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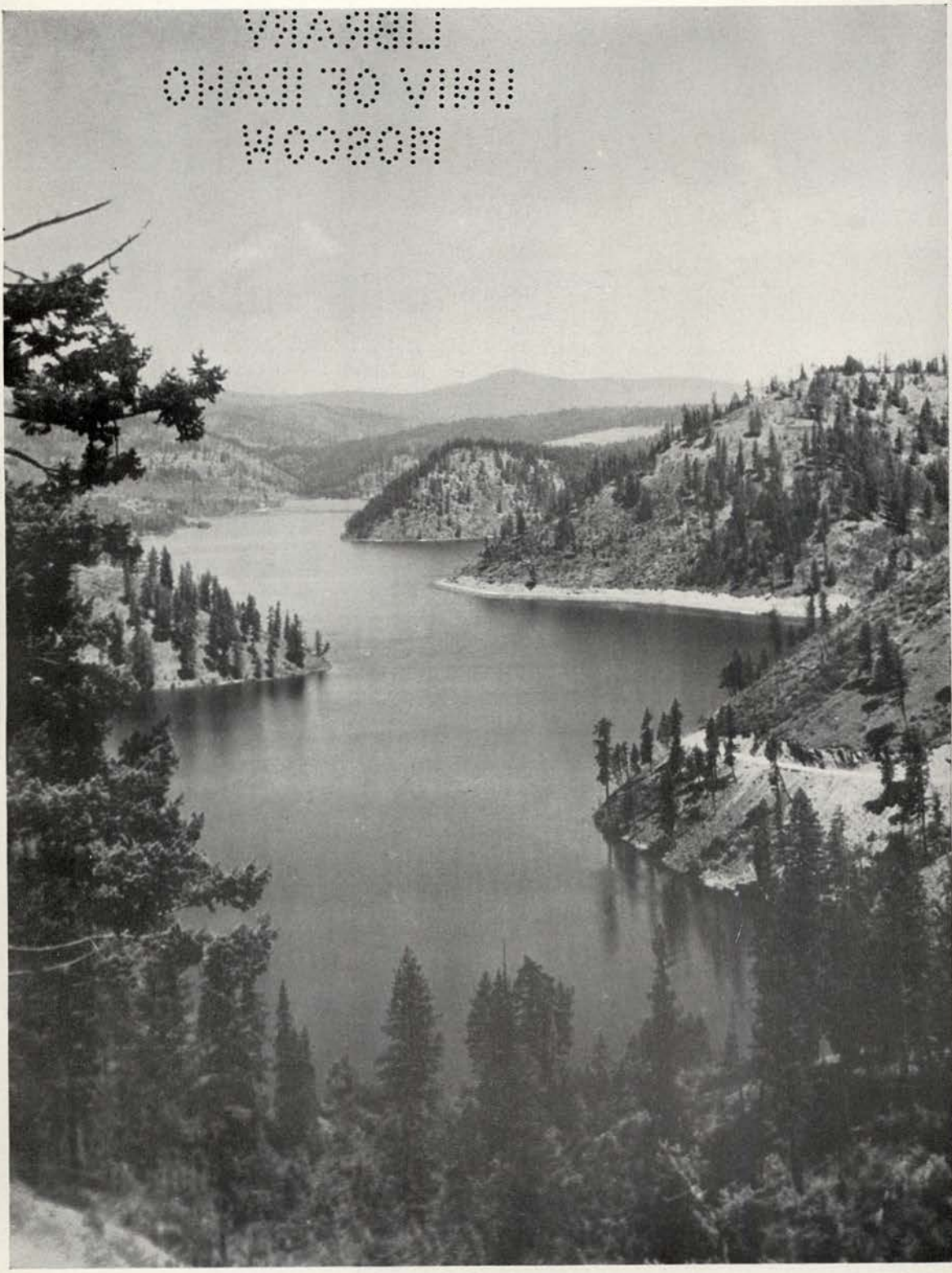

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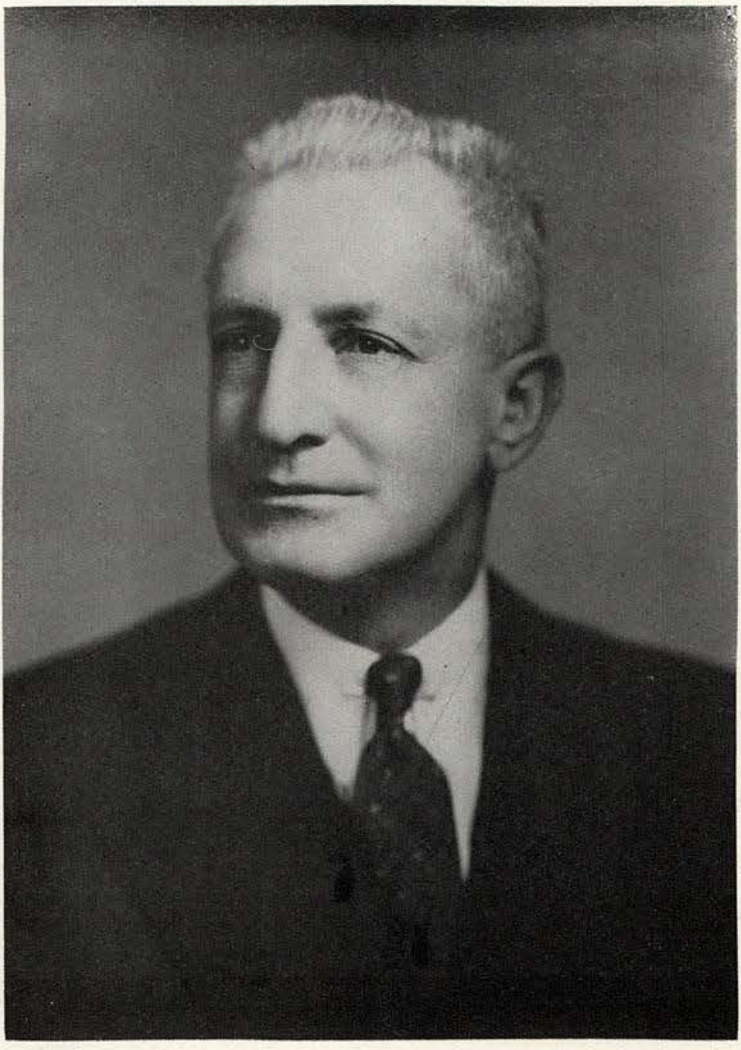


DEDICATION

To Major Evan W. Kelley, a real Forester
and friend of our school,
we, the Idaho Foresters, dedicate this
twentieth volume of our publication

TABLE OF CONTENTS

FEATURE ARTICLES — Page

Land Use Planning, by Evan W. Kelley 6
Planning Applied to Land Use Problems in Idaho, by Carl Tjerandsen 9
The Greatest Forest Management Problem in Idaho White Pine, by E. C. Rettig 12
Sustained Yield at the Crossroads, by Charles H. Willison 14
Coordinating Game Management With Other Land Use, by Orange A. Olsen 15
The Land Use Program of the Soil Conservation Service in Idaho, by J. H. Christ 17

GRADUATING SENIORS 22

SCHOOL NEWS

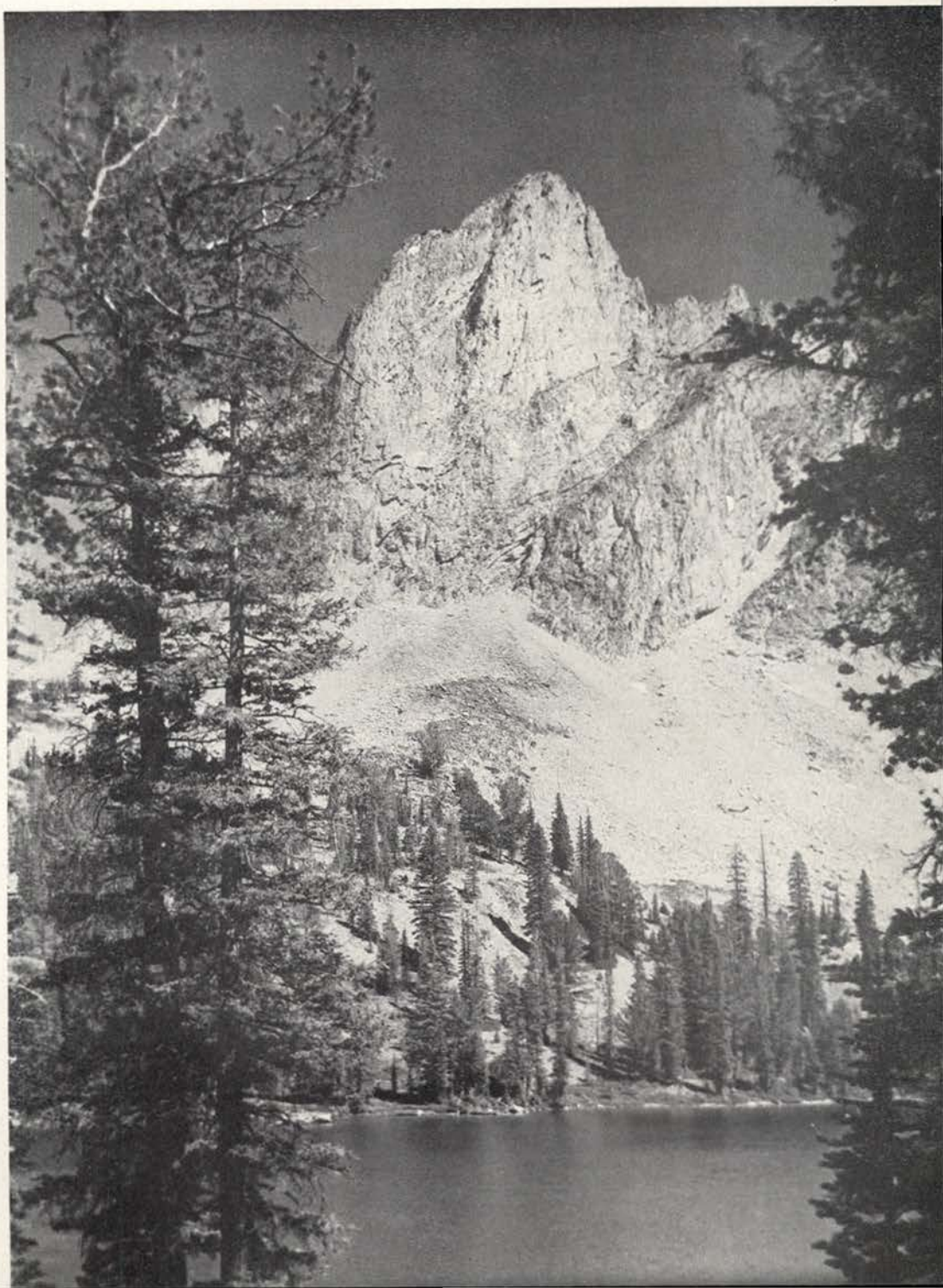
The 1938 Idaho Forester Staff 28
Idaho Has a New President, by D. Nelson Jeffers 29
Graduate Students, by Robert Blum 32
The Idaho Forester Photo Contest Winners 34
Juniors Are Champs at Bunyan's Feats, by Howard Johnson and Kenneth Kehrer 36
The Forester's Ball 37
The Morrill Hall Meteorological Station, by Arthur Wm. Nelson, Jr. 37
Around the Loop With the Senior Foresters, by George R. Callaway, Jr. 40
The Associated Foresters, by Ernest Taylor 41
Senior Range Party, by Bruce R. Lee 42
Xi Sigma Pi, by John Wright 43
Idaho's First and Second Technical Game Management Conferences 44
Labor and Forestry in Germany, by Albrecht Behm 45
Forester's Bonfire, by Foster Robertson 46
Twenty-Second Annual Banquet, by Claude Brower 47
Summer Camp 47
Utilization Majors Organize 47

ALUMNI NEWS

1937 Graduates Hibernate with the Selway Elk Herd 50
Federal Funds Made Available for Wildlife Restoration in Idaho 50
In Honor of Francis Garner Miller, by Harold F. Heady 51
Alumni Directory 52
The New Cover Design 68
Dr. Gail Travels in Europe 68

FEATURE ARTICLES

The Half Dome, Sawtooth Mountains



Land-Use Planning

U. S. Forest Service
Northern Rocky Mountain Region
Evan W. Kelley, Regional Forester

"Land-use planning" has come to be a national byword. Were the import of the term fully realized in material form, many of our economic ills traceable to improper land use would have been dispelled and widespread convalescence would characterize the situation of today.

