The Importance of Trained Recreational Personnel in the U.S. Forest Service

with a

Plan for Administrative Organization

by

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Preface

This paper has but one aim. If the United States Forest Service intends to continue with forest recreation as a major function of its various activities, then competent trained men must be included within the organization of the recreation personnel. This is the premise which this thesis has attempted to substantiate.

The four summers experience which I have had with the Forest Service has given me sundry ideas of forest recreation. Many of those ideas have been incorporated within this report. But having realized that those opinions which I have gathered might tend to be biased, I circulated twelve sets of questions pertaining to recreation to those whom I felt were more qualified in this phase of forestry than I. I asked for the personal opinions of these men so that their answers to the questions would not be influenced by policies of their own organizations. As a consequence, the answers obtained were very beneficial to me in formulating proper ideas of certain phases of recreation. The answers to the questions have not been included in this thesis; neither have I alluded to their source. The men who answered my list of questions were informed that the information received would be treated strictly confidential for - shall we say - obvious "political" reasons.

This thesis, therefore, has been compounded from one person's opinions, backed by references, and tempered with
the opinions of others who have had direct relations with recreation. It is not complete, nor is it a masterpiece, but it is hoped that the paper will provoke serious thought on the future status of forest recreation personnel in the United States Forest Service.
Acknowledgments

To those twelve men who submitted answers to my list of questions, I wish to express my sincere appreciation. Their assistance in aiding me to formulate opinions on some of the phases of forest recreation has proven exceedingly valuable. Their cooperation is indicative of the Spirit of Service within the National Forest Policy.

Also to the many persons employed by the United States Forest Service, both permanent and short term employees, with whom I have come in contact, I voice my thanks for their conscious and unconscious criticism in my behalf. Their impressions of forest recreation have supported my beliefs in the majority of cases.

Then, to those foresters who have contributed materially to the advancement of forest recreation throughout the country, I wish to express my gratitude for the work they have done and are doing. The philosophy behind their accomplishments has been a motivating force in this paper.
Part I.

The Need for Trained Men in Recreation Work
"What is this strife and worry all about,  
This building up and tearing down of things?  
I know a wood where birds flit in and out,  
And the west wind sings.

What of the sobs and hate-words that I hear,  
This shouting and mad barter in the street?  
I know a calm hill where the stars seem near,  
And the airs are sweet.

What of the power that passes in a breath,  
This digging for the buried Gates of Doom?  
I know a vale where echoes laugh at Death,  
And the wild flowers bloom."

The above verses were clipped by James Oliver Curwood from a book found in his library, had been mounted on a cardboard, framed, and placed on his desk in the tower room of Curwood Castle, his studio, where the Shiawassee swings in a great bend through Owosso. (1)

For countless centuries man has sought peace and rest from his daily tasks—from his humdrum existence in the tall timber, the mountain meadow, and along the shores of the forest waterways. However, in the very beginning of things, man was afraid of the elements—the winds, rains, thunder and lightning.

Lewis Browne, in "This Believing World" says, "Earth and sea and sky were set against him; with relentless enmity, with inexplicable hate, they were bent on his destruction."(2) But as time went on, and man gradually became more intelligent and more confident of his ability, he began to view the

(Note:--Numbers in parentheses (1) indicate literature cited)
out-of-doors and Nature's handiwork in a different light. He found to his satisfaction that the sights, sounds and silences of the forests were capable of resting his body and refreshing his soul. As his capacity for learning grew, man, by virtue of his travelings found,

"-- tongues in trees, books in the running brooks, sermons in stones, and good in everything." (3)

So it was, long ago, man realized the recreational values of the forests, and so it is today—that selfsame realization of contentment afforded by a long hike, a good catch of fish, and relaxation before an open fire at nightfall. But today we find recreation is rapidly becoming a necessity rather than a pastime.

Charles Eliot said of recreation and leisure:

"The life history of humanity has proved nothing more clearly than that crowded populations, if they would live in health and happiness, must have space for air, for light, for exercise, for rest, and for the enjoyment of that peaceful beauty of nature, which, because it is the opposite of the noisy ugliness of towns, is so wonderfully refreshing to the tired souls of townspeople." (4)

Then along the same line of reasoning, Frederick Law Olmsted, Sr., stated:

"-- the average human nervous system could stand only three to four generations of city life with its lights and noises, poor air, and lack of exercise; that there was thus a biological reason why the majority of leaders in every walk of life came from the country, and that in physical and mental inheritance as well as in financial it was frequently three generations from shirt sleeves to shirt sleeves; that the decline of great families was frequently due to the "running out" of mental and physical vigor occasioned by the continued drain of city life upon the nervous and physical vigor of succeeding generations." (4)
Here, then, we find food for thought about this matter of recreation being a necessity and not a mere pastime. Mr. Kenneth O. Maughan states the following in confirmation of the above:

"The trend toward the recognition of the value of physical and mental well being for all individuals has resulted in the creation of municipal, county, state, and national parks, and the use of the state and national forests for recreational activities and the consequent realization of the responsibility of the Federal Government to its citizens in this movement. No democratic government can grow beyond the capacity of its people, and the capacity of its people is dependent on their health—physical and mental." (5)

Therefore, if the above is true, and people of this day, in all walks of life, need the tonic provided for them by vacations into the rural and less inhabited districts, the primeval woods, and open glades, then there must be, necessarily, some means for meeting this demand. Happily, this demand has been and is being met by the government by establishing the many and various recreational centers throughout the country from elaborate camp-grounds to remote primitive areas. Here, then, the facilities for enjoying all which Nature has to offer has been and is being provided, yet there is something lacking—something which does not allow the "over-all" picture to become complete. This missing factor, although not entirely lost, and absent from view, is very undeveloped at the present time. The embryo is alive, but dormant in many localities. I speak of trained recreation personnel in the Forest Service.

It has been shown that the people of this "land of the
"free" do need freedom—freedom from the strain of modern living—for their own mental and physical welfare. And we are well aware of the opportunities available for the fullest expression of that desire. But what we are not positive of is this: If after the public arrive out in the forests seeking relief and pleasure, are conditions such that they will derive the greatest possible benefit from their stay? Can those agencies administering recreational areas be certain that the using public will come away from those areas satisfied and wishing to come again, or will an unsatiated feeling be prevalent among the people using the areas as they pack up their things and head for home? Can the men who have planned the areas and the men who administer the areas be sure their efforts have not gone in vain to the extent that the users have not derived the greatest possible benefit from the areas? In other words, have the planners and administrators been thoroughly trained in their job so that the element of doubt of their success of what they do and are doing is minimized to the smallest degree? The answers to the above questions are quasi-negative—in some localities, "yes"—in most places "no."

