergh, Admudson, Stefansson and others.

In our present-day coddled and pampered world people derive extreme satisfaction in doing things for themselves which is possible only in the wilderness or on the sea. One is appalled at the preponderance of criminals and racketeers in our larger cities, yet crime in itself is an outlet for cooped-up adolescent youths who crave adventure and thrills but have no other avenue available.

What of the value of the pure physical and emotional ecstasy when standing at the brink of an open ledge looking down upon an unknown lake cradled in a pocket of timber like a deep-set emerald? Even the hardy seasoned woodsman will boast of the beauty of an unnamed lake he has just discovered.

What of the physical reward of paddling along a glistening, serene shoreline supported by a belt of solid dark-green beauty such as is found in the Superior Wilderness Area? Be it understood that by canoe travel is not meant "paddling up the noisy wake of a motor launch and portaging through the back yard of a summer cottage. When that day comes canoe travel will be dead, and dead too will be a part of our Americanism. Joliet and LaSalle will be words in a book."10

The Trail Rider trips that the American Forestry Association has initiated is not merely a novelty or fad which will lose its appeal in the space of a year. It is an expression of the desire for invigorating outdoor activity not possible within the confines of a noisy book-shelved city. Mr. Aldo Leopold well puts it:

"The day is almost upon us when a pack train must wind its way up a gravelled highway and turn out its bell mare in the pasture of a summer hotel. When that day comes the pack train will be dead, the diamond hitch will be merely a rope, and Kit Carson and Jim Bridger will be names in a history lesson."
Note the eye-sore created by so small a thing as a tent as compared to the untroubled wilderness in the upper picture.
One must not lose sight of the one psychological factor tending to increase the use of the primitive for recreation which is: As society becomes more and more mechanized, and since human beings still require compensations, the need for an escape will also expand. It is becoming difficult for many people to stand the nervous strain, the high pressure, and the drabness of their lives. To escape these abominations constantly growing numbers will seek the primitive for the finest features of life.

A touch of the solitude now and then is an incentive to independent thought. It fosters self-reliance and mental independability. The wilderness has inspired many of our greatest thinkers—men such as Henry Thoreau, Thomas Jefferson, John Muir, Mark Twain, and Gifford Pinchot. Thoreau stood still and made progress.—"The live long day—a-studyin'—the-habits—of the bull-frog." 12

It is in the wilderness that the most intimate and deepest spiritual experiences may develop and great decisions made. Here also is Nature's place for repose and convalescing. Bertrand Russell has skilfully amplified this idea in his essay on "Machines and the Emotions." He expresses the significant conclusion that "many men would cease to desire war if they had opportunities to risk their lives in Alpine climbing." 15

All too truthfully has it been said that the artist doesn't live who is able to capture the true essence of a mountain sunset. There is an unknown vital quality which the brush cannot duplicate. When one looks at a sunset he is living in the midst of heavenly beauty. Not so with man-made art. The same peculiarity is noted when one takes a panoramic snapshot of a sheer stupendous mountain range. When one shows this picture to a friend he is surprised and disappointed at the lack of enraptured enthusiasm on the part of the recipient. He hurriedly strives to explain the awesome, all-engulfing beauty of the scene but fails miserably. The
Man must forever discover that Nature is the only true artist. Note the added beauty of a single row of trees.
photograph has left out the one basic quality which makes Nature the only true artist in the universe. "The sheer stupendousness of the wilderness gives it a quality of intangibility which is unknown in ordinary manifestations of ocular beauty. When one looks at and listens to the wilderness he is encompassed by his experience of beauty, lives in the midst of his esthetic universe." This is not so with a painting by Rembrandt!

Man-made art is static. Once a Beethoven symphony or a Shakespearean drama has been completed they are stagnated. On the other hand the wilderness is in a constant flux—seedlings are growing, trees are blowing over, the wind is whistling through the tree tops, the call of a distant grouse is heard, the unique odor of the balsams and of freshly-turned humus is prevalent in the air, while the mist can be seen rising from mountain meadows. It is the satisfaction of all the senses at the same time, blended into a unity that can only be appreciated with leisure and which is ruined by artificiality.

Notice the contrast in the two pictures on page 8a produced by the addition of a row of trees. These photographs were taken in the state of Massachusetts whose courts have recognized the right of the state to the extent of prohibiting the obnoxious use of billboards on the highways. It is trying to recapture the beauty of natural things by artificial plantings.

ARGUMENTS AGAINST PRIMITIVE AREAS.