No such happy outcome is generally in the national picture. The import of land-use planning to date is more audible than material. Land-use planning, as I see it, is in something of the same status as Mark Twain's characterization of the public's treatment of weather problems—everybody talks about it but no one does much about it; accordingly, I conclude that development of land-use planning has not progressed past the "talk" stage as a broad national move.

What is land-use planning? Nothing more than analysis to determine how given tracts of land should be used and developed to contribute most abundantly, and most enduringly, to the satisfaction of social needs; recordation of essential facts pertaining to the findings of such an analysis and the conclusions drawn therefrom; and, finally, setting up means of attaining the desired ends. Even if the greatest of skill is exercised in the making of the analyses and wisdom of the highest order is drawn upon in arriving at conclusions, plans are mere scraps of soiled paper unless their execution is begun and diligently carried on to an outcome in consonance with the objectives of the plan.

Under existing situations in the United States, the wisest of land-use planners encounter hosts of insurmountable obstacles in translating plans into action designed to achieve the objectives of the planners. One of the chief obstacles is that psychologically, American landowners are not ready to accept changes which violate traditions or interfere with personal practices. Neither are political bodies generally ready to establish essential legal foundations to enable the achievement of the objectives of wise land-use planning, which, to be worth the cost of carrying on, must go beyond the mere determination of the purpose for which land should be used and the prescription of the technique to be followed in the carrying out of the plans.

Land-use planning is not new to members, past or present, of the U. S. Forest Service. Theodore Roosevelt and Gifford Pinchot initiated land-use planning in the Forest Service on a broad scale away back at the turn of the century, when they dispatched examiners into the field to search out unappropriated public domain lands suitable and needed in the national economy for watershed protection and timber production. Even preceding that movement, the Congress of the United States took a broad step forward in land-use planning in the passage of the Act of March 3, 1891, which empowered the President to "set apart and reserve . . . . . public lands wholly or in part covered with timber or undergrowth, whether of commercial value or not, as public reservations . . . . . ."

Subsequent Acts of Congress extended land-use planning by specific legislative directives, an important one of which was the Act of June 11, 1906, which authorized the Secretary of Agriculture "to ascertain as to location and extent of land . . . . within Forest Reserves" which were "chiefly valuable for agriculture and which in his opinion may be occupied for agriculture without injury to the Forest Reserves."

So it has continued over the years—the personnel of the Forest Service has been engaged, as they are today, in planning for the use of all National Forest areas. Present-day activities, to be sure, cover the land-use planning program in a more detailed manner, with the objective of maximum benefits to society from every acre of National Forest area. The achievement of that objective naturally requires the interjection of the principle of multiple use and coordination and integration with uses of lands of other ownerships, geographically and economically related.

Highest social service, which is synonymous with maximum benefits, lies not wholly in furtherance of commercial aims or commercial uses of forest land, nor not necessarily in use by an individual, but in principles of use whereby utilization will harmonize with current public needs and permanent community, state and national welfare. This does not intend however that there should be denial or violation of individual rights, privileges or needs. It only says that such rights, privileges and needs cannot be allowed to transcend the collective interests of communities, states or nation. It therefore follows that in land-use planning the Forest Service must vigorously and unremittingly combat any principles or measures under which

private rights in the National Forests would become dominant or permanent over public interests in consideration of community welfare and security.

A word about the multiple-use principle: If all legitimate national needs and demands on wild land for timber, watershed protection, grazing, recreation and wildlife production were satisfied by devoting suitable areas each to a single use, even today, without considering future expansion of population, a total area approximating twice that of the United States would be required to satisfy those demands. It is a well-recognized fact that most non-agricultural lands, and even certain agricultural lands, inherently possess one or two or more of these values to a varying degree. Simple arithmetic therefore dictates that land-use planning must provide for multiple use of wild lands if the community is to realize the greatest total output of commodity in service from lands of this character.

The Forest Service has always stood for multiple-use planning and management, and consistently has endeavored to avoid single-purpose use except in unusual cases where no alternatives exist. Keeping the Forest Service ship steadily upon this course and at the same time meeting the increased and more varied demands made upon the National Forest areas has led to the development of continually more refined techniques—more soundly founded analytical processes—for applying land-use planning principles to multiple-use management of forest and other "wild" lands.

How does one go about it? The basic processes are little different from those by which conclusions are now sought in other fields of land-use planning. Though they are not incisively separable, the phases and steps in the process can be expressed in a sort of logical sequence.

First comes the inventory phase. The first step in it is the resource inventory in which one must determine the potential services and benefits—the utility capacities—of the lands for which the plan is being made. A recital here of the individual land utilities of the mountain country of the Northwest (concerning which this article is particularly written) seems almost unnecessary but in order that none may be overlooked, here is a list of those with which we are concerned in planning the use of National Forest areas containing lands of diverse character and ownership: timber production; watershed protection; domestic stock grazing; recreation; wildlife production; cultivated crop production; mineral production; and miscellaneous occupancies such as for roads, reservoirs, ditches, canals, power lines, townsites, administrative sites, etc. By way of further explanation of this first step of the inventory phase, one must delimit the areas capable of producing timber of commercial size and quality from those producing noncommercial stands only; the areas in which watershed protection is of more than incidental importance, such as those furnishing domestic and irrigation supplies; the lands supporting the grass and browse forage species palatable to domestic stock; the stream and lake sides, the areas of outstanding scenic or other attraction, having recreation value; and so on through the whole list of utilities.

The second step of the inventory phase—a qualitative and quantitative analysis of the present and future needs for the resources or utilities and their interrelationships—cannot be entirely separated from the first. To cite an instance or two of this inseparability, a timber stand which serves satisfactorily in supplying vital needs for house-logs, rough lumber, fuel, fence posts and what-not in eastern Montana, therefore fully qualifying as to utility for that territory, may be wholly unmerchantable in western Montana or northern Idaho where the demand on the heavier, higher-quality stands is chiefly for lumber for distant markets; or, a trickle of a spring in a lightly wooded glade on the slope of a timbered butte may be an eminently desirable and needed camp or picnic spot in the eyes of the residents of surrounding treeless prairies, while a similar spot in a territory of heavy forests, sparkling streams and clear lakes would receive no consideration whatever in an inventory of recreation resources of the latter locality.

So, these two steps of the inventory phase must go hand in hand—giving due weight to local, regional and national social and economic factors, including particularly the relationship between the lands being planned for and surrounding lands, in determining the kinds of services and benefits our lands must render. Examples of the results will be found in a division of the area capable of producing timber of merchantable size and quality into two zones—the first meeting the requirements of the probable market as to species, quality and accessibility, the second not meeting such requirements; in elimination of areas of forage otherwise suitable for summer use by domestic stock due to the infeasibility for one reason or another, of their being so used; and in preliminary delineations of areas of a character suitable for camp and picnic grounds, summer-home and resort sites, scenic areas and roadsides, primitive areas—in fact

areas to meet all kinds of recreation demands, present and future. In addition to appropriately modifying the bare inventory of physical capabilities, which was the first step, this second step, fully performed, will have supplied factual data as to the degree of need for the various utilities.

The next phase is the plan itself. In it, by a process of weighing, adjusting and coordinating resources and demands, one must determine how the needed services and benefits can be best assured or rendered by the available resources and how conflicting needs for the utilities from the same land can best be adjusted so that the greatest amount of benefit from each can be realized. An essential among the numerous elements to be considered at this stage is whether the expected returns in service and benefits from a given resource will fully justify the expenditure of human effort and capital wealth needed to obtain them.

In the evaluation of all the numerous factors bearing upon the problem the land-use planner has need of all the analytical powers at his command. He is constantly confronted with the lack of accurate yardsticks to work with in assigning values to conflicting demands. He will often find himself unable to evolve uncontestable formulae and will have to depend upon judgement and indicative but non-conclusive observations. In his adjustment of conflicting uses with a minimum of sacrifice of benefits in each he must apply both sound economics and sound natural science, otherwise his plan of management must fail—either because it is uneconomical to harvest the benefits in the way he has decided upon or because the harvest in the manner decided upon results in the destruction of the source of the benefits.

However, if he applies sound analysis to sound factual data he will not go far astray and the result will be infinitely better than no planning at all. What is the result? To state it simply, the result —documentary evidence of which will be in the form of maps, tabulations, text and what have you —is the definition of the pattern of land use which if effectuated, will result in the maximum flow of benefits from the area for which the planning is done.

Putting the resultant findings upon a map (as we record our master land use classification and plans for National Forest areas) using appropriate colors to denote our various utilities and legends of solid colors and cross-hatching to signify priorities of use, will enable us to see better the result. Here and there we have areas and strips which we have allocated to single-purpose exclusive use, but, by far, on most of our areas we have planned for two or more uses. In some cases we have set up this multiple-use on a coordinate basis, the different uses to be given equal weight and if sacrifice is neccessary, the sacrifice in each to be equal. Again, we have classed some use or uses as subordinate to the predominant or exclusive use, or to two or more coordinate uses, indicating that though that use now sems relatively important, if in the future there is a conflict of uses, the subordinate use is definitely scheduled to be sacrificed, or completely eliminated. We have gone one step further, too, and indicated incidental use—one of little importance which can be accommodated with no sacrifice of more important ones.

Having recorded our findings are we through with the matter? No, for two reasons. The first is that a land-use plan of this kind should never be considered as completed. Founded as it is upon economic and social needs as well as upon present understanding of natural phenomena, a land-use plan for wild lands must live and grow with changing conditions and with the accession of new knowledge of conditions and influences.

The second reason why we cannot stop with a mere plan is that we have not yet accomplished our ultimate objective—actually obtaining the maximum flow of benefits and services which our analysis has shown our lands to be capable of producing. Here the land-use planner often runs into obstacles—finds himself without tools to accomplish his objectives, though in the National Forest areas he finds himself better equipped than elsewhere. The secret lies in the existence of continuity of control under stable ownership dedicated to the principle that there is a social obligation incumbent upon all lands.

In National Forest areas, it therefore becomes a matter of incorporating the findings of the planner into the individual resource-management plans. Timber-management p'ans are drawn with full recognition of the requirements for watershed protection, recreation, etc. Grazing-managment plans are evolved in which provision is made for concurrent timber, watershed, wildlife, recreation and other benefits. Recreation plans likewise give full weight to demands for timber and forage utilization. And so on down the list.