The question immediately arises as to why the planners and administrators of recreational areas cannot be certain of the success of their plannings and administrations? The answer comes back bluntly and frankly—improper or not enough training along recreational lines. Fay Welch of the New York State College of Forestry says this:
"Foresters as a group have been exceedingly slow to recognize both actual and potential recreation values and responsibilities---this is due in part, no doubt, to the training that foresters have received. Most of our forestry texts and not a few of our forestry teachers continually emphasize the fact that producing wood is the highest use to which any forest area can be put. Many foresters still treat recreation as an illegitimate use of the forest. They do not recognize dollars earned through recreational use as having the same value as dollars produced by other uses of forest lands. In view of these attitudes, it is not strange then that leadership in the recreational field is often taken by others." (6)

However, the picture isn't as black as it may seem, yet there is still much to be accomplished in the proper training for foresters engaged in recreation work. Hence, the purpose of this thesis--to show the importance of trained recreational personnel in the United States Forest Service, to present a program of training, and to outline a feasible plan for those administering recreation areas.

Before the above objectives are developed, and we lose ourselves in a fog of theory, it may perhaps be wise to look at the "over-all" picture of Recreation as we now have it before us. Let us review the present status of recreation in the Forest Service, "take a squint" at the present recreational personnel organization, and try to forecast the future trends of recreation as they might affect the personnel.
The Present Status of National Forest Recreation

Supervisor A. O. Waha of the Mount Hood National Forest made the following report in 1937:

"Recreation use of our National Forests, both summer and winter, has increased to such large proportions that it is now a major activity and must have Service-wide attention.

"Reports show that in 1936 almost 71 million people visited or passed through the National Forests, and about 24 million actually used their recreation opportunities. This is by far the heaviest wave of summer travel in National Forest history. It is evident that mass realization by the public of the inspirational values of the outdoors has become an established fact." (7)

The year 1937 also saw an increase in the number of people who used the National Forests. It has been estimated that nearly 30,000,000 visitors used the facilities in the 157 National Forests, which was an increase of 6,000,000 over 1936. During the year of 1937 the users of the forests were divided as follows:

- 857,000 - persons with summer home permits
- 2,165,000 - persons at hotels, dude ranches, and resorts within the National Forests
- 2,836,000 - campers
- 6,000,000 - picknickers
- 19,000,000 - persons motored, rode horses or hiked through the National Forests

30,858,000 - sum total of all persons using the National Forests for some means of Recreation. (8)

The above statistics will serve to show the importance of recreation in the forestry program, especially when we consider that the use of the National Forest in this capacity has increased 1000% over 1916. (8) What will be the figures for 1946 and 1947?
Today Recreation has become one of the major activities of the Service—that fact cannot any longer be denied. The infant has grown out of his swaddling clothes and is a full-fledged individual capable of using his mind for asking for that which he demands for his own welfare. Although the parent dislikes the thought of his hair becoming gray around the temples as a result of worry over the vagaries of his offspring, he has realized, or should have realized by now, that many of his child's so-called "whims" are very vital to the child's welfare. Child specialists will agree that if the parent of a child does not give in at times and satisfy the youngster, such inactivity will prove a boomerang in some cases. So it is with Recreation. This activity of the Forest Service is yet only a child as compared with the other phases of forestry; yet this child has grown to such stature that nearly one-fourth of the population of this country is on intimate terms with the young fellow. The Service has done a remarkable job in raising the baby. Ten years ago there were only 1,493 improved forest camps in the United States—today there are more than 3,500 developed campgrounds in the National Forests. Twenty years ago 3,900 summer home permits had been issued, and by the end of 1937 this figure had been increased to 13,000. Rapid development? Yes, very much so! The credit for this increase is due those men who have had the forethought to make provisions for allowing recreation to have its way at times. If the demands of the public had not been met in somewhat of an intelligent way by those in authority
within the Service, then this child would be suffering from acute malnutrition today. However, it has not been an easy task to keep the youngster fed and properly clothed, and the big job lies ahead to maintain the correct standards, and furthermore keep pace with the future developments.

Those men in charge of forest recreation in the Service have a greater obligation today than they ever had before. This obligation to the public in general to provide for the best in recreational facilities will increase year by year. The "foster fathers" of recreation will have to submit to those demands made by the people in order that a correct solution to recreational problems may be met intelligently. Today this is being done in many localities—the demands of the "child" are being considered and granted—the public is being satisfied. Yet in other communities, forest recreation is considered in the light of a nuisance, and something to be looked upon as a minor phase of forestry. Such an attitude on the part of men who should give recreation its due place in the forestry program should not be condoned, and the old German definition of a forester—a man who grows trees—must be defined further if the modern concepts of forestry are to survive in this country.

Forest management is both a dynamic and static function of government, state and private agencies employed for the reclamation, use and conservation of forest lands and their products thereof for the present and future economical and social benefits of all the people concerned. Forest recrea-
tion has a distinct place in this definition—so has the recreational engineer. Some persons would have you think differently, but to them only this may be said, "They can't see the forest because of the trees!" Forest Recreation is here today—it will remain long after these pages are yellow. The decisions of today affect the policies of tomorrow. The actions today set precedents for the future. Are the decisions and actions of today a result of proper training in forest recreation, or are they made and done by the man who grows trees? Doesn't it seem logical that an activity as important as recreation is today be accorded full-time planning by men trained in this line of endeavor?

We wouldn't trust an appendectomy to a dentist, nor would we permit a chiropodist to remove our tonsils. The medical profession has, as well as its country doctors, highly trained specialists whose sole work is to handle special cases which require the advanced knowledge of specialists as against the general knowledge of the ordinary M. D. This profession has worked out many of its problems in past years through intensive training in specialized fields, and one can't help but marvel at the progress from the crude attempts made by Andreas Vesalius to the modern techniques employed by doctors today. Someone has likened the profession of forestry to the medical profession in manners of ethics and progress. But in the recreational field even with the knowledge of rapid progress during the short time since its inception, there
remains the fact that there are not enough trained men to carry out that which is demanded--there are too many "country doctors", and not enough specialists. However, let's look at the present administrative organization and see how it fits into the forestry program as far as recreation is concerned.
Recreation in the Forest Service today comes under the Branch of Lands in the national set-up, and although fish and game is considered a part of recreation, these activities come under the Branch of Range Management. Each Branch is headed by an Assistant Forester or Chief in charge of the administrative work of each Branch. The Assistant Forester in charge of recreation, or his assistant, works in connection with the Regional Forester of each region, who in turn heads an organization similar to the Washington office, consisting of duplicate branches with an assistant Regional Forester or Chief in charge of each branch. (5)

Although the idea within the Forest Service is decentralization of control, the Assistant Forester in charge of recreation works in connection with the various regions, and although each region virtually formulates its own regional practices, these practices must stay within the broad general outline of the Forest Service program. (5)

Each region has a varying number of National Forests with a Supervisor as the administrative head of the forest. He is directly responsible for any recreational development on his forest. At times there are assistants assigned to the Supervisor's office to act in the capacity of Recreation Assistants who plan for the development on the forest. Sometimes the Assistant Regional Forester aids the Supervisor in
his plans, and at other times the Supervisor with the
rangers of each district formulates and carries out the
plans for the forest. (5)

There are several ways that the details of recreation
are administered in the various regions. In Region 6
recreation is handled by the Associate Regional Forest In-
spector, whose position corresponds to a Recreational
Engineer. He works under the Assistant Regional Forester
in charge of Lands. In Region 5 the recreational planning
has been done by the Mining Examiner as an incidental
activity, although at the present time there is additional
help in the recreational planning field. Regional 4, on the
other hand, has no Recreational Engineer or anyone approach-
ing that title. There the work is handled by the Assistant
Regional Forester in charge of Lands. (5)