First, is the objection to inadequate fire protection facilities due to lack of roads. This is an argument which has much weight and is generally advanced by the Forest Service.

Second, is the argument advanced by utility men and so-called public spirited economists which is, in short: "Why look up many natural re-
sources such as valuable mineral deposits and potential water-power merely for the pleasure of a few? Why should valuable mature timber go to rot through overmaturity?"

Third, the universal complaint advanced from every side: "Why should we set aside a vast area for the enjoyment of a few hundred people when roads would make that area available for half a million? Aren't we obligated to consider what will bring the greatest good to the greatest number?"

These three arguments form the nucleus of all related disadvantages usually advanced against primitive areas. Many others have been given but all of them are either directly or indirectly a part of those given.

EVALUATION OF CONFLICTING ARGUMENTS:

It was stated that the Forest Service is the principle plaintiff against setting aside wild regions due to inadequate fire protection facilities or, in other words, lack of sufficient roads. Nevertheless it has been found that foresters give evidence of little encouragement to recreationists due to carelessness with fires.27 It is common knowledge that the greater the number of human inhabitants within a forest region the greater the danger of fire. Let me put it this way: "Better roads equals more thoughtless campers, more fires, fewer trees, smaller streams, more erosion, less fish and game." This is exactly what has happened to Bear Valley, near the Middle Fork of the Salmon river in Idaho, within the past six years. It now takes over half a day to catch a few six-inch trout from the main stream where six years ago trout under twelve inches were discarded.1 Another common truth is that fire plus sheep plus cattle equals vanishing top soil, muddy water, and dead fish. A splendid illustration of what road development will contribute to fire problems in the National Forests is the Mt. Hood National Forest. The entire north
half of the forest is simply honeycombed with large, burned-off areas resembling huge graveyards with many towering, weather-beaten snags as headstones. Yet the south end of the forest contains a solid block of green timber twenty miles square containing less than five miles of road and a very negligible number of small burned-off areas--typical lightning-fire areas. It is in the northern part of this forest that road development has seemingly been of paramount importance. On the extreme north end is the Columbia River Highway and fifteen miles further south is the famous Mt. Hood Loop Highway, with many additional secondary forest roads bisecting the area between these two highways.

Another actual case is illustrated by the Gila National Forest. Here the extension of roads is not necessary for good fire protection. "The Forest Service, with its system of lookouts, telephone lines, and trails, is successfully handling the fires, even during the bad years. The percentage of lightning as compared with man-caused fires on the Gila is very high (65 per cent lightning; 35 per cent man caused). As a rule the greater the percentage of lightning fires, the more serious is the handicap of inaccessibility. The reason for this is that man-caused fires are usually increased by building roads and letting in more transients, whereas lightning fires remain the same. Therefore a heavy lightning region like the Gila ought to be a severe test of the practicability of controlling fires in roadless areas. The test has been thus far successful."

Obviously the result of these two cases does not dispose of the argument. There no doubt are several regions here and there where fire control is impossible without roads. If so, roads must be built in such regions (more of this later). But where the reverse is true then roads should be excluded. It is merely a problem of wise management.

In actual figures the average percentage of man-caused fires compared to that caused by lightning is as follows: (1925-1936)
The work of Man--Civilization?

The work of Nature--A Wilderness
Lightning—35 per cent

Man-caused—65 per cent (30 per cent due to campers and smokers)

Therefore, if I may be allowed to again repeat, the more roads that are constructed in primitive areas the greater the number of irresponsible campers and transients and the greater the fire hazard.

"By looking up our natural resources we are suffering great economic losses," argues the pure utilitarian and the short-sighted lumberman. It is admitted that to a certain extent some of our timber supply will be shut up for a long period of years, but it must also be admitted that fully fifty per cent of this timber will be practically worthless in terms of lumber production. Most of the present and probable wilderness areas are mountainous regions of the most inaccessible and unproductive type. These regions not only produce the poorest quality of timber but are situated in such a manner as to be impractical to log.

The next question is what to do with those areas that do contain high quality lumber? The large majority of these regions will be so located as to be readily correlated with watershed protection and temporary game refuges. But most important of all these areas can be set aside to serve as a timber reserve for the future, or as a reserve to fill in the gap or transition stage between the cut-over period and the reproduction stage. (See part II.)

Why should anyone object to setting aside a few million acres of timber when for the past decade the lumber market has been continuously flooded and over one hundred million acres of potential forest lie devastated? "If one-tenth of this denuded land were put to its maximum productivity, it could grow more wood than all the proposed wilderness areas put together." This is the problem the true lumberman should be concerned about.