The National Forest administrator does not confine himself, however, to resource-management plans in putting his complete land-use plan into effect. He has other tools to work with. His land-use plan points out to him the nonconforming uses on intermingled lands in other than Federal ownership and by indicating the relative degree of pub-

(Continued on Page 20)

Planning Applied to Land Use Problems in Idaho

By Carl Tjerandsen
State Land Planning Specialist
Bureau of Agricultural Economics
U. S. Department of Agriculture

With the passing of the frontier in a geographical sense, the people of the United States have come face to face with a new social frontier. The prevailing land use practices of the past, with their emphasis on equality of opportunity, rugged individualism, and reckless exploitation of natural resources, are no longer adequate to cope with the problems arising out of the mistakes inherent in the application of such policies to our natural environment. It may be that they were never qualified to deal with such problems. Perhaps it is a case of never having been required to, because there were always fresh lands and new opportunities available for the taking. Now that this condition no longer exists in the same degree, we must face the consequences of our mistaken exploitive policies. As a result, there has become increasingly apparent a shift in emphasis between individual self-interest and social welfare. One aspect of this shift in social emphasis can be found in the increasing attention given to the planning of land use which has as its objective the promotion of an optimum relation between people and their natural environment.

Although the planning of land use had been carried on by a variety of agencies for many years, it was not until 1934 that an agency was set up in the Federal Government, the chief responsibility of which was the study of problems in land and water use and the corrective measures which they require. In that year, land planning consultants responsible to the National Resources Board were set up in practically every state of the Union. The responsibility for this work was finally transferred to the Bureau of Agricultural Economics after having been assigned for a time to the Resettlement Administration and later, the Farm Security Administration.

It must not be construed from the foregoing, however, that this new agency was designed to duplicate or supplant the activities of other agencies which have been engaged in land use planning work. Its function has been, rather, to bring together the results of scattered programs of research is an effort to arrive at a unified program which would be capable of coping with the land use problems which were becoming increasingly serious in their effects upon the economic and social order. Its work might be conceived of as specialization in the field of generalization, i.e., bringing together many related lines of specialized research.

In line with the shift in emphasis from individual to social welfare, there has been a growing recognition of the part which government must play, government being the instrument of social policy, in planning the use of land and water resources. For that reason, increasing emphasis has been placed upon the development of programs of land use adjustment rather than on pure research as such. A conscious effort is being made to direct every research program toward developing courses of action required to solve the problem in specific areas.

The foregoing discussion should indicate broadly wherein the purpose of land use planning lies. Its prime function is to assist in the process of bringing people into an optimum relation to their natural environment. If possible, this should be an optimum relationship for both the individual and society, but where the two interests do not coincide the welfare of society should prevail. For example, a shoestring valley might afford a living to one or two families, yet the cost of providing public services to so few people would result in an unreasonable burden upon society. Such settlement should be prevented.

Perhaps the most important aspect of land use planning is the classification of lands and the development of action programs arising therefrom. Land classification is a geographic concept referring to the delineation of specific areas on the basis of specific and similar conditions giving rise to specific and similar problems requiring specific and similar solutions. As such, this concept is inseperable from the idea of use-capability; in other words, for what the land can best be used.

So far, in the land use planning program in Idaho, we have been more concerned with the major type of desirable use than in the gradations of use-quality within a major type. That is, we have been more interested in determining the boundaries of agricultural, grazing, and forest areas than in laying down boundaries of several different grades of a given type of land. Types of agricultural land are differentiated under certain conditions, however, as when different programs are required for the handling of the various prob-

lems which are peculiar to each grade of agricultural land. No attempt has been made, however, to recommend changes in management practices within a given land class except where the stability of use depends thereon.

It is somewhat unrealistic, however, to devote much time to the discussion of land classification in general terms because in any land classification study it is found that the categories set up and the methodology employed must inevitably be conditioned by the specific objectives which have prompted the study. Perhaps this principle can best be exemplified by a brief consideration of the land classification study which was made in Latah County Idaho.*

Latah County contains, besides a considerable area of forest land, excellent agricultural land as well as much agricultural land which is being utilized under submarginal conditions. As such, it presents a variety of problems which point to desirable objectives in a study designed to correct maladjustments in land use. More specifically, the major problems which have arisen in the use of land have developed as a result of a persistent migration into the county which coincides with a decline of activity in the timber industry. The inevitable result has been an increase in the demand for agricultural sites not only on the part of new arrivals in the county but also on the part of individuals who could no longer find either full or part-time employment in the forest industries. These problems pointed toward the objectives which were followed. For example, it appeared desirable to determine the areas where agriculture as a major use should be discouraged in order that the wastage of human and natural resources might be minimized. On the other hand, it was necessary to develop a basis for guiding newcomers to the county, many of whom had come from the drouth areas, to those lands which would offer some hope of affording a living. Evidence of unreasonably high per capital costs for roads and schools indicated a need for guidance in the distribution of public services. The same need was indicated for the loaning programs of private and public credit agencies. A case load of about 225 rural families in 1934 and 1935 seemed to warrant a study of rural relief problems in an effort to arrive at some conclusion as to the causes of the condition and the possible remedies which might be available. Lastly, the acquisition by the county of about 12,000 acres of land through tax foreclosure between 1934 and 1936, gave evidence of a maladjustment in land use requiring study.

In making the study, many types of data were gathered to develop the basis for the conclusions eventually reached. These data included the following: soils, topography, climate, cover types, assessed valuations of agricultural land, average wheat yields, tax delinquency, ownership, rural relief records, crop acreages, public service costs, and farm records. The first step was to make a classification of the lands based upon physical qualities. The physical classification was modified in the light of pertinent economic and social factors. This modified classification was then checked in the field. The classification and conclusions were presented to a group of county officials and local farmers for their consideration and, after further modifications of the material in accordance with their suggestions, the final classification was prepared.

It will bear repetition that land classification is first of all a process of separating land areas into categories on the basis of types of action programs which are required to deal effectively with land use problems in the respective areas. In the case of the Latah study, four major separations were made as follows: (1) agricultural areas suited to both cash-crop and livestock farming; (2) agricultural areas offering special land management problems; (3) grazing areas; and (4) forest areas. Additional subareas were delineated within each major type to the extent that variation in conditions, problems, and suggested remedies made such delineation necessary.

As far as the forest lands are concerned, the land classification work of the Bureau does not involve detailed planning of forest management. It is concerned, rather, with the boundary between agricultural lands and other types of lands. At the same time, consideration is given to the characteristics and needs of forest lands, especially with reference to the interrelationships of forestry and other uses. For example, the necessity for maintaining a stable cover for the purpose of flood control, soil erosion control, recreation, stabilizing the water table, etc., has been emphasized as well as the difficulties which have prevented private enterprise from managing forest lands in the interest of serving these various uses. In this connection, a thorough revision of the tax structure is needed to permit a more rational utilization plan. This, in itself, is not enough because many of the benefits resulting from a sound forest program are not pecuniary or do not accrue to individuals as such. Flood control, rec-

*Carl Tjerandsen, *A Land Use Classification of Latah County, Idaho*, U. S. Department of Agriculture, Resettlement Administration, Region XI, June 1937.

reation, watershed protection, and game preservation are benefits which fall into this category. The financial burdens involved in attaining these ends are heavy and direct. Individuals cannot and should not be expected to assume them. They are more properly the responsibility of society. On the other hand, the effect of the checkered ownership pattern, which prevents the blocking-up of economic administrative units, on efficient management of public forest lands has been noted.

These conditions point to the general conclusion that a land classification, as far as a particular area to which it applies is concerned, is only a first step in a long-time endeavor to promote desirable readjustments in land use. Some progress has been made. For example, the Latah land classification has been useful in directing the local rural rehabilitation loan program of the Farm Security Administration. Various real estate, life insurance, and credit agencies have expressed their interest in the land classification study in terms of its application to their respective activities.

In this connection, it is of interest to note the attitude expressed by the local committee, composed of the County Commissioners and local farmers in Latah County, which was designated to consider the report. This committee placed its attitude on record in the following terms:

BE IT RESOLVED THAT:

1. The information contained in this land classification study be made available to the people of the county in order that better use of the land of the county may be encouraged.

2. In disposing of county-owned land, the county, as a general policy, sell to prospective farmers only such lands as are in areas classified as agricultural.

3. County lands in non-agricultural areas be sold only under suitable safeguards to insure that agricultural development will not be attempted on such lands.

4. The cooperation of other land-selling agencies be requested in furthering the recommendations embodied in this report in order that no sale of lands to prospective farmers be made in non-agricultural areas.

5. The improvement and extension of public services be not encouraged in non-agricultural areas unless such improvements and extensions are necessary parts of a comprehensive plan involving a wider area.

6. Loans for the development of lands for agricu'tural purposes be encouraged only when they lie in agricultural areas.

7. Land-clearing projects in agricultural areas receive immediate consideration in the permanent solution of the relief problem.

8. Local planning agencies give consideration to the proper use and administration of the lands classified as non-agricultural and, working through all available channels seek to bring about such consolidation of ownership, under the agency or agencies most capable of administering said lands, as is necessary to insure the use of the lands for the permanent welfare of the people of the County, State, and Nation.

It should be mentioned, however, that the land classification study of Latah County illustrates only a few of the ways in which land use planning in Idaho is directed toward improving the relation between the people and the income producing resources of the State. Wherever focal points of population pressure upon natural environment develop, there is usually a need for land use planning. Much work needs to be done, for instance, in the way of planning a redistribution of water resources so as to promote a wider and more efficient use of such waters. This is only one of many examples which might be given.

Experience to date in land use planning activities makes it increasingly evident that to be as efficient as possible the particular research programs must be directed toward the needs of specific action programs. For example, the Forest Service is interested in knowing the boundaries of the areas within which they can carry on their purchase program with maximum benefit; the Bureau of Public Roads is interested in the economic future of specific areas in connection with the planning of secondary highway programs; the Bureau of Reclamation and similar agencies must know which areas will repay developmental costs and which areas will not; the planning of a State educational program must depend in a large measure upon the determination of the areas where expenditures for schools are justified and where they are not; the Rural Electrification Administration is concerned with extending power transmission lines only into areas which will justify the cost of such extensions; and the submarginal land purchase program of the United States Department of Agriculture must obviously be predicated upon a classification of lands as to best major use.

At the present time, it must be recognized that the various instruments of land policy are only experimental in character. Detailed research must be carried on before the possibilities of specific action programs in meeting specific needs will be

(Continued on Page 48)

The Greatest Forest Management Problem in Idaho White Pine

By E. C. Rettig
Forester, Potlatch Forests Inc.

Forest management as practiced by Potlatch Forests Inc., must succeed in domesticating the wild and natural hereditary environment of its timber stands, otherwise the attempt is doomed to failure as far as regeneration of the forest, within a reasonable cycle, is concerned. The effort of our company is to hasten the work of nature by reserving a nucleus of timber from which to harvest a second crop within a period of thirty to thirty-five years. This nucleus which consists of white pine trees of diameters of seventeen inches and under, and mixed species not now having a commercial value, is usually termed suppressed trees in the white pine species and climax, or shade enduring trees, in the other species.