Such then, is the organization of the present personnel
of the recreation administrators of the Forest Service. Yet
this is not the whole story. The final application of recre-
tional policies made by the foregoing men are put into
practice and either promoted or discarded by men not belong-
ing to the permanent force of the Forest Service. I speak of
the "short term" men—those campground guards and other guards
who come into close contact with the using public during the
summer season. Here the recreation program meets its final
test, and its success depends on the personnel in the field.
The Guard Handbook of the North Pacific Region states the
following:
"In a surprisingly large measure, the impression the average forest visitor receives of the Forest Service is based upon contacts with forest guards. To most of them, a forest guard is a forest ranger. In actual fact, the average guard contacts six forest visitors to every one the ranger contacts. What does this mean in creating respect for the Forest Service and confidence in its employees? It means that the forest guard moulds public opinion in a far greater measure than does the ranger." (10)

The forest guard, therefore, is an important person in the recreation personnel of the Service. The success of much aforehand planning rests in his hands. Poor public contacts will do much towards the tearing down of well-laid plans. Public opinion is a factor to be taken into consideration when the proficiency of the recreational policies have been inaugurated and then weighed as to their merit. Adverse criticism by the public is criticism to be avoided whenever possible. Forest guards are in a position to prevent this, and proper training will expedite constructive criticism on the part of the public. But more about this later.

The background of the present recreational personnel has been a varied one. Many of the men now in the Forest Service do not have a college or university education, which may or may not affect their qualifications for the work which they are doing. Some of the forest officers have kept up with recreation as it has expanded in the Service. They have gone out of their way, in several instances, to gain further knowledge of the subject. Other men have simply relied upon the information sent out by the regional office or Supervisor's headquarters for their knowledge of forest recreation.
Ranger training schools have supplemented most forest officers' knowledge with a comprehensive schooling in the activity. Yet, regrettable to say, there are some who have let the matter slide, and have treated recreation like a "hot potato." While on the other hand, we find men now engaged in this function of the Service—trained, thoroughly educated, believing in the value of recreation, and able minded enough so that their efforts have placed forest recreation in their community on a par with the other forest land uses. Hats off to them! With such a varied background as do the present forest officers have who administer recreation areas, is it such a wonder that there is a great deal of difference of opinions on whether recreation shall be accorded a major place in the forestry program or not? Those men who have not had the opportunity of studying the principles behind recreation as it has developed from a theoretical standpoint and then putting such theory into practice cannot really be blamed for making mistakes once in awhile. Recreation has often been dumped into their laps with the instructions to make the best of it; consequently, perfect jobs were never accomplished in many cases. It wasn't because they didn't try to carry out the orders; it was simply because they didn't know the reason behind this new activity, which might well be traced to lack of proper training in forest recreation.
So today in the Forest Service, we have a mixture of untrained, trained and partially trained men endeavoring to administer forest recreation to the best of their ability. We also have the "old school" and the "new order" attempting to work out the correct solutions to the problems. Friction is bound to occur in this set-up, and conditions may not be entirely harmonious, yet in view of the accomplishments attained in the past few years, we find that cooperation of all must have been obtained in some degree of success. But at what cost? Were concessions granted by either side whole-heartedly or grudgingly? Whatever the answer; how much did the background of training influence the decisions made? And rhetorically again, is the proper training of Forest Service personnel important to the present and future welfare of recreation? Let us move forward.
Future Trends Affecting the Forest Service Personnel

The realization of the multiple use of our forests has been one of the most practical and logical lines of reasoning in regards to this basic resource. To the "timber barons" of yester-year the idea of using the forests for a multiplicity of uses, such as we have today, was probably the most remote thought in their minds. At present they are no doubt squirming in their "wooden overcoats" as the constant tramp of recreationists' footsteps filter down to their ears. What changes have occurred since the "good old days"! And what changes will occur in the days to come! Whoever thought that the man who counted sheep, marked timber, and put out fires would be called upon to cooperate in the construction of a flush toilet in the depths of the forest primeval! Shades of Ol' Paul! To think that a forester would be called upon to cater to the wishes of these "fair-weather" campers, Sunday drivers from the cities, and children's organizations is something which would make Herr Schwappach say, "Dunder und blitzen", only in more emphatic guttural articulations! And yet, that is just what the forester today is doing, regardless whether he enjoys his new duties or not. The importance of accomplishing the tasks which recreation has now demanded of the forester has grown to such large proportions that even the lowest paid employee of the Forest Service is influenced to some extent by recreation.

Henry R. Francis of the New York State College of
Forestry makes this observation of the importance of recreation to foresters of these times:

"In order to meet the problem squarely, foresters are recognizing its importance and are grappling with it. The solution of the problem is of too great significance in the professional practice of forestry to treat it as a side issue to receive attention after the regular day's work is over or when that problem has grown into an emergency situation like a devastating forest fire." (10)

The inception of forest recreation into the forestry program has been like the ingrowth of Phoradendron villosum on the oak trees of the west. The haustoria has entered the very heart of the forestry program, and the only way to eradicate the so-called "parasite" would be to cut down and burn the tree so that the "disease" could not spread to other hosts. Even though this "parasite", recreation, has gained such an anchorage in forest management, and may in some cases cause some of the limbs of the tree to wither, there is a demand for the "mistletoe" on the market, and which may be more important than certain parts of the tree itself. Witness the amount of grazing land taken out of use and put into the activity of recreation. Witness the setting aside of primitive areas solely for recreational use. And witness the large areas reserved for game refuges so that the hunters may have targets at which to shoot. Many of these areas contain much valuable timber—young reproduction for future use and overripe trees which should be cut now. Does this make sense—this impounding of resources which might well be turned into dollars and cents? The logger and the "money hungry" person would have you believe not, yet there is a far
greater use to which much of this land may be put, and thanks to those who have exercised their influences for having done so in the past. The public has voiced its approval many times over. Mr. C. B. Morse of the Regional Forester's Office in Ogden, Utah, corroborates the above by saying:

"Out-of-doors recreation is in the forests. It is going to stay; it will greatly increase; it brings its problems and its blessings. The forestry profession has always been in the vanguard looking for new opportunities. Recreation is the big opportunity of foresters today of which there can be no doubt they will take advantage. It is up to us to get ahead of the game and not let it get ahead of us." (11)

Hence with the many uses to which our forests are being put today and shall be put in the future, it behooves those who manage and administer the forests to resign themselves to an increased use along recreational lines.