The time-worn doctrine of the greatest good for the greatest number
number does not mean that this commendable relationship must take place on every acre. We have always catered to the majority but we have plenty of room and time, therefore let's cater to the minority also. The majority undoubtedly desires non-primitive forms of recreation—auto roads, scenic drives, public campgrounds, etc., but a very substantial minority desire just the opposite. In a questionnaire returned from forest visitors of the summer of 1935 in Region I. of the Forest Service the primitive area policy was strongly sustained by a vote of 79 per cent for the present policy and 18 per cent against. Less than 4 per cent were neutral. It is much easier to keep wilderness areas than to create them. This is the whole crux for forehandedness in the proposed wilderness area policy.

If we must always think in terms of the majority why should we then support state colleges, Civic Symphony Orchestras, municipal art galleries and museums, a Congressional Library, and numerous federal buildings? Surely only a minority of the people enjoy the above types of recreation. As Robert Marshall well puts it: "Quality as well as quantity must enter into any evaluation of competing types of recreation, because one really deep experience may be worth an infinite number of ordinary experiences. Therefore, it is preposterous to hold that the objective of outdoor recreational planning should be to enable the maximum number of people to enjoy every beautiful bit of the outdoors."

As Aldo Leopold once stated: "It is a characteristic human trait that when the end of the supply is in sight we 'discover' that the thing is valuable." Unless we practice foresight rather than hindsight our next resource to "discover" will be the wilderness.
SHALL OUR WONDERFUL WILDERNESS COUNTRY DISAPPEAR FROM AMERICA BECAUSE WE LACK THE VISION TO SEE ITS VALUE?

In the face of the rapid disappearance of our truly wild country, we cannot afford to longer ignore the need for action. We must at once formulate a definite national policy for the permanent establishment of wilderness recreation grounds. Unless this is done, our larger areas of wilderness will mostly disappear within the next decade. This photograph shows the upper part of the South wall of Kings Canyon, on the John Muir Trail and the oval inset above is of Kneela Lake, in beautiful Glacier National Park.
II.

WILDERNESS AREAS: A PLAN
Introduction

When a plan for wilderness areas was first considered by the author it seemed inevitable that it must of necessity be of a lengthy and complicated nature. Since doing some research and reading on the subject it has been found that the exact opposite is the case. Of all the noted primitive area authors and enthusiasts none, so far as I have been able to find out, have suggested or outlined a practical plan for setting aside and administering wilderness areas. W. B. Greeley, formerly Chief Forester, suggested numerous points as basic to the construction of a sound wilderness area but did not go into a plan proper. The Wilderness Society, recently organized at Washington, D.C., has presented a platform itemizing the specific aims of a wilderness policy. The Superior National Forest has the only detailed policy, so far as I know, in managing its large canoe wilderness area.

The plan, as presented in the following pages, is based primarily on one assumption—that man must look forward to the day when wilderness areas will be at a premium and the few remaining timber lands will have to be carefully guarded against unwise administration.

DEGREE OF DEVELOPMENT: CONTROLS.

Note: Much of the following material has been copied verbatim from the platform of the Wilderness Society.

Fire Protection—All necessary development such as lookout towers, telephone lines, trails, etc. shall be allowed with the exception of roads. No roads shall be built unless it is found absolutely necessary.

Railroads, Cog Roads, Cableways, etc.—These shall not be permitted, excepting railroads across wilderness zones.
Graded Trails--These will be allowed in certain parts of the West where horse travel has historically been the general mode of travel, where it is often necessary to grade a trail to prevent erosion, and where, because of the absence of deep duff, grading a trail does not generally mean ruini-\textit{ing} the underfooting. In the Eastern forest types, such as the Adirondacks, the Great Smokies, and the Blue Ridge, graded trails make a serious erosion hazard, destroy the underfooting of duff which is such an important value of an ordinary trail, and appear far more artificial than in the West. They shall not be allowed in such regions.

Ski Trails--Must be located in inconspicuous places, not to exceed eight feet in width, and few in number. They shall not invade primeval, extensive wilderness, or superlatively scenic areas, although skiing will be allowed on the ordinary trails.

Foot Bridges--Permissible if built with logs, stones, or dirt, but metal or sawed lumber shall not be allowed.

Logging Operations--Shall not be permitted in any sort of wilderness.

Power Lines--Shall not be allowed, except in certain instances where it may be necessary for them to cross wilderness zones.

Water-power Developments and Irrigation Projects--These involve perversion of natural conditions, therefore they shall not be allowed.