Our logging methods remove the dominant and many of the co-dominant white pine trees, or trees which have outgrown their neighbors. This results in opening up the stand to more sunlight, more wind, and causes a problem in slash disposal. In other words, the remaining timber is subject to increasingly hazardous natural enemies, and the ravages of man.

These trees bowed in deep shade for many years, fanned by cooling breezes and having a bountiful supply of moisture are suddenly released into a new climate with strong sunlight, hot drying winds in summer, and severe winds in the spring, fall and winter. The tender, thin bark of these trees reacts much the same as the tender skin of a person who tries to hasten the sun-tan process and a sunburn, or sunscald is the result. The wind enjoys snapping the tops from the long spindly crowns, and chuckles gleefully when it succeeds in crashing many to the ground. Both the sun and wind combine to more rapidly absorb the moisture from the forest floor and add additional hazards to a new environment. Along with the sun and wind, man comes into the picture and in an attempt to save these trees from fire, starts what he considers controlled fires to reduce the fire hazard by burning the slash accumulated from previous logging operations.

This controlled burning does not materialize as such, much of the time, and very often runs out of control, thus destroying many fine trees left for a second cut. In other instances the fires become too hot and sear or scorch the bark on the side facing the fire, causing a dry side, or very often damages the root structure thus weakening the tree and making it an easy prey to some other enemy, such as bark beetles.

On the other hand, we hope that through the release of these suppressed and climax type trees, thus greatly reducing the competition for existence, the increase in growth will far more than offset the loss between the period of the cutting rotations.

This company has been logging under a selective plan since the fall of 1928. Last summer it was decided that we make a careful check of just what is happening to these selectively logged timber stands. A crew of three men, all with forestry training, were delegated to get certain information for us, from which we could definitely determine whether these trees were able to withstand the shock of a more domesticated environment, and what could be expected within certain time limits.

During the winter the story has been gradually unfolding and at first the results were anything but cheerful. In fact, the results to date are quite disheartening from the standpoint of the total volume growth actually made since the inception of our selective logging plan.

As the work progressed, however, it became more evident that the worst enemy this timber had was not the natural elements, but man. In other words, slash burning was the real enemy to contend with and not the sun, wind, rain, snow, bug or disease. Fortunately we were able to find areas where the slash had not been disposed of. It was a real surprise, and of course a source of gratification, to find that our loss of timber decreased very materially on the areas not burned.

Where before it would take from twenty to twenty-five years for the remaining trees to add sufficient growth to equal that lost from various cause, mostly slash burning, we now feel it possible to reduce that period to possibly five years by the elimination of slash burning, or sparsly burning. In fact, the most valuable species, white pine, made sufficient growth to equal the loss within three years. White fir seems to be much less resistant to the sudden change than white pine. The percentage of timber removed appears to

(Continued on Page 20)

Residual stand of white pine after selective logging operations near Headquarters, Idaho. The larger white pine and mixed species have been removed and no brush disposal has been attempted.

Brush disposal fires in a residual stand of white pine following selective logging operation near Headquarters, Idaho. Notice the proximity of the flames to the remaining trees.

"Sustained Yield" At The Crossroads

By Charles H. Willison, Jr.
Private Forester

With the appointment of F. A. Silcox as Chief Forester in 1933, a new division of the Forest Service was created, that of State and Private Forestry. Its purpose is to promote cooperation with the states and with private timber owners and operators, in improving forest practices off the National Forests. For the successful working out of this objective on private lands to its ultimate goal, i.e. sustained yield, a new conception has been developed, namely the "sustained yield unit".

The basis for this idea has been with us since first Fernow brought his European training here with him. But its need has not become pressing until recently. It is to me a conception that is basic to any long-term land planning for large areas. The object is to bring about the most economic and socially beneficial use of land, and the specific method involved here is to get an integrated use of logical forest units regardless of ownership.

This objective is recognized without question in the field of grazing. Forest Service officials study grazing petitions submitted and allot areas of given size and location according to their best judgements, taking into consideration the amount, location, and distribution of private land. Competitive bid does not enter here.

But on the other hand, such logical allotment of stumpage use is not possible. There are cases in which National Forest, Indian, State, and private timber are located in one unit naturally tributary to an established mill and town. Under the existing system the use of such timber is dependent upon competitive bid for each of the three independent parcels.

It must be understood here, that I speak of sustained yield in a specific sense, applied to a given mill. There is an honest difference of opinion between foresters on this conception, some men considering it to be general and regional in scope.

Let us consider first two eventualities. An operation is of a size to warrant a logging railroad. The management draws up a sustained yield management plan and a mainline railroad is built up to the public timber as logging progresses. Then a sale is opened. A small mill owner with low overhead bids in and takes the sale. He will log it and get out. Now what becomes of the first operator? He has installed an expensive transportation system fitted to the requirements of the whole unit. Had he counted upon logging only his own timber, he would have built a much less expensive system fitted to the needs of his own timber. However he followed the "will-o'-the-wisp" of sustained yield and is left with a mainline that has not yet returned its cost of construction. Or would he have followed this dangerous path? Not if he were a sound business man.

For a second case there is this. There has been advocated recently for ponderosa pine a harvesting technique known as the "maturity selection system" which aims at removing the slowest-growing, highest-value elements from the stand. Then by the time a cutting cycle has elapsed, the reserve stand has attained a volume great enough to make logging economically possible. Let us assume a system removing half the stand on a cycle of 40 years. It would be uneconomical to return for a second cut before the 40 years had elapsed. The operator enters into this long-term plan and cuts up to the public timber in 15 years. When a sale is opened, again a small mill bids and wins. Where does the operator stand? He bought and paid for stumpage, which was left in the woods as an investment. Only 15 years have elapsed since the first of it was cut. The reserve stand does not yet have a sufficiently high conversion value to warrant logging. Unless one of the public agencies steps in and buys the land from him, he is left "holding the sack." But would he enter upon such a dangerous path? Not if he were a sound business man.

While the second of these examples is hypothetical it is not far-fetched; and the first has actually happened. What possible rosy inducements toward sustained yield such as: "good citizenship", "responsibility of ownership", "conservation of resources", "stability of communities", etc., can we foresters hold out to operators in the face of the stark actualities of business planning?

These considerations of course do not concern the subject of good forest practice. Fire protection, slash disposal, the leaving of adequate seed trees or advance reproduction, are matters that are necessary, but also possible of accomplishment without regard to the sufficiency of timber for sustained yield. The realization of the foresters' dream, "sustained yield" on private lands, is, however, dependent upon the removal of the above difficulties which make consummation impossible.

What can be done to remedy the situation? For

(Continued on Page 33)

Coordinating Game Management With Other Land Use

By Orange A. Olsen
Forest Service, Ogden, Utah

Game is as much a product of the land as is timber, agricultural crops, or livestock. Someone defined Game Management as "the production of sustained annual crops of wild creatures in harmony with the major economic uses of lands". Game is a land crop and its management is therefore directly tied up with land and no management plan is complete until the proper use of land for all purposes has been carefully considered. Proper use means devoting land to its most beneficial use with due regard to perpetually maintaining the soils fertile and productive.

Logically the first step in game management would be to classify the lands according to their highest use; but under existing conditions this is seldom possible or easy because our country was not settled and developed on a planned basis. People settled here, there, and everywhere to suit their personal fancies. If later "the grass looked greener over the hill" they moved on to pioneer it elsewhere. But there are no frontiers left. Civilization has established itself and changes to fit wildlife needs are largely out of the question. We are no longer nomadic. Planning for game at this date will consequently have to be adjusted to fit in with man's requirements and not with what game needs. Human needs come first. The most conservation-minded of *Homo sapiens* will concede this; if not, we might as well turn the country back to the Indians and let it revert to wildlands and wildlife with the red man as the only beneficiary.

In classifying lands, two classes of ownerships are encountered: those owned by the individual and those owned by the people. Most private land owners and especially ranchers who live in game country enjoy having wildlife around and gladly supply food and protection. They complain only when numbers and damage become excessive. The private land owner has certain inalienable rights, one of which is to determine the use to which his lands shall be put so long as that use is legitimate or does not become a public nuisance. It is good sportsmanship to admit that the private land owner has the prerogative to say to what extent his property shall be utilized by game. If he produces game, he can resonably expect compensation from those who enjoy the benefits, commensurate with his effort. Game on private lands is an important factor in production and should be encouraged but inasmuch as it must be a cooperative affair, the game manager would be quite assumptive in attempting to classify private lands as to their highest and best use.

Public lands belong to the people and they have the right to demand that such lands be managed in the interest of society. The public's interest goes beyond physical needs. We have passed the primitive stage when man's wants were fully met if he had food, clothing, and a hut for shelter. More than bare necessities are essential if we are to enjoy "a more abundant life," for which we all strive. It is right and proper that soils and waters should be assigned to the production of some of the finer things of life.

Among these is game. Wild creatures lure the tired and worn from the hum-drum of daily toil into the out-of-doors where Nature with her mysteries rebuilds man physically, mentally, and spiritually. The sight of a bounding doe or of a stately elk awakens the soul. Even the hunter gets a thump and a quickening thrill that he alone can explain. Knowing something about wildlife, how it lives, its habbits, its inter-relationship with other creatures, its ecology, etc., is educational and broadens our understanding of life. Wild animals are also important economically, not only for their food and fur but from a business standpoint. Someone has produced figures showing that Idaho's wildlife is worth over two million dollars annually to the state. Thus wildlife, because of its esthetic, educational, recreational, and economic values, constitutes an important part of real living, and must continue as an important factor in the checkerboard of modern life.

We can well afford to provide for wildlife in land use planning. Fortunately there is enough land in Idaho to meet our every need and if properly integrated and managed no industry needs to suffer or be crowded out by game.

Public lands should be classified and "all resources used in the ways which will make them of largest service." That is a Forest Service axiom. It is a safe and sound policy. In classifying wild lands their major use should be determined and designated; that is, whether they are chiefly valuable for timber production, watershed protection, wildlife, recreation, grazing, cultivation, etc. As to how each land type should be classified depends on need and suitability. Obviously it is useless to devote any resource to any

purpose irrespective of how well suited it may be, if it isn't needed for that purpose. Suitability involves many factors such as soil, water, vegetative cover, climate, exposure, topography, and accessibility.

Classifying lands according to their major or dominant uses does not necessarily mean exclusive use. In fact, most lands render the best service in dual or mulitple capacities. Ordinarily lands chiefly valuable for timber production can support grazing animals up to the point where browsing does not interfere with tree growth. Properly managed grazing lands can carry both livestock and game without appreciable interference or conflict. Watershed lands may well be grazed in numbers that do not deplete the protective vegetative cover. Recreational use and game production go hand in hand.

In planning for wildlife the game manager seeks to provide maximum numbers consistent with other essential uses. He knows that game must have a place to live and reproduce. It can't get along on the unmanaged leftovers. There are two ways to accomplish this: (1) Set aside exclusive ranges for game and, (2) Provide for game in conjunction with other uses. There are some areas so highly important to game that exclusive use is justified. Certain winter ranges may particularly fall in this category. Exclusive use in most instances is, however, neither practical nor necessary. Conditions determine. Exclusive use means restriction because our economic set up will not permit the establishment of sufficient inviolate areas to meet the demand. No doubt most of our game will have to be produced in harmony with other activities. Coordinated use will provide for more game which will, however, be more widely distributed than under the exclusive use plan. Exclusive use implies less game concentrated on smaller areas. Where the grazing of livestock enters into the picture of land use numbers should be adjusted to provide for game.