A new concept of use must be woven into the forester's make-up. Lands formerly given over to grazing, logging, mining, etc., must be coordinated with recreation, and in many cases this is not possible. Grazing in areas of heavy recreational usage is intolerable, clear-cut logging cannot be practiced near the shores of a beautiful mountain lake where hundreds of persons enjoy themselves, and hydraulic mining just isn't done in regions of areas with unlimited esthetic value. Therefore, some allowances must be made, some concessions must be granted, and proper decisions of the use of forest land need be the rule instead of the exception for this "parasite"—recreation. As time goes on,
as time will do, these allowances, concessions, and decisions will become more important, if past history of recreation tells us anything. If this be true, then those men who build for the future will necessarily need to believe in their decisions and view the "over-all" picture so that proper decisions may be reached. The background for the ability to arrive at a happy solution to any problem is based on training along those lines. It is obvious, then, that foresters engaged in recreation work in the future will find it to their advantage if they have a solid foundation of recreation on which to base their stand. Mr. L. A. Barrett of the Regional Forester's Office in San Francisco states the following:

"The time has come when there is a demand for men with a technical forestry training and who have specialized in recreational engineering. There are many important and interesting problems to be solved that require men with this training and point of view. Men with those peculiar qualifications are scarce. In the future many important National Forests will require the services of recreation specialists just as they have timber sale specialists and grazing specialists now." (12)

The future of forest recreation lies in the hands of a few to make it that which they will. The happiness of over a quarter of a million people depends on the judgments of this few. The results of future planning in recreation will be reflected in the lives of those people. The men behind the scenes, the stagehands so to speak—the men who pull the ropes—are in a position to control the destiny of the play. It can go along smoothly, or the action may be dull and jerky—
men behind the scenes will decide on which. It seems logical, therefore, to have in positions of importance men who "know their stuff"—men who have been trained in forest recreation so that the action may go along without a hitch, and the players and audience will derive the fullest benefit possible. The forecast of the future indicates this to be true. Mr. Carl B. Arentson of the Minidoka National Forest says this:

"This recreational use of the forest areas will continue to increase. The decrease in working hours, increase in population, easy transportation to and within the forests, and the efforts of the people to escape the drabness and nerve strain of city life will bring more people to the mountains year after year."

The above is not mere idle talk—statistics prove otherwise. Hence, it is vitally important to the Forest Service to provide for these people, and plan the areas intelligently. In order to do this efficiently, men with a background of recreation must be employed. The recreation engineer has made his application for the job. Will you hire him?
Part II.

Training for the Job.
Type of Men Needed for Recreation Work in the Forest Service

1. Mental Attributes

The mental attributes of any man determines his success in his field of endeavor. A sound body, alone, will not make for success—that is well known. A strong-backed person may do well in felling trees, but usually the trees selected for cutting are generally marked by someone with a more educated mind. The actual installing of camp-ground facilities may be done by healthy and capable men, yet the worth of the installation to the public is predetermined by the man behind the scenes. Those engaged in the planning of forest recreation areas must necessarily be above the average in mental equipment than the common laborer who puts on the finishing touches of a recreation plan. There must also be some incentive to the person doing the planning other than just the monetary return.

"The Spirit of Service as indicated in our national forest policy is a most important requisite to success in public forestry. It is the Spirit that causes men to place the interests of society and of the group at large above the interests of self or of the few. It is embodied in the policy of so managing the forests as to promote the greatest good for the greatest number of our people." (14)

With the proper viewpoint or attitude toward the job at hand, a person is able to do much better work, which reflects not only on himself, but also his fellow workers and his employer as well. In forest recreation work, this is as true as it is in many other lines of endeavor. The Spirit of Service is paramount if successful recreation is to be accomplished.
In Emil Ludwig's biography of Napoleon we find this:

"The soul which governed this body was driven forward by three fundamental powers: Self-confidence, Energy, and Imagination."

Such three powers may well be included in the mental characteristics of a recreational forester. He must have enough self-confidence in his own abilities to carry on that which has been started, and to have the same quality to aid him in starting that which must be accomplished. He must have energy to speed him on with his tasks, and lastly he must have imagination so that the future of recreation may be developed in the proper way and not permitted to grow like "Topsy."

Specifically, the recreation engineer must have a sense of purpose and direction which augments his belief in the Spirit of Service. Enthusiasm for his work, friendliness and affection for those around him make for a "regular" fellow in the eyes of his co-workers. Integrity is no mean quality of character to leave out of such a discussion. The ability to make definite decisions backed up by intelligence is a combination hard to beat in the personal qualifications of a recreational forester. Lastly, faith in his job, himself and employer cannot be stinted, for a man without this will soon become discouraged and his work will obviously show it.

2. **Physical Stamina Required**

Physically, any employee of the Service, and any other endeavor, for that matter, cannot afford to be in poor health. To be physically active does not mean that the person
need be a Hercules, but that he is able to stand the strain of the varied type of work which is his lot. Chronic ailments often affect the quality of work produced by an individual, so it is important that the best of health be the criterion for the recreational engineer to have and maintain.

3. Technical Knowledge Necessary

With all the many separate mental and physical characteristics which go to make up an individual, the thing which definitely holds his job is technical knowledge of his work. And that which distinguishes a recreational forester from the other type of foresters is the kind of technical knowledge received previous to his employment. Mr. Fred Cleator of the Region 6 office aptly sums up the technical knowledge required by a recreational forester by saying:

" - The time is here when we need men with some recreation training and sympathies. Even those who are frankly not a bit interested in recreation work are finding that their life work in forestry, whatever the angle, is contacting with recreational jolts of heavier voltage and higher frequency. More and more are we going to need and require as national forest executives and helpers, men who have knowledge or some training in social service, and in such subjects as the studies of birds, fish and animals, particularly the "game" end of it. Ability in photography is a wonderful advantage. Probably, courses in landscape architecture and its related subjects will be the by-studies of greatest value to future recreational foresters, for here the student gets an inspiration and knowledge of harmonies in various schemes of plant and tree growth and their relations to Mother Earth. He may learn that nature can be little improved upon by other agencies; but if this be so, it is well to have it thoroughly grounded. Almost every forester, whether he works for the government, state or private enterprise is going to encounter something of a recreation problem."
"- we do have a problem of getting men who have a sense of proper proportion, best acquired with a basic training that will tell them instinctively when a building or a trail or a timber cutting is in harmony with the forest. Utility is the main principle in handling national forests, but Beauty is knocking at the door, and we shall let her in." (15)

The technical knowledge of a recreational forester is not based so much on hard and fast rules of operation, but rather on social rules which are often elastic, and which demand a different outlook than the average forester now has. Fay Welch of the New York State College of Forestry confirms this by stating:

"I believe it important, first, that all foresters have a background of general recreation knowledge. To modify one's silvicultural outlook is not enough. Such an attitude has been responsible for the fact that frequently in the past the forester on a recreation project has been considered as a kind of head gardener. He was called in for consultation when a question of fuel supply, tree disease or fire protection came up, but was not consulted as to what the recreational needs of given areas were, or as to what land in a given region should be purchased, or as to what particular uses the various parts of an area were adapted to, or as to where roads, buildings, sanitary or recreational facilities were to be located, or as to the upkeep and administration of these areas. If the reply is made that the forester is not trained for this work, then it is time that more training of this kind be given.