Airplanes, Motor Boats--Permitted only where they are absolutely necessary for fire protection or emergency.

Beacon Towers--These shall not be permitted, except where main airplane routes cross wilderness zones at right angles or where they cross over corners of extensive wilderness areas.

-16-
Cabins, Shelters, etc.--Simple, rustic, indigenous shelters sparingly placed will be permitted in extensive wilderness regions. They shall never interfere with important scenic values, they shall not be used for commercial purposes, and they shall not be concentrated in groups of more than two. Summer home sites, hotels, and other commercial structures shall never be permitted.

Sheep and Cattle Grazing--Areas where no grazing has previously taken place shall not be open to grazing. It shall never be permitted in primeval or superlatively scenic areas. On those areas where grazing has been the custom in the past it shall be restricted to small areas.

Fences--It may be necessary to build fences in order to control the grazing areas and prevent erosion. Under all conditions fences should blend with the surrounding vegetation.

Erosion Control--This shall be permitted only where necessary to undo the effects of faulty land use.

Insect and Rot Control--This shall be permitted only when it is necessary to save the wilderness forests from destruction. Endemic attacks occurring in the wilderness shall not be disturbed.

Slash Disposal and Clean-up--The forest shall remain in its natural state.

AIMS OF THE PLAN:

(1) Each area shall be representative of some type of country of distinctive recreational value, or afford some distinctive type of outdoor life, opportunity for which might disappear on other forest lands open to industrial development.

(2) In wilderness areas recreation shall be recognized as a highly important, if not dominant, use. Subject to such recreational restrictions
An aid to the Camper;
A mutilation of God's Handiwork.
as are deemed necessary, the use of timber, forage and water shall ordinarily take its course.

(3) Legal sanction for barring airplanes from wilderness areas except in case of fire protection or other emergency.

(4) Areas shall be of a size conforming to the type of country and the definition of a wilderness area.

(5) A part of or an entire ranger district suitable for a wilderness area shall be set aside in each national forest preferably located so as to serve in correlation with watershed protection, wild life recreation, and natural and superlatively scenic values. The ranger station shall be either centrally located or at one end of the area depending, of course, on the region. One small part of this district shall be devoted to the normal types of outdoor recreation where parties may split up with one group taking a trip into the wilderness for a period of days and the other group free to follow its own desires. Thus the District Ranger can have full control of both areas. Wilderness travellers must first get permission from the Ranger before starting on an extensive trip. They must show themselves competent of woods travel to the satisfaction of the Ranger or be with a competent party who will assume responsibility.

(6) Hunting and fishing will be allowed in accordance with the game and fishing laws except in game refugees.

(7) A simple direction map showing trails, streams, springs, shelters and lookout towers shall be available to each wilderness party. (A representative example is included following this page.)

(8) Obtrusive signs, posts, and direction markers shall be discouraged.

(9) Most important of all, these areas shall be set aside with a thought to the future. They shall be set aside with the thought of a timber reserve where all forms of logging will be excluded. It is true that
many trees will die of overmaturity if not logged off, but the advantage gained from less fire risk more than offsets this objection.