Multiple use of lands, not in every case but as a general policy, if fairly correlated is believed to be the best method of providing for all dependent interests. The problem of proper correlation is not easy, especially if one attempts to satisfy all interests—it can seldom be done. One difficulty in coordinating use is the tendency to justify everything on a monetary basis. Game cannot be accurately evaluated. Many data have been collected to show the economic importance of game but no one has yet devised a practical scheme of computing in dollars and cents its esthetic, educational, and recreational values which represent its greatest worth. Until a measuring stick is brought forth, land managers will have to employ that instinct called common sense. In fact, the necessity of establishing the place of game in land use on an economic or monetary basis is questioned. Fairness can be arrived at without money as a yardstick.

An example of the correlated use principle is found on the national forests, where the needs of wildlife have always been considered important from the standpoint of land management. The lands have been classified as to their major and minor use values. Every interest has been provided for to the extent that the available resources permit. Perfection is not claimed and the job is not finished. It never will be. Time and new conditions will necessitate changes. During the past year on the national forests of southern Idaho in Region 4, 77 million board feet of lumber, house logs, building material, and fuel were cut for commercial and home use. Cattle and horses totaling 124,500 head and 1,102,000 sheep were grazed, also approximately 60,000 deer, 7,000 elk, 4,500 antelope, 1,600 bighorn sheep, 1,300 mountain goats, and 350 moose. Recreationists visiting the forests numbered 373,000, of which 15,000 were big game hunters.

As an example of coordinated land management, the following depicts the actual land use picture on the 13,311,500 acres of government land in the 12 south Idaho national forests: usable grazing land reserved for camp grounds and recreation, 42,000 acres; set aside for game, 682,000 acres; closed for watershed protection, 31,000 acres; temporarily withheld from use on account of timber reproduction, 38,000 acres; inaccessible to livestock because of topography or isolation, 3,993,500 acres. Wildlife enjoys unrestricted freedom over the entire area.

There are some few conscientious wildlifers who would eliminate all livestock grazing, particularly sheep, from public lands. The advocates of such a plan have failed to think the whole problem through. Statistics show Idaho has approximately 790,000 cattle and 2,125,000 sheep with an estimated value of $53,000,000. Investments in stock ranches and improvements total around $25,000,000. On the national forests of the entire state of Idaho, 2,869 permittees hold grazing preferences for 127,395 cattle and horses and 1,150 users have permits for 1,223,000 sheep. On the public domain under the Taylor Grazing Act, licenses have been issued to graze 207,494 cattle, 20,717 horses and 1,840,590 sheep by 3,598 owners. The livestock

(Continued on Page 48)

The Land Use Program of The Soil Conservation Service In Idaho

J. H. CHRIST, Idaho State Coordinator

The ultimate goal of the Soil Conservation Service is the establishment of a system of land use that will protect and maintain the one resource upon which the economic welfare of the country depends. The future of agriculture and the future of the nation depend upon the maintenance of this basic resource, the soil.

Although the agricultural history of Idaho covers not more than two or three generations, erosion already has exacted a serious toll from the lands of the state. Even the most casual observer cannot fail to see the common symptons of erosion, such as gullies in rangeland and cropland, dust storms, exposures of subsoil in fields, and silt-laden waters which choke streams in seasons of heavy run-off. In fact, some of the symptons of erosion have become so commonplace that they are looked upon as necessary accompaniments of agriculture, and their true status as the destroyers of agriculture's basic resource is lost.

Surveys made by the Soil Conservation Service have produced striking evidence as to the severity of the toll which erosion has taken from Idaho soils. In Idaho's most stable and most productive dryland wheat district, the Palouse, fifty percent of the topsoil has been lost from the virgin profile in less than fifty years of agriculture. An average of one fourth of an inch of topsoil a year has been carried away, and this rate tends to become progressively higher as topsoil depths decrease. The loss has not been uniform over the entire area or even a single field. In situations especially subject to erosion all of the topsoil and varying proportions of the subsoil have been lost. Subsoil has been exposed on the surface of sixteen percent of the entire area of the Palouse.

The full significance of uncontrolled erosion to the future of agriculture in the Palouse is apparent from studies of yields on acreages which have suffered various degrees of soil loss. As might be expected, there exists a close relation between depth of soil and yield of wheat. When the soil depth falls below twelve inches, wheat yields drop rapidly. Subsoil exposures produce yields of only eight to fourteen bushels per acre—evidence that these areas are in many cases farmed at an actual loss.

Under natural conditions the soil is usually well-protected against the erosive action of wind and water by a cover of vegetation. In practically every case where this cover is destroyed by cultivation or depleted by grazing, erosion may be expected as a normal result of the action of natural forces. The degree of erosion which results depends upon many factors, including slope, soil type, soil condition, climatic conditions and the nature of the use to which the land is subjected.

Some of the factors which contribute to erosion cannot be controlled by man. Fortunately two of them, soil condition and land use, can be altered or modified to suit man's purposes. In fact, soil condition can be governed within its natural limits by the processes to which the soil is subjected in its use, so that the one tool available for the control of erosion is land use.

According to Chief H. H. Bennett, the goal of the Soil Conservation Service is TO PROPAGATE THE USE OF SOIL-CONSERVING PRACTICES IN AGRICULTURE. To this end, its program comprehends distinct but interrelated fields of activity involving: (1) Demonstrations of practical and effective measures of soil conservation by actual work on the land in cooperation with the land owners; (2) consistent development and improvement of control measures through research and field tests, and (3) continuing educational activity with respect to the destructiveness of erosion and the necessity for overcoming these evils.

The object of these demonstrations is two-fold; first, to show how erosion control can be accomplished; and second, to build up a desire on the part of all landowners for correct land use practices and a public demand for action.

The basic principle of the demonstration phase of the Soil Conservation Service program is the development of a coordinated plan which indicates the use and treatment of each parcel of land according to its peculiar needs and adaptations. Proceeding under this principle, the first step in the application of the conservation program to an individual farm is the erosion and conservation survey, which results in a map showing the slope, the soil type, the degree of erosion and the type of land use on every part of the farm. With this map as a base and with supplementary information gained by personal inspection of the farm and consultations with the owner, the Soil Conservation

Service technicians prepare a detailed plan of operation.

The plan indicates by maps and tables the exact use and treatment which each field, pasture or other subdivision of the farm is to receive for the period during which the operator cooperates with the Soil Conservation Service in demonstrating erosion control methods. The conservationist who prepares the plan has assistance as needed by specialists in the fields of soils, agronomy, range management, enginering, woodland and wildlife management.

Although each farm receives a plan of specific operations to fit its needs, it is realized that each individual farm is a unit in a community which may include several or even hundreds of farms operating under similar conditions. Thus, the general features of the conservation program in any area are determined by the outstanding erosion and land use problems of the area.

A variety of different conditions encountered in erosion control work in Idaho is illustrated by three projects, the Pullman-Moscow project, the Emmett project, and the Pocatello project. Types of control vary from measures to check soil and water losses on cultivated wheat and pea land in the Palouse to methods of controlling run-off and erosion on overgrazed rangeland slopes above the city of Pocatello.

When the Soil Conservation Service project was established on the watershed of the South Fork of the Palouse river, it was found that the major cropping systems did not provide sufficient protection against erosion during the critical winter period and, at the same time, failed to return an adequate amount of organic matter to the soil. An additional problem existed in the disposition to be made of land that was already seriously eroded.

Under the land use program which has been developed in this project, the first step in the treatment of an individual farm is the retirement to permanent or semi-permanent vegetation of all seriously eroded cultivated areas. Subsoil exposures on hilltops and ridges are seeded to alfalfa and grass. Similar plantings are made on steep north slopes which are subject to soil slips, and often the additional protection of a tree and shrub planting is given to check the drifting of snow into north coves. These areas have become submarginal for wheat production, so that in many cases the hilltop grass or alfalfa and grass plantings yield a larger return to the operator than the wheat formerly grown on the same area.

Tree and shrub plantings are made in areas which may best be stabilized by this type of vegetation. These woodland plantings provide additional benefits, such as windbreaks, shelterbelts or wildlife refuges. If woodland areas are already present on the farm, the Soil Conservation Service program includes a plan of woodland management designed to maintain these areas for permanent erosion control.

Soils containing an adequate amount of organic matter absorb water and resist erosion much better than depleted soils. Formerly, Palouse farmers burned most of the crop residues and had not adopted the use of green manure crops. Every plan in the Soil Conservation Service program provides for the utilization of stubble and crop residues and the application of a rotation including a green manure crop at a five to seven year interval. Increased yields are expected to amply repay for all costs of the green manure crop. Improved tillage methods, including trashy fallow, deep tillage and contour tillage, are advocated to increase moisture penetration, lessen run-off and decrease erosion. A modified form of strip-cropping in which the fields are broken by buffer strips of permanent vegetation is finding considerable favor.

In all gully control work it is realized that gullies are the symptoms, not the cause of erosion, and that permanent control can be established only by methods which control the run-off at its source. Gully control work serves mainly to correct the damage which erosion has already caused. Future damage must be prevented by the application of conservation methods to the watershed above the drainageway.

Small gullies in fields are plowed in and seeded to grasses and legumes. A grassed drainageway prevents further erosion and provides a crossing for farm machinery, so that fields which were formerly cut up by gullies into several units can be operated as one unit after treatment. The stabilization of large gullies by vegetation alone is a difficult procedure. The construction of a series of small dams and the sloping of the banks to a gentle gradient are practices which are applied to assist in the establishment of a permanent protective cover of vegetation.

The Squaw Creek Project of the Soil Conservation Service is located near Emmett, Idaho, in the watershed of Squaw Creek, a tributary of the Payette River. The principal agricultural industry in the Squaw Creek area is livestock production. Grazing is the primary land use. The area is typical of many livestock producing communities in the Snake River basin. Overgrazing of the range land has depleted the vegetative cover

and has caused serious erosion throughout much of the Squaw Creek watershed. The Soil Conservation Service program, which has been in operation in this area since August 1935, has been directed toward the establishment of erosion control by proper utilization of range and cultivated lands.

Under the range management program a grazing plan is prepared for each cooperator. Each plan is based on the principle of establishing a range usage that will promote the restoration of a vegetative cover on the depleted range lands. Controlled grazing, deferred and rotational, is an important feature. The most seriously eroded areas are given complete protection for a period of several years. Where applicable, contour furrows are used to lessen sheet erosion and to provide greater infiltration of moisture. Abandoned areas of cultivated land which have been returned to grazing use are reseeded. Water developments, salting and drift fences are used to secure better stock distribution. Adjustments in rate of stocking are made to bring the grazing use into agreement with the carrying capacity.

In the dryland farming areas an attempt is being made to divert a maximum acreage from dryland cereals to permanent forage crops, thereby providing erosion control on the cultivated land and aiding in the relief of the range by increasing forage production. In order to provide the grain that is needed for local use and to keep the forage crops in vigorous stand, it is proposed that this retirement be on the basis of a long time rotation with approximately ninety per cent of the acreage in alfalfa and grass and the remaining ten per cent in grain crops.

Trees and shrubs are planted in many parts of the Squaw Creek area where proper land use indicates the advisability of controlling erosion by woody species. The Soil Conservation Service program provides woodland management plans to assure maintenance of the protective value of timber areas on private lands. In the development of woodland areas, natural or planted, consideration is given to features of value in wildlife conservation.