"Secondly, those who take special responsibilities for planning, developing or administering recreational areas need special training and information. They need a good grounding in the basic principles underlying large scale land use planning. They must be competent in designing specific areas and facilities, and they must understand operations and programs, and be concerned with people, their desires, reactions and activities as well as with trees." (6)

Therefore, a good education in the basic principles which act as a foundation for recreation is imperative for a recreational forester. This idea is not a new one. It has been presented many times by those who have been far-seeing
enough to realize the portent of recreational development. In 1918 Mr. Frank A. Waugh saw the "hand-writing on the wall" and suggested that a staff or specially trained men be included within the organization of the Forest Service to secure to the fullest extent the development of the resources of the forests. And Kenneth 0. Maughan further points out, in speaking of Mr. Waugh:

"In his report to the Forester of June 1931, he stresses the fact that many of the recreation plans are disappointing because they have not been made by those having a proper background, and states that 'it is highly desirable that all recreation plans should be well coordinated, at least throughout any single forest region, that similar policies should prevail on neighboring forests, and that plans should be made by someone who has a broad view of the entire situation, an adequate grasp of recreation policies, and some definite knowledge of recreation technique!'" (5)

To show the importance of trained recreation personnel in the Service as seen through the eyes of others, we quote once more from Mr. Maughan; he says:

"The use of certain portions of our National Forests for recreation is today in keeping with the better thought on the utilization of all forest lands, and when the time comes for intensive development of this resource, it should not be left to the technically trained forester but must be handled by men trained as landscape engineers and recreational engineers working with other Forest Service officers." (5)

Hence, the recreational engineer should be a man with a broad range of knowledge of forestry problems, and not only those of recreation. To limit his range solely to recreation would defeat the coordination of uses within the forests. His is to combine, if possible, recreation with the other uses and the other uses with recreation, and if this is not
possible to see that recreation, where needed, is not left out of the forestry program. The recreational forester is, therefore, more than just a forester.

4. **Prerequisite Experience**

Then along with this theoretical knowledge, it follows that a certain amount of experience is necessary for the practical application of that knowledge. All theory and no practice may be sanctioned in the classroom, but the final test of such knowledge is made in the field. At present the Forest Service is enabling those forest school students with interests in recreation to carry out some of their theoretical knowledge by giving them jobs during the summer as caretakers in campgrounds and positions where they come into contact with the public. These positions are merely administrative jobs with very little planning connected with their functions. However, the student is able to learn much about the policies of the Service in this manner. It has been said that a forest guard should have at least two or three seasons with the Service before he is given charge of a class "A" forest camp. This point is well taken, because during those summers he is able to get his "feet on the ground" and obtain a more intelligent view as to what the Service is attempting to do. Then after he has graduated, passed the Junior Forester examination and received his appointment, he will be better prepared to enter into the planning phase and the more complex activities of the administrative program. It will be here in the Service that
he shall gain his experience with procedures, practices, laws, and policies not obtained when he was a guard in a campground. But for a basis for permanent employment in the Service, a man should have the opportunity to familiarize himself with recreation by virtue of having summer employment in some phase of forest recreation. This is his introduction to the activity, and whether or not his introduction is pleasant and fruitful depends on the training he has received. The impressions the person obtains as regards recreation will be influenced to a large degree by the training he has received while in school and by the training program as outlined by the Forest Service. It is essential that both agencies—the school and the Service give the prospective recreational forester all the vital information and cooperation necessary for the good of both the student and the Service. For without such information and cooperation the student will be lacking in sufficient experience to carry him over the rough spots after he first enters the Service.
"Training is the acquiring of an ability to exercise a given skill. This skill may be some manual dexterity, or it may equally well be a skill in utilizing ideas, dealing with people, assimilating an attitude, or developing an appreciation." (16)

1. Preliminary Training - Forest Schools

Forest education in the United States has been a very controversial subject since the time of its introduction at Cornell University in 1898. Many theories and practices of training a man to be a forester in the United States have been promulgated by men well versed in the practice of forestry by virtue of both the education and experience in the field. Men such as Price, Pack, Schenck, Griffith, Sherrard, Olmsted, and Schwarz have done much toward establishing the profession of forestry as an entity apart and in a category of its own 'midst the other professions of the country. Then as the demand grew for men trained as foresters, the torch of forest education was carried forward by men like Fernow, Roth, Schenck, Graves, Pinchot, Fisher, Tourney, Korstian, Chapman, Moon, Brown, Spaeth, Recknagel, Mulford, and a host of others who have aided conscientiously and unselfishly to the training of foresters. Orchids to them for their Spirit of Service to Forestry! And although the forest education of this country has been based on the European viewpoint, the above men have gone a long way in the past 40 years in establishing forestry as a true American profession. Progress has been made--rapid progress--and the next 40 years show
promise of producing changes in the profession now thought impossible. Recreational forestry comes under the head of those phases of forestry which will experience drastic changes in the future. We have seen the many changes in this activity during recent years. If, then, recreation is to undergo changes in the future as it has done in the past, it remains for those agencies training foresters to provide for a complete education in forest recreation so that the jobs at hand may be well done. Yet some authorities on forest education at the present time think otherwise.

Dean Henry S. Graves and Professor Cedric H. Guise in their book "Forest Education" report the following on recreation:

"Recreation is assuming constantly increasing importance in the management of forests, especially those publicly owned. The problem should be given recognition in the schools and provision be made to give the students an understanding of the character and significance of recreational resources, the principles underlying their protection, development, and use, and the integration of their management with that of other resources. The recreational use of forests should be touched upon in the courses in silviculture, forest protection, forest economics, forest policy, organization, administration, utilization, and wildlife management. We do not advocate a separate course in the subject in the undergraduate years. Special studies may well be conducted in the graduate year, which would involve the consideration of the technique of recreation management and the problems met in public forests and parks and in private forests." (17)

And this is all which is said about forest recreation in this book on forest education. Perhaps this is all which should be said; yet recreation has reached such proportions that it cannot be passed off in one paragraph—especially the educational features behind the activity. With all due
respect for those who were responsible for the book "Forest Education," and realizing that years of experience lie behind the writing of the publication, one can't help but feel unsatisfied after reading this short paragraph on recreational education. At least the person doing the reading will be unsatisfied if he is aware of the importance of recreation and its possibilities. However, there is food for thought in this section of the book.

The second and third sentences which state that the principles behind recreation should be included in the forestry curriculum, and that recreation should be touched upon in various courses is heartily indorsed. Another sentence should have been included to the effect that all students of forestry should have an understanding of recreational principles, and the part recreation plays in the forestry program. Mr. Fred Cleator advocates the same thing when he states:

" - I do not want to be misunderstood as broadcasting a lot of recreational jobs, but I do not hesitate to invite college foresters to get a taste of artistic forestry and to prophesy that it will not interfere with common sense National Forest Administration." (15)

Better forest management would be obtainable if all foresters realized just how much recreation controlled decisions when other land uses are taken into consideration. That should be obvious.