(10) Finally, a program of educating the public shall be necessary. This must come largely through the efforts of private organizations. It should consist of an appreciation of the values and understanding of the necessary technique of wilderness journeying.
<table>
<thead>
<tr>
<th>Name of Area</th>
<th>State</th>
<th>Acreage</th>
<th>Ownership</th>
<th>Present Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Idaho</td>
<td>Idaho</td>
<td>3,375,000</td>
<td>National Forest</td>
<td>Partially Established</td>
</tr>
<tr>
<td>Aroostock-Alagash</td>
<td>Maine</td>
<td>2,825,000</td>
<td>Private</td>
<td>Potential</td>
</tr>
<tr>
<td>South Absaroka</td>
<td>Wyoming</td>
<td>1,825,000</td>
<td>Nat'l. F., Nat'l. Pk.</td>
<td>Established</td>
</tr>
<tr>
<td>Upper St. John</td>
<td>Maine</td>
<td>1,300,000</td>
<td>Private</td>
<td>Potential</td>
</tr>
<tr>
<td>Superior</td>
<td>Minn.</td>
<td>1,275,000</td>
<td>Nat'l. For., Private</td>
<td>Established</td>
</tr>
<tr>
<td>High Sierra</td>
<td>Calif.</td>
<td>1,075,000</td>
<td>Nat'l. For., Nat'l. Pk.</td>
<td>&quot;</td>
</tr>
<tr>
<td>South Fork</td>
<td>Montana</td>
<td>1,050,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Glacier-Bridgeo</td>
<td>Wyoming</td>
<td>1,050,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>North Cascade</td>
<td>Wash.</td>
<td>1,025,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>North Absaroka</td>
<td>Wyoming</td>
<td>825,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Snoqualmie</td>
<td>Wash.</td>
<td>800,000</td>
<td>Private</td>
<td>Potential</td>
</tr>
<tr>
<td>Sysladopsis</td>
<td>Maine</td>
<td>775,000</td>
<td>Nat'l. For.</td>
<td>Potential</td>
</tr>
<tr>
<td>Olympic</td>
<td>Wash.</td>
<td>725,000</td>
<td>Private</td>
<td>&quot;</td>
</tr>
<tr>
<td>Dead River</td>
<td>Maine</td>
<td>600,000</td>
<td>Indian Reservation</td>
<td>Established</td>
</tr>
<tr>
<td>Montes Mts.</td>
<td>Arizona</td>
<td>575,000</td>
<td>Nat'l. Forest</td>
<td>&quot;</td>
</tr>
<tr>
<td>Gila</td>
<td>N. Mex.</td>
<td>575,000</td>
<td>Nat'l. Pk.</td>
<td>&quot;</td>
</tr>
<tr>
<td>North Glacier</td>
<td>Montana</td>
<td>550,000</td>
<td>State, Private</td>
<td>&quot;</td>
</tr>
<tr>
<td>Moose River</td>
<td>N. Y.</td>
<td>500,000</td>
<td>&quot;</td>
<td>Potential</td>
</tr>
<tr>
<td>North Yosemite</td>
<td>Calif.</td>
<td>475,000</td>
<td>&quot;</td>
<td>Established</td>
</tr>
<tr>
<td>Aquarius Plateau</td>
<td>Utah</td>
<td>475,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Mt. Marcy</td>
<td>N. Y.</td>
<td>450,000</td>
<td>State, Private</td>
<td>&quot;</td>
</tr>
<tr>
<td>Pitchstone Plateau</td>
<td>Wyoming</td>
<td>450,000</td>
<td>Nat'l. Pk.</td>
<td>&quot;</td>
</tr>
<tr>
<td>Okefenokee</td>
<td>Georgia</td>
<td>400,000</td>
<td>&quot;</td>
<td>Potential</td>
</tr>
<tr>
<td>South Glacier</td>
<td>Montana</td>
<td>400,000</td>
<td>&quot;</td>
<td>Established</td>
</tr>
<tr>
<td>Yosemite</td>
<td>Calif.</td>
<td>380,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Madison Plateau</td>
<td>Wyoming</td>
<td>350,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>San Juan</td>
<td>Colorado</td>
<td>300,000</td>
<td>Nat'l. For.</td>
<td>Partially Established</td>
</tr>
<tr>
<td>Oven Lake</td>
<td>N. Y.</td>
<td>300,000</td>
<td>State, Private</td>
<td>Established</td>
</tr>
<tr>
<td>Goat Rocks</td>
<td>Wash.</td>
<td>250,000</td>
<td>Nat'l. For., Ind. Res.</td>
<td>&quot;</td>
</tr>
<tr>
<td>Salmon Trinity</td>
<td>Calif.</td>
<td>250,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>High Uintas</td>
<td>Utah</td>
<td>250,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Beartooth</td>
<td>Calif.</td>
<td>250,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Eagle Gap</td>
<td>Montana</td>
<td>225,000</td>
<td>Nat'l. Pk.</td>
<td>&quot;</td>
</tr>
<tr>
<td>Grand Teton</td>
<td>Wyoming</td>
<td>225,000</td>
<td>Nat'l. For.</td>
<td>Partially Established</td>
</tr>
<tr>
<td>Central Plateau</td>
<td>&quot;</td>
<td>200,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>Bighorn</td>
<td>Montana</td>
<td>200,000</td>
<td>Ind. Res.</td>
<td>Partially Established</td>
</tr>
<tr>
<td>Mission</td>
<td>Montana</td>
<td>200,000</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>
1. Arenschiold, E. M. --"Progress Comes to Bear Valley." Harper
174: 440 - 2, March '37.
5. Clark, F. G.--"Some Preferences of Forest Visitors." Journ. of For.
42: 395 - 99, Sept. 1935. (#9)
27: 927, 1929.
Print. Off. 1933--U.S. 73rd Congress, 1st Session, Senate Doc. 12.)


*33. ------The Wilderness Society--(A Platform and Functions of the Wilderness Society. Washington, D.C., Jan. 21, 1935.)