Realizing that a successful application of conservation operations to the Squaw Creek watershed requires the cooperation of many agencies with interests in the area, the Soil Conservation Service recently enlisted the aid of numerous governmental agencies and local organizations in formulating a complete land use program. Planning surveys were made by the Soil Conservation Service in cooperation with the University of Idaho and the Western Range Surveys to secure data for the development of the program. These surveys produced information which indicated that the success of a joint program depended upon the relief of the acute shortage of supplementary feed which exists at present. A contributing factor to the feed shortage is the lack of water for late irrigation of hay lands. Erosion following overgrazing has reduced the water-holding capacity of the watershed so that much of the annual precipitation is lost in the peak run-off in the spring. In order to overcome this handicap, the Soil Conservation Service has approval to cooperate with state and federal agencies in an extensive reduction of stocking to carrying capacity by diverting wheat lands to grass and hay; and aid in plans to increase carrying capacity of bottom land pastures and hay lands already established but at present in low production.

Erosion control in the Squaw Creek watershed and consequently the continued productiveness of the land, is absolutely dependent upon the control of grazing. The Soil Conservation Service in this project can only point the way. Actual control must be brought about by local land holders themselves through concerted action.

At Pocatello, Idaho, the Soil Conservation Service has established an effective demonstration of the control of run-off and erosion on watershed slopes above the city on either side of the Portneuf valley. Before the initiation of the Soil Conservation Service program severe overgrazing had resulted in a serious depletion of the vegetative cover. The run-off following seasonal torrential storms reached flood proportions and serious damage was inflicted on the city by water and debris. Watershed protection is the basic principle of the land use program applied in this area. Effective control of run-off and erosion has been established by the construction of contour furrows and protection from grazing. While the contour furrows produce immediate results in controlling run-off, the restoration of a vegetative cover is relied upon for permanent control. Moisture held by the furrows stimulates revegetation. Protection from grazing, a feature of the rededication of the area to watershed protection, will be required until a cover of maximum density is produced. Proper usage thereafter will maintain this protective cover.

The foregoing discussion illustrates how land use planning for erosion control and water conservation is being applied to a few of the major problem areas in the State of Idaho. In other areas the problems unsolved are just as intricate and as serious as these which have been described. Con-

tinuance of the program of the Soil Conservation Service envisions the adaptation throughout the state of sound land use principles which will provide for maximum use commensurate with the attainment of soil and moisture conservation.

Land Use Planning

(Continued from Page 8)

lic need, establishes priorities for acquisition by exchange and other available means. Through various kinds of cooperative undertakings and personal influence and education, he strives to bring about the kind of management on the intermingled lands which his land-use plan for the whole area requires. The net result of the application of land-use planning principles, and particularly that of multiple use, has been a greatly augmented flow of services and benefits from National Forest areas.

What of the area of forest and other wild lands of exactly similar characteristics outside the National Forest areas? Is there any reason why the same principles of planning should not be applied to them in order that they may contribute to the fullest extent possible to local, regional and national welfare? I see none. The same kind of planning which has been and is being applied to National Forest areas is urgently needed to define the action program needed to cure that portion of our economic disability caused by improper wildland use. Such an action program will, as previously mentioned, find many obstacles in its path since the land-use planner's conclusions frequently violate established traditions and practices. However, sound attack on these obstacles will eventually result in clearer definitions of the responsibilities which go along with land ownership and management and the ultimate result will be a pattern of land ownership, public and private, definitely committed to resource management of the kind that will assure the realization of full benefits and services from all lands.

The Greatest Forest Management Problem in Idaho White Pine

(Continued from Page 12)

play an important part in the loss factor, especially with white fir. White pine by nature requires more sunlight than white fir and apparently can withstand the sudden change from a dense to an open stand much better than white fir and other species of the climax type.

While the volume loss has been quite severe in our selectively logged stands, the actual money loss has not been so pronounced. When it is realized that the species other than white pine have little value today, and white pine under fourteen inches in diameter has little or no value, it is readily understood why the financial loss is trivial.

However, our hopes are on the future and not on today. We must give serious consideration to reducing our losses, both volume and financial, as the valueless trees of today may be the valuable ones of tomorrow.

Slash disposal rules and regulations of today have been built up from the experiences of the past. Year by year our rules have been made more stringent, with one thought in mind only, and that is—reduction of the fire hazard. We went under the assumption that all that is needed to grow timber is to keep fires out. That assumption appears to be only too true today. However, we are told, to keep these fires out it is necessary to pile and burn the slash, thus creating fires. In creating these fires we have nullified nature's efforts for many years. We have destroyed timber in a manner that is not quite so evident nor so unsightly as a complete burn, but quite appalling when totaled up. The loss caused directly, and indirectly by slash burning when totaled up would equal the loss of many large and serious forest fires.

No one agency is to blame for this. The United States forest service, state and private operators are all equally involved and apparently until this company began to have misgivings as to the results achieved, little thought was given to the effects of slash disposal. As our studies began to prove what we had been fearing, we felt it was time to take steps to thwart our greatest enemy, the one created by man in his attempt to grow timber.

We are not the first to say that burning is harmful, whether done carefully or carelessly. We knew it was harmful by the latter method, but were slow in realizing the enormity of the loss when it was carefully done.

During the fall and winter just passed we have approached the two public agencies, federal and states, and told them of our findings. We have assisted in getting the Society of American Foresters and the Western Pine Association interested in working on this problem. Today the government has promised to assist in carrying on experiments with various methods of slash disposal in an attempt to reduce the heavy timber losses. The state forester has promised to co-operate, and we hope that from the unification of these efforts, our greatest enemy and menace to successful forest management, will be conquered.

GRADUATING SENIORS

Continental Divide near Salmon, Idaho

FRANK J. KAPEL, *Range Management*
John Rogers High School, Spokane, Wash.; Xi Sigma Pi (3,4); Associated Foresters (1,2,3,4,).
Summer Experience: 1 season Blister Rust Control, 1 season A.A.A. Range Survey.

PALMER J. NERMOE, *Range Management*
Kramer High School, Kramer, N. Dakota; School of Forestry, Bottineau, N. Dakota.
Summer Experience: 1 season Forest Nursery, Bottineau, N.D.; 1 season A.A.A. Range Inspector.

ERNEST AHLER, *Forest Production*
La Follette High School, La Follette, Tennessee, University of Tennessee; Associated Foresters (1,2,3,4,) Sec.-Treasurer (4).
Summer Experience: 1 season lookout, Coeur d'Alene National Forest; 1 season timber survey, St. Joe National Forest.

ARTHUR WILLIAM NELSON, JR., *Forest Production*
Maine Township High School, Park Ridge, Illinois; Associated Foresters (1,2,3,4); President (4).
Summer Experience: Nature study instructor, Chippewa National Forest; Monument Valley Expedition, Arizona; Field Assistant, Priest River Experiment Station.

LYLE R. KAUFFMAN, *Range Management*
New Plymouth High School; Associated Foresters (1,2,3,4) Forester's Glee Club (3).
Summer Experience: 2 seasons Blister Rust Control. 1 season in research, Pacific Northwest Experiment Station; 1 season A.A.A. Range Inspector.

VICTOR O. SELLERS, *Forest Production*
Doulestown, Pennsylvania, High school.
Summer Experience: 1 season C.C.C. (N.R.M. Experiment Station); 2 seasons lookout, Clearwater National Forest.

HAROLD F. HEADY, *Range Management*
Buhl High School; Associated Foresters (1,2,3,4) Exexutive Board (3,4); Xi Sigma Pi (3,4); Ranger (4); Senior Award; Idaho Forester (2,3,4); Business Manager (4).
Summer Experience: Lookout, Clearwater National Forest; A.A.A. Range Range Inspector.

DEAN PRATER, *Forest Production*
St. Anthony High School.
Summer Experience: 1 season grazing inspector, Clearwater Timber Co.

ROBERT A. TAYLOR, *Range Management*
Oilton High School, Oilton, Oklahoma; Oklahoma A. and M. College, University of Oklahoma, University of Wyoming.
Summer Experience: A.A.A. Range Survey.

KURT RUBISCH, *Forest Production*
Alcee Fortier High School, New Orleans, Louisiana.
Summer Experience: Lookout, Flathead National Forest.










HAROLD L. HARRIS, *Forest Production*
Ashton High School; University of Idaho S. B.; Associated Foresters (1,2,3,4).
Summer Experience: 1 season, trail crew, Salmon National Forest; 1 season, fire guard, Salmon National Forest.

GORDON H. GREENWAY, *Forest Production*
Parma High School; Associated Foresters (1,2,3,4).
Summer Experience: 2 seasons, Blister Rust Survey.

WILLIAM FRED CLUBB, *Forest Production*
Mullan High School; Associated Foresters (1,2,3)
Sigma Nu; Idaho Forester (2,3).
Summer Experience: Lookout, St. Joe National Forest.

E. LAVELLE THOMPSON, *Forest Production*
Warren High School, Intermountain Institute, Weiser, Idaho; Associated Foresters (2,3,4); Idaho Forester (2,3,4); Alumni Editor (4).
Summer Experience: 2 seasons, forest guard, Idaho National Forest; 2 seasons, Key Guard, Idaho National Forest .

HAROLD C. ELG, *Forest Production*
Idaho Falls High School, University of Idaho S.B.; Associated Foresters (3,4); Wrestling (1,2,3,4).
Summer Experience: 1 season, lookout, Salmon National Forest; 1 season, trail crew, Salmon National Forest.

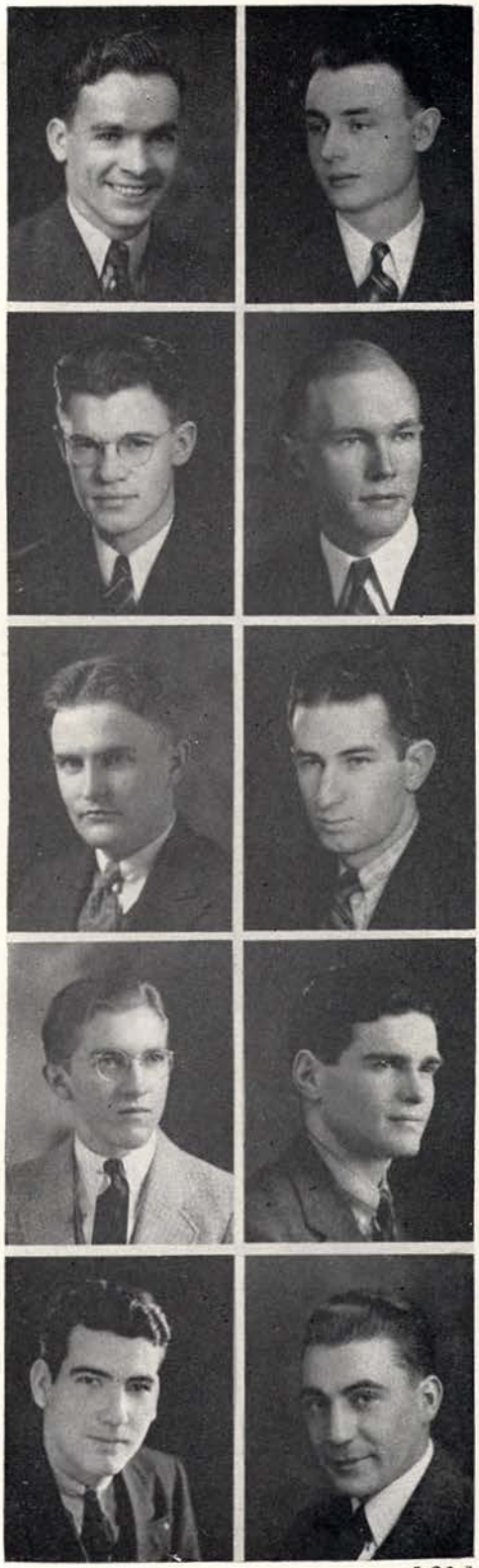
EDWARD C. BOOKER, *Range Management*
Dewey, Oklahoma, High School, Junior College, Bartlesville, Okla.; Associated Foresters (2,3,4).
Summer Experience: 1 season, Pine Disease Survey; 1 season, A.A.A. Range Inspector.