But the part of the paragraph which is not condoned are the last two sentences. They state that recreation should not be incorporated into a separate course, and that such
study can well be pursued in the graduate year. If recrea-
tion is to maintain the present position in the forestry
program and advance with the times, surely men trained,
thoroughly in this line, will need to have more than one
year of specialized training in recreation. This phase of
endeavor is too large, even at the present time, to try to
learn all angles of it in one year. The landscape archi-
tecture part of recreation alone will take up more than just
one year's study. This was alluded to by Fay Welch, and by
referring to what has been stated previously: " - those who
take special responsibilities for planning, developing or
administering recreational areas need special training and
information. They need a good grounding in the basic princi-
ples underlying large scale land use planning. They must be
competent in designing specific areas and facilities, and they
must understand operations and programs, and be concerned with
people, their desires, reactions, and activities as well as
with trees." (6) Can all this be accomplished in the short
space of one year? I doubt it! It appears that in order for
a student to gain the above knowledge as proposed by Mr. Welch,
the student will be quite "taken up" with recreation for more
than a single year. And when Mr. Carl Arentson says, "The
forest schools of today are training men for the management
and control of timber, range and game resources, and that
within a limited time the forest schools will be required to
furnish men who have received equal training for the manage-
ment and use of recreational resources," (13) then it further
appears that more time must be spent on recreation in the
schools than is advocated today. Again recreation has demanded certain concessions, and the forest schools are obliged to meet these demands by setting up a satisfactory course in recreation to comply with the present trends and future changes which are bound to occur. To do this will be expensive, no doubt, but the burden of properly training a prospective recreational engineer should rest with the schools and not with the several agencies on the outside which hire these men. If this be true, then forest recreation should become a definite part, a degree granting course, in the forest schools of the country. However, the present curriculums and even the methods of teaching will have to undergo changes to successfully train a student in recreation. Certain past and present ideas of forest education will have to be substituted for a newer concept of education for the forester.

Professor Walter Mulford of the University of California indicates two outstanding defects in our system of forest education. He states first that the instructors and professors should realize their own short-comings as instructors and amend their ways of teaching for the best results. He also points out that the present graduates of forest schools have a narrow outlook on forestry which results from the excessively large amount of forestry in the curriculum of the undergraduate. He defends his statements by saying that the leaders in forestry no longer come from forest schools but from among trained men in a more scholarly and broader depart-
ment of the university. He expresses his contentions thus:

"I would urge a downward change in the number of units of forestry requirements with a corresponding increased use of the time spent in the supporting departments. This would accomplish more for the advancement of the standards of forest education than any other move now in sight." (18)

"The time saved by condensing instruction in forestry subjects makes room for more work in biology, philosophy, psychology, foreign language, science, physics, mathematics, chemistry, economics, political science, and in our almost forgotten tongue--English." (18)

"A reduction of the amount of forestry will give a greater sum total of mental power." (18)

Professor Mulford further brings out that it will mean the student's mind will become more responsive, and he will encounter the minds of more teachers. He will learn a greater range of methods of approach and obtain a clearer realization of the relationships of new possibilities. Rich havens of enjoyment will have opened up for his personal enjoyment of living. There will be a greater likelihood that the student will uncover his own latent powers in grasping forestry for what it is by pursuing a more liberal education along with forestry subjects. Forestry is the broadest of all professions in the number of points touching the affairs of man. The American forester must become much more than a man of the woods; otherwise leadership will pass from him. He can learn the woods as he lives with them later in life. College years are the golden years in which to open the student's mind. And there should be fewer units in forestry and more in other departments. (18)
Another proponent of a more liberal forest education is Henry Schmitz of the University of Minnesota. He has announced the following as being of prime importance in the training of a forester:

" - In part at least a new type of training is required, a training involving not only adequate technical preparation, but a broad liberal background and advanced specialization. Cultural and humanistic courses ordinarily conceived to be an essential part of any college course are neglected in order to permit time for a greater number of technical courses. If this drift continues, forest education will be reduced to trade school level and eventually will have to justify its place in the university." (19)

He further implies that students are already too vocationally minded when they enroll in forestry courses, and what they need is a keener realization and appreciation of the attributes of an educated man. (19)

Mr. John B. Hatcher of the Forest Service continues in this line of thought by saying that the infusion of broad social and economic philosophies into forest school education is desirable. He also favors the presentation of more forestry work earlier in the scholastic program, instruction to promote a better understanding of man's relationship to forests and conservation rather than so much detailed technical information, and the establishment of a comprehensive course to introduce students to forestry as a national economic problem. (20)

Whether Messrs. Mulford, Schmitz and Hatcher had forest recreation in their minds when writing their articles is not known. However, that which all three men have written is the main idea behind the training of a recreational forester.
Their discussions, no doubt, were meant for all students enrolled in forest schools, yet either consciously or probably moreso, unwittingly, they have made a contribution to the basic principles underlying the study of forest recreation. In the future, forest educators may well refer to these three men when planning a curriculum for the study of recreation, keeping in mind the liberalistic viewpoints of each man.

It has not been the intention to include within this report a complete curricula program for recreation engineering --that remains for educators to accomplish. The task requires the concerted effort of those well versed in education, especially forest education, to design a satisfactory course in recreation, whether it be for four years or five. The latter will probably be the rule in a very short time to come. However, it is well to stress that subjects such as psychology, philosophy, personnel management, landscape architecture, technical report writing, sociology, botany, public relations, ecology, recreational engineering, and the policies and principles of recreation must all be included in a course of recreation leading to a degree. Naturally, the student will necessarily need a background of general forestry subjects, but these will have to be subjected to a condensation so that the more liberal subjects may be incorporated within the curriculum. As it stands today, there is only one school of forestry in the country which offers a degree in Recreational Engineering. How efficient and first-rate is this school is
not known in this capacity; yet, the New York State College of Forestry deserves credit for setting an example for other forest schools to follow. Will the other forest schools cooperate in furthering the subject of recreation, or must those agencies on the outside continue to accept into their organizations untrained men with only a smattering of recreation? In view of the progress made in the past in forest education, I have faith in those forest educators who will gradually swing over to the realization that there is something to a complete course in recreation. They'll be forced to do so in the future anyway, so the sooner they "swing", the better!

2. Guard Training by the Forest Service

The guard training program of the Forest Service has made more progress in the past few years in the matter of bringing to the short term men the importance of recreation in the forestry program than have the forest schools. This, at least, has been true in Region 6. Congratulations to those who have been instrumental in formulating the courses necessary for the various guard training camps throughout this region! On those forests which have a large recreational use, much time is spent on the training of those guards who come into contact with the using public. With the funds and time available for the brief training which is given these guards, we must frankly admit that the results have been desirable to date, and that such monies and hours used in this
endeavor have not been wasted. The Forest Service, as well as the guard himself, has benefitted to no small degree by the program instituted a few years ago. And in all probabilities, the subject of forest recreation will be stressed more intensively in the future in the guard training camps. Such action is exceedingly justifiable. Supervisor Arentson confirms this guard training by admitting:

"The visitor's first contact will likely be through the recreation guard and ranger. The men so assigned should possess the asset of being able to meet and deal with all classes of people in a way to leave an impression of service, and gain that cooperation so necessary in the protection and use of the forest improvements and resources that have been placed at the disposal of the visitor. It is here that the future will require a man trained in the principles of recreation, yet possessing the broad training of the average forestry student and ranger usually engaged in forest administration. Every recreation guard or ranger should not expect to be a recreation planner, but he should be grounded in the principles of recreational use and possess a keen sense of aesthetic values." (13)

The Forest Service has, therefore, been trying to instill the Spirit of Service into each and every forest guard at the training camps. In a large measure the Service has been successful in doing this; yet, as the saying goes, there is always room for improvement. As time progresses the courses given at these training camps must necessarily be changed to meet with the constantly changing conditions within the forests. Also the instructors leading the classes must be the best which the Service is able to procure. It is not always easy to find men capable of acting as teachers in the training camps; yet the Service should again be on the watch for those who are able to lead the many discussions which
present themselves in a school of this sort. Needless to say, those in charge of the guard schools cannot rest on their laurels, but must be alert to the problems at hand and attempt to solve them so that the schools will serve their intended purpose—that of carrying forward the ideals of the forestry program from the Service itself to the forest guard, then to the general public.

Forest recreation in the guard schools has been a knotty problem to solve. Today, some success has been realized in teaching this subject in the training camps. However, the limited amount of funds and time have not allowed as complete a training as might be accomplished if funds and time were not the hindering factors. More and more time could be spent on forest recreation and public relations if it were possible to do so, and all concerned would be that much more ahead in the matter of giving the proper training to the forest guard. However, the question arises—Why can't some of the subjects taught at training camps be included in the forest school curricula? After all, many of the courses now being presented to the students at guard school could very well be pursued while attending the college or university. This would eliminate the burden at the training camps, and permit time for other things. Local men hired for short term work would not receive the advantage of the college man if such a change was instituted; yet most of those guards placed in positions where recreation is of prime importance are generally college students, and such
a plan has its merits. But if the Service continues to maintain the training camps, which will undoubtedly be the case, it appears that more funds are necessary so that more time may be spent on not only recreation alone but on all subjects. The value received by the guards at these camps is worth far more to the guard and the Service itself than the money expended. After attending four such training camps, I have felt this to be true. So rather than offer adverse criticisms toward the program and pick on inconsequentials, bouquets have been tossed instead, and faith in those planning the program is assured to the extent that improvement in the future will be the watchword toward bettering the training camps. For it is here that the guard rubs shoulders with the administrative heads of the organization, and this means better cooperation all 'round.

3. Ranger Training

Ranger training schools have been included in the training program of the Forest Service for its permanent employees. This has been a wise step in spreading those ideas which have done much toward keeping the Service intact. In these training schools for rangers old ideas may be rehashed and new ideas may be presented. Progress has been accomplished, and from information obtained, it has been indicated that they shall be continued in the future because of their success.
It is at these ranger schools that recreation can again be pointed out as an important land use not to be taken lightly. It is here that the ranger not as well informed as others as to the necessity of watching new developments in the recreational field may gain new viewpoints, and as a consequence he will be able to administer his district to better advantage. It is a clearing-house of ideas and should be maintained at all costs for the value received by those attending the school. Again as with the guard training camps, it behooves those in charge to be awake to changes and capitalize on those changes to the highest possible degree.
The last hurdle that a prospective forester must leap over in order to obtain a permanent position with the Forest Service is the Junior Forester examination. It is quite a jump, too. Some never make the leap, and this is applicable to a man studying to become a recreational engineer. A man with such qualifications today is handicapped when he takes the Junior Forester examination, as he comes face to face with questions which do not bear upon that which he has studied. In the past these examinations have been divided into two parts, namely, management and utilization. Little has been said of recreation in the exam with the consequence that some good men have been denied the chance to prove their worth in the field of recreation. If the system of forest education is to be changed to meet this demand of recreation, then it follows the civil service examination must be also altered so that those preparing themselves for recreation work will be afforded the chance to compete on an equal footing with the other foresters who take the other options of the examination. This appears to be only fair to so alter the examination in this way.

This year the examination has been changed somewhat from the usual type. Options have been offered those forestry students who have specialized to some extent in soil conservation, wild life, and range management, but recreation to date has not been included. The Forest Service has recognized the value of specialization as shown by allowing for the above
three options. It is hoped that in the future, the Service will go still further and permit recreation to take its rightful place as a separate option also. The Service should also try to stress in this examination the value of including more questions which deal with the social and economic relationships in the forestry program and put less emphasis on purely technical questions. Also the elimination of memory questions should be accomplished. (20) Much of forest recreation is not of the memory type of study, as it depends on the thinking out of problems for their correct solution. The Junior Forester examination will have to be changed if this line of reasoning is acceptable.

Mr. C. J. Buck gives us this truth:

"Forestry's greatest problem has always been one of schematic leadership in the moulding of thought along the lines of greatest public weal as against community inclination. The horizon must be continuously searched for more light to strengthen that leadership." (21)

The Forest Service holds a unique position whereby it is able to exert influences both ways in order to obtain and strengthen that leadership of which Mr. Buck speaks. Through the Civil Service Commission, the Forest Service is able to give any type of examination so desired. And by exercising this prerogative, the forest schools must fall in line and produce students who have the necessary background so that they may be qualified to take the examination as presented. In this way the Service is able to ask for the type of men it so wishes. An important factor as this should not be overlooked,
and especially in the field of recreation. The future will demand recreation trained men, the forest schools will be the training agencies; therefore, the Junior Forester examination must be designed to fit this type of forester.
Part III.

A Plan for Administrative Recreation Personnel
in the
Forest Service
Need for More Efficient Organization

The recreation organization of the Forest Service was outlined briefly in the first part of this report, but to summarize the way the activity is handled, we find: (a) a Forest Service organization with broad national policies, (b) Regional policies, which vary according to climate, class of people, physical features, etc., (c) Forest Plan, under the Supervisor's organization, and (d) a detailed unit plan, which takes care of the ranger districts. (5) These steps in the management of recreational areas are logical and follow in sequence which is a satisfactory method to employ. To make any radical departure from such a system would not be in accord with the policies of intelligent administration. Yet, it must be remembered, that Time is no respecter of policies or plans. Changes occur regardless of how perfect man's plans may seem. It appears that even in our case this is liable to happen.

As the trends toward the future activity of recreation indicate the demand for trained men in the administrative positions, it seems evident that the administrative organization will undergo some alterations in spite of present day concepts. Recreation has become such an important phase of the National Forest program that in order for those trained men to function in a proper manner, they should be included within an organization which will allow for the best development possible along recreational lines. The efficiency of any
organization is reflected in the method with which it is organized. A loosely organized unit will not be able to function in the manner intended that it should function. This is true of the recreation organization of the Forest Service. It is not meant to infer that the set-up today is not doing what it should or that its personnel is lax in accomplishing the tasks at hand, but observations have been made to the fact that there are too many bosses in this phase of the program. Recreation is a subject which requires that decisions made in its favor be done so by men trained in recreation rather than have those decisions handed down by men with only a part knowledge of the principles which underly forest recreation. It is regrettable to state that in the past there have been instances where those in positions of authority have passed upon recreation projects which were entirely out of their scope and field. As a result, certain developments have been changed simply because the decisions made were done so by men who did not have a sufficient background in the principles of recreation. The primary intentions were honorable enough, but the developments showed a definite lack of planning beforehand which could be traced to a deficit of knowledge in recreation. The men are not to be blamed; it is the organization which should be censored for permitting untrained men to experiment as they saw fit to do so. Happily, this procedure is rapidly passing out of the picture; yet, to guard against any reoccurrence, the following plan is submitted for its own merits--that it may bring the
matter of putting recreation under the supervision of one organization rather than permit every Tom, Dick and Harry to "putter around" with this important phase of forestry.
Proposed National Organization.