DWIGHT R. CABLE, *Range Management*
Tuscon High School, University of Arizona; Xi Sigma Pi (3,4); Swimming (2,3,4); Associated Foresters (2,3,4).
Summer Experience: 1 season, Experiment Station; 1 season, A.A.A. Range Inspector.

PAUL F. ANDERSON, *Forest Production*
Belen, New Mexico, High School, New Mexico A and M College; Associated Foresters (2,3,4); Lindley Hall Vice-president (3).
Summer Experience: 1 season, lookout, Kootenai National Forest; 1 season emergency smokechaser, Clearwater National Forest.

NORMAN J. BRIGGS, *Wood Utilization*
Pensacola High School, Pensacola, Florida; University of Florida; Delta Chi.
Summer Experience: Longview Fibre Co., Longview, Wash.

JOHN COMPAGNONI, *Forest Production*
St. Maries High School, Gonzaga University, Spokane, Wash.
Summer Experience: 1 season, Rogers Lumber Co.; 4 seasons, Winton Lumber Co.; 1 season, trail crew, St. Joe National Forest; 5 seasons, checker, Blister Rust Control.



JESSE L. CAMPBELL, *Forest Production*
Rigby High school; Associated Foresters (1,2,3,4); Xi Sigma Pi (3,4).
Summer Experience: 2 seasons U.S. Forest Service, 1 season, Forestry Nursery, University of Idaho.

HERBERT W. ANGELL, *Wood Utilization*
Clinton High School, Clinton, Iowa, Georgia Tech (1,2); Associated Foresters (3,4).
Summer Experience: 2 years Technical Foreman, C.C.C. Hiawatha National Forest, 1 season, Potlatch Forests Inc.

ERNEST H. TAYLOR, *Forest Production*
Spencer High School, University of Idaho S.B.; Associated Foresters (1,2,3,4).
Summer Experience: Pine Beetle Control Targhee National Forest; 4 years, Wood Livestock Co.; lookout, Challis National Forest; Administrative Guard, Cooke National Forest; Recreation Guard, Challis National Forest.

ROBERT T. RAUBACH, *Forest Production*
Weiser High school; Associated Foresters (1,2,3).
Summer Experience: 2 seasons, Pine Disease Survey.

KENNETH E. HUNGERFORD, *Forest Production*
Moscow High School; Sigma Nu, Rho Epsilon; Associated Foresters (1,2,3,4) Ranger (3); Idaho Forester (2,3,4) Editor-in-chief (4).
Summer Experience: 1 season, C.C.C. (N.R.M. Experiment Station), Pine Disease Survey, Contact Patrolman, Deerlodge National Forest.

ROBERT KIRKPATRICK, JR., *Forest Production*
Moscow High School; Concert Band (1,2) Symphony Orchestra (1,2,3).
Summer Experience: 3 seasons, Blister Rust Control, 1 season, fire guard, Kootenai National Forest.

ROBERT E. FREY, *Forest Production*
Lodi Union High School, California; Associated Foresters (1,2,3); Chi Alpha Pi, Interfraternity Council (3,4).
Summer Experience: 1 season, Blister Rust Control; 1 season, headquarters guard, Bitterroot National Forest; 2 seasons, lookout, Bitterroot National Forest.

NOEL L. HALLETT, *Wood Utilization*
Council High School; Xi Sigma Pi, Wrestling (3,4).
Summer Experience: 1 season, Potlatch Mill, Potlatch Forests Inc.

WILLIAM J. LLOYD, *Forest Production*
Blackfoot High School, University of Idaho S.B.; Associated Foresters (1,2,3,4); Foresters Chorus (3,4).
Summer Experience: Lookout, Bitterroot National Forest.

WILLIAM D. TAYLOR, *Range Management*
Redondo Beach, California; Vandaleers, Foresters Glee Club.
Summer Experience: 1 season, smokechaser, Clearwater National Forest; 1 season, A.A.A. Range Survey, Region 2.

F. Orville Tumelson, *Forest Production*
Peck High School, Lewiston State Normal School; Associated Foresters (1,2,3,4); high honors (1,2); Xi Sigma Pi (3,4), Award (1), Forester (4).
Summer Experience: 1 season, Cardiff Logging Co.; 2 seasons, Blister Rust.

John E. Manning, *Forest Production*
Boise, Idaho, College of Idaho.
Summer Experience: 1 season U.S.G.S.; 2 seasons, lookout and trail.

Claude G. Brower, *Forest Production*
Ashton High School, University of Idaho S.B.; Associated Foresters (1,2,3,4) Assistant Editor, Idaho Forester (3); Chairman Forester's Banquet (4).
Summer Experience: Stand improvement foreman, C.C.C., Targhee National Forest; 2 seasons, alternate ranger and dispatcher, Targhee National Forest.

George R. Callaway, *Forest Production*
Lenexa, Kansas; Lindley Hall Treasurer; Sweet Hall Treasurer and president (4); Idaho Forester (3,4); News Editor (4).
Summer Experience: 1 season, lookout, Kaniksu National Forset; 1 season, road survey, Kaniksu National Forest.

William D. Shelley, *Range Management*
St. Alphonsus High School, Langdon, North Dakota; North Dakota School of Forestry; Associated Foresters (3,4).
Summer Experience: 1 season, forest nursery, Columbia, S. Dakota; 1 season, A.A.A. Range Inspector.

Philip H. Bender, *Forest Production*
Lewis and Clark High School, Spokane Washington; Pasadena Junior College, Pasadena, California; Associated Foresters (3,4).
Summer Experience: Trail, Kaniksu National Forest.

Howard E. Ahlskog, *Forest Production*
Lewis and Clark High School, Spokane, Washington. Delta Tau Delta; Associated Foresters; Football (1); Summer Experience: 2 seasons, trail crew; 1 season, trail foreman; 3 seasons, lookout; 2 seasons, headquarters guard; 2 seasons, alternate ranger; 1 season, growth studies; and 1 season timber sales on Coeur d'Alene National Forest.

Woodrow W. Doupe, *Forest Production*
Tekoa High School, Tekoa, Washington; Associated Foresters (1,3,4).
Summer Experience: 1 season, lookout, St. Joe National Forest; 1 season, lookout, Idaho National Forest.

Clarence Brown, *Forest Production*
Wilder High School.
Summer Experience: Lookout and trail work, Clearwater National Forest; Headquarters fireman, Clearwater National Forest.

Lionel Miller, *Range Management*
Fruitland High School.
Summer Experience: Soil Conservation Service.

W. KENNETH FITZGERALD, *Range Management*
Clarkston High School, Clarkston, Washington; Lewiston State Normal; Silver Lance; Blue Key; 2nd Lt. R.O.T.C., Junior Class President; A.S.U.I. Executive Board and Dicipline Board, Basketball (1); Boxing (2); Associated Foresters (1,2,3,4).
Summer Experience: 4 seasons, Wolf Livestock Co.; 1 season, Umatilla National Forest.

JEROME EVANS, *Range Management*
Lava Hot Springs High School; Delta Tau Delta, Gem (1); Associated Foresters (1,2,3).
Summer Experience: 1 season, Pine Disease Survey; 1 season, A.A.A. Range Inspector.

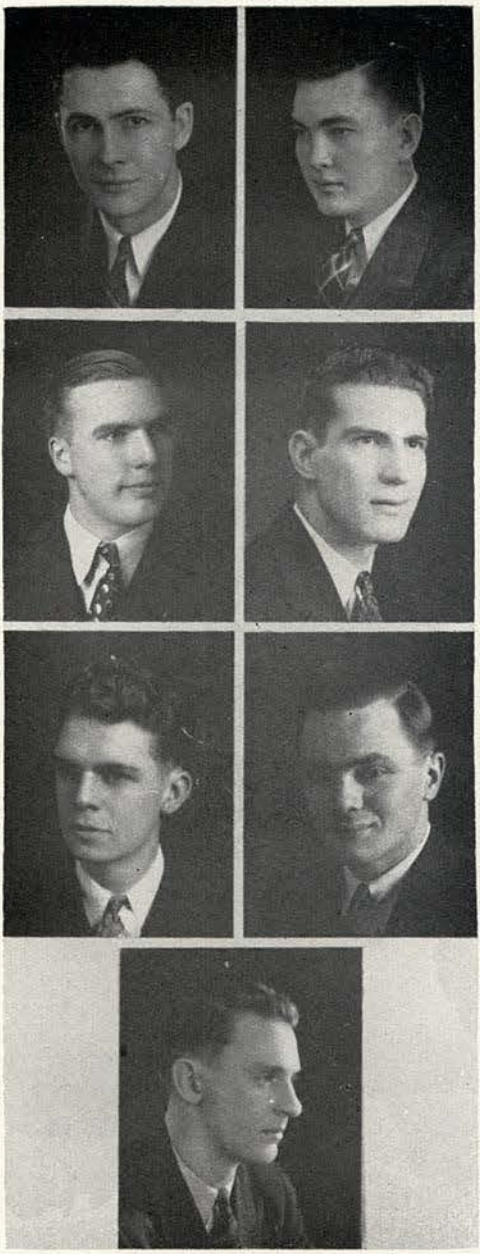
F. WOODROW SNYDER, *Forest Production*
Perkasie High School, Perkasie, Pennsylvania; Associated Foresters (1,2,3,4); Track team (1,2,3,4); Cross-country Club (3,4); Secretary (3,4).
Summer Experience: 1 season, C.C.C.; 1 season, lookout, St. Joe National Forest; 1 season, Research Assistant, N.R.M. Experiment Station.

KENNETH KEHRER, *Forest Production*
Boise High School, Boise Junior College; Associated Foresters (1,2,3,4).
Summer Experience: 1 season, lookout, Bitterroot National Forest.

JONATHAN W. WRIGHT, *Forest Production*
Lewis and Clark High School, Spokane, Washington; Pep Band ,1,2,3,4); Highest honors (1,2,3); Xi Sigma Pi; Phi Eta Sigma; Alpha Tau Omega; Associated Foresters (1,2,3,4).
Summer Experience: 2 seasons, Pine Disease Survey.

JOSEPH DOUGLAS WAHL, *Forest Production*
Kellogg High School; Associated Foresters (1,2,3,4).
Summer Experience: 2 seasons, lookout, St. Joe National Forest.

DONALD W. WILSON, *Range Management*
Lewis and Clark High School, Spokane, Washington; Delta Tau Delta.
Summer Experience: 3 seasons, Blister Rust Control; 1 season, A.A.A. Range Survey.