With the increased use of the National Forests for recreation by the public, more developments being made each year, and that men trained as recreational engineers are desired on the National Forests to plan and administrate those recreational areas, it is proposed to set up a Branch of Recreation under the Chief Forester of the Forest Service with a Chief Recreation Engineer in charge of the Branch. Five assistants would be appointed to aid the head of the Branch to carry on the planning and administrative work. All men would be under civil service, and they would be trained in recreational forestry. They would act as a committee to view, discuss and pass upon such plans as affect all the regions of the country. It would also be the duty of each assistant to spend part of each year in traveling about the country and visiting each region to aid the region officers in their local problems. By virtue of these contacts a closer knit national and regional organization would be possible, and it would be possible to obtain an inter-exchange of ideas which would make for better recreation in the country -- the West would find out what the East is doing, and vice versa. Some of this is accomplished now, but it is not enough.

By forming a committee made up of these five trained assistants to the Chief Recreation Engineer a more powerful and efficient organization would be possible. This group would be in a better position to make recommendations for improvement
in a national recreation plan and to submit proposed appropriations of money necessary to carry on the recreational phase of forestry in the National Forests. Also this group, because they will have been trained in the broad concepts of forestry, will have a better understanding of land use—this will provide for a more effective coordination between recreation and the other land uses. It is not intended to separate recreation from the other phases of forestry altogether, but it is meant to provide for a national organization which will have as its head men trained in the basic principles of recreation which includes an understanding of the problems of other land use activities, as well as recreation.

Although fish and game management is a part of recreational activities of the public, it is suggested to place this function under a separate Branch, also. The same efficiency possible under the proposed Recreation Branch would be feasible in this organization.

Proposed Regional Organization

The regional organization would be treated in much the same manner as the national set-up. A Regional Recreation Engineer would be in charge of his force, and he would work under the Regional Forester. Assistants would be appointed to aid the Regional Recreation Engineer in his duties—the number would depend on the amount of recreation in the region.

The Regional Recreation Engineer would cooperate with all the National Forests within the region, and pass on all
major plans suggested from the Supervisors' offices. The Regional Chief would be responsible to the national organization for major changes which might occur.

All assistants in the regional set-up, including the Chief, would be selected from the Civil Service register, and these men would also be graduate recreational engineers.

**Proposed National Forest Organization**

In the Supervisor's office of each National Forest would be an assistant either called a National Forest Recreation Engineer or Recreation Ranger. He would have the same rating as the Assistant Supervisor in pay scale and rank. Assistants would be assigned to him—the number depending upon the amount of recreational use of the forest. The plans for the forest would be handled by the Recreation Ranger with the approval of the Supervisor and the Regional Recreation Engineer.

The Recreation Ranger would cooperate with all the rangers in formulating plans for each district. Every assistance to the rangers would be afforded by the Recreation Ranger, for both winter and summer recreation problems. It would be the duty of the assistants under the Recreation Ranger to travel through the forest during the periods of heavy usage and spend a few days or a week with the various campground guards in analyzing conditions in each forest camp and further training the guard in public contact work. These assistants would be expected to contact each District Ranger and discuss possi-
ble changes in his district. By doing this the ranger would obtain a better understanding of recreational principles and would be less able to make mistakes in planning for his district. The assistants would be able to relieve the ranger from some of the details of planning which might prove a burden to the ranger. It is a well-known fact that the District Rangers have a multitude of tasks to perform, and they would probably welcome a chance to pass some of their duties to someone else. This set-up would permit the ranger to relegate some of his duties and give him more time for other tasks. Then by permitting the ranger and assistants to have conferences more desirable all-round recreation could be practiced on each district, as all rangers are not fully capable of planning and putting into execution recreational principles. These conferences would tend to bring closer cooperation on recreation policies between the ranger and the Supervisor's office.

The Recreation Ranger would have the hiring and training of all recreation guards employed during the summer months. It would be his duty to select men whose records indicated that they possessed those qualities of character necessary to make a successful campground guard. Recommendations would be accepted by the district ranger for certain men to be employed on their districts in this capacity of recreation guards, but the final selections would be done by the Recreation Ranger. This would eliminate favoritism and would allow the best man for the job to be placed at strategic locations.
The organization as proposed for the National Forest would naturally make for centralization of authority and standards of practices to be executed on the forest. However, it would not destroy the initiative of the district rangers. If a ranger is at all interested in recreation on his district he will endeavor to plan more efficiently than under the present set-up, as he will know that his plans will necessarily have to be of the best and not done in a careless manner. He will be forced to strive for the optimum in recreational precepts for his district. As for centralization of authority, this is advocated as it would eliminate the "many boss" angle now prevalent on some forests. Those best qualified to pass on recreation plans would be the judges of the worth of the plans submitted, which would bring about the results desired in forest recreation.
Part IV.

Conclusions
Conclusions

From the foregoing material presented in this thesis the following conclusions may be drawn:

1. That, as the United States Forest Service develops its program in the future, there will necessarily be an increasing demand for men trained in the study of forest recreation. The past has indicated that forest recreation will play an even more important part in the lives of the people than it is doing today. More intelligent planning will be required to satisfy the growing demand, and that such planning will have to be done by men experienced, both in the field and classroom, in the basic principles of forest recreation.

2. That, as the demand increases for trained men to administer the recreational areas within the National Forests, a peculiar type of man is needed for this work. Certain qualities of character not possessed by the average forester now graduated from the forest schools of the country will be required. A different type of curriculum will need be followed in order to produce men with a broad knowledge of the concepts of forest recreation. And in order to place such men in the Forest Service organization, the Junior Forester examination will have to be modified.

3. That, as these men come into the Service they must be included within an organization which will permit them to do the work at hand as efficiently as possible. This means a moderate reorganization of the present set-up. It would
mean to give the recreation engineer more authority to carry out to the optimum degree the policies behind the recreation program of the Forest Service.

It is evident that some will disagree with what has been proposed and stated. It is only natural that criticism will be forthcoming. As was stated in the preface, this thesis is not a masterpiece nor is it complete. Yet no apologies are offered for what has been stated—what has been said, has been said in good faith. But to those who are not in accord with some of the statements and ideas as promulgated, this is emphasized:

The United States Forest Service and all of its ramifications was organized for the good of all concerned. And forest recreation has become a definite part of the many functions of the Service. The health and happiness which this activity affords the people of this country cannot be accurately measured in dollars and cents. And if this trust which the people of this country have placed in the Forest Service to provide happiness and health to them by means of forest recreation is to be continued in the years to come, it is charged that the Service cannot violate that trust. The Forest Service has a definite job to perform in this respect—the Spirit of Service must not be permitted to wane!

In order to maintain the high standards already in existence within the Service as regards recreation, trained men in this field is the criterion to follow. The Forest
Service needs such men; the forest schools are able to produce such men; the people of the country require their assistance; the demand is present; the next thing to do is -- Carry on!!
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