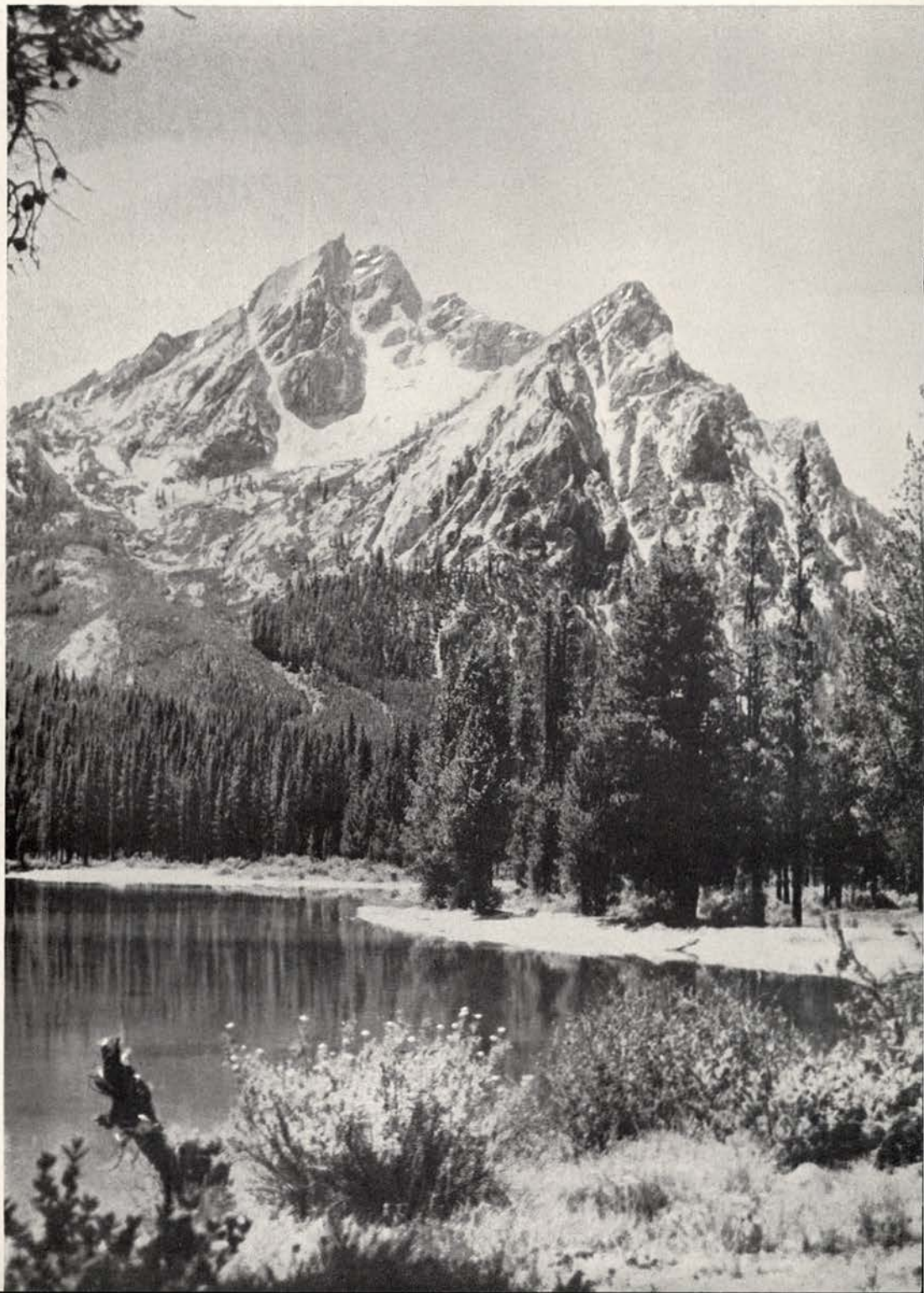
JAMES FRANKLIN MENEELY, *Forest Production*
Cambridge High School, Moscow High School; B.S. (EE) University of Idaho, 1931; Sigma Tau; Associated Engineers President (1931); Tau Mem Aleph; Associated Foresters (3,4); Xi Sigma Pi.
Summer Experience: 1 season, lookout; 1 season; smokechaser; 1 season, headquarters guard; 1 season, dispatcher; 5 seasons, alternate ranger; 2 seasons, acting district ranger on the Clearwater National Forest; 1 season, central and weather dispatcher; and 3 winters fire planning and fire research in regional office, Region 1.

WALTER P. MITCHELL, *Forest Production*
Point Arena, California.

HOWARD C. WATSON, *Forest Production*
Philadelphia, Pennsylvania.

SCHOOL NEWS

Stanley Lake, Sawtooth Mountains



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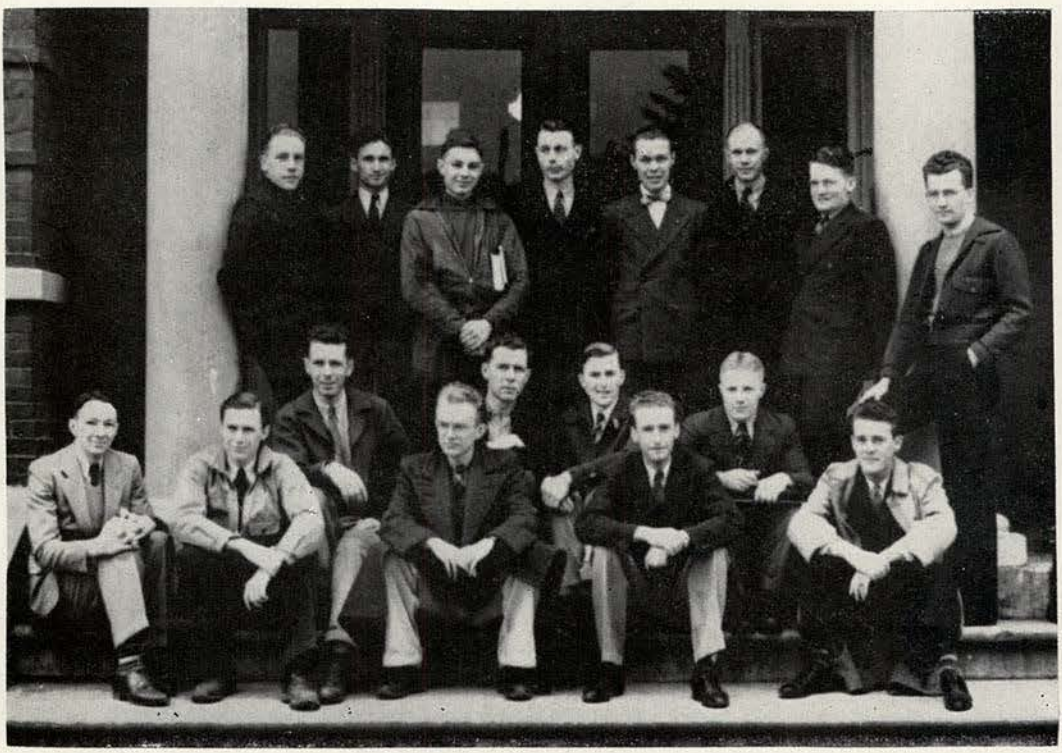


Left to right, seated; Wesley Barcus, Paul Spence, Bart Wetzel, Nelson Jeffers, Neil Tise, Foster Robertson, Eamor Nord, Otto Baltuth and Bruce Lee. Standing: Ben Spencer, Glenn Maryott, Kent Leader, Gordon Greenway, Harold Oldson, Lavelle Thompson, Harold Heady, and Kenneth Hungerford.

Idaho Has A New President

D. Nelson Jeffers

While we forestry students from Idaho were passing time as lookouts or compassmen last summer our campus was welcoming its new command. Several years before, Mr. H. C. Dale had resigned his deanship of our school of business administration, little expecting to return later as the man behind the desk in the president's office. His appointment, July 31, 1937, was the ninth made by the board of regents since its beginning, the eighth being that of Dr. M. G. Neale, now a professor in the University of Minnesota. Married and the father of three children, President Dale came to us from "Idaho's eastern branch", Miami University, so known due to its outstanding collection of Idaho men.

President Dale is a native of Massachusetts in which state he received the majority of his education. Not the usual student, he graduated from Harvard in 1907 with high honors. Continuing his study, he made two trips to Europe, there conducting research in economic history. Returning to Harvard he received his M.A. degree in 1908 and completed his graduate work in 1909.

The year 1910 saw him embark on his career as an educator which he has followed, with short interruptions, to his present post as our president. At Utah Agricultural College, from 1910-1912, he met A. H. Upham with whom he was to become closely associated. Spending three years at Washington University in St. Louis, he returned West as professor of economics and political science in the University of Wyoming. Upon the United State's entry into the World War, President Dale became state director of liberty loan speakers for Wyoming. During his stay in Wyoming, he organized their school of law and became its first dean. As an aid to Gov. Carey, Mr. Dale, in 1919, made an administrative survey of all state departments and institutions. Still contributing to the welfare of Wyoming, he became the state's budget adviser and assisted in planning the first budget.

In 1920, his friend A. H. Upham, who had by that time become president at Idaho, called him to fill a vacancy in the economics department. It was 1925 when the school of business administration was established and President Dale was made its first dean. At the same time he had been offered a similar position at Marquette. For three years following, he served as dean, in which capacity he was very active in state affairs. Acting as an economist to a committee of Northwest farm groups, he assisted in drafting the McNary-Haugen bill and helped further the bill in Washington, D.C.

Finally he moved from Idaho, again at the call of A. H. Upham, now president of Miami University, to become dean of the business school at Miami. There as elsewhere he was called upon to give a great deal of his time to outside activities. For several months in the fall of 1935 he served as consulting economist to the Division of Review of the N.R.A. During the summer of 1931 he was honored by being given a place on the faculty of the Yale school of law. A similar honor was given when he lectured on management at the University of Cincinnati. Included with these accomplishments are numerous government and economic articles and reviews plus a book, "Ashley-Smith Explorations and the Discovery of a Central Route to the Pacific".

Maintaining the record he has made, President

Dale is continually "on the go", enlarging and improving the University's present status. To bring him within reach, after the foregoing paragraphs, it will be of interest to know that students have preference over deans and professors when an interview with President Dale is desired.

DEAN JEFFERS

Dean Jeffers has gone from coast to coast this past year in the interests of the school of forestry. Beginning as official representative of the University of Idaho at the bi-centennial celebration of the University of Wyoming, he spent the summer travelling. Some time was given to visiting Region-4 forests in southern Idaho, getting acquainted with the supervisors and rangers, and at the same time giving the school a boost. With the State Land Board and the State Planning Board, he inspected state lands at Priest Lake and made a trip through northern Idaho, into the Bitterroot valley of Montana, and down the Salmon river to the middle fork. On the latter trip the party was augmented by the North Idaho Chamber of Commerce and Governor Barzilla Clark. The highlight of the year was the trip to the annual meeting of the Society of American Foresters, held at Syracuse. While there he was informed that he had been elected one of the nine members of the council for the society. In Washington D.C., for two days, he consulted with Forest Service officials on forest school matters. Twice this year he has gone to Boise as a member of the State Cooperative Board of Forestry.

DR. JAHN

Dr. Jahn has been kept busy this year directing the research activities of the wood conversion laboratory. Several different studies are being made on wood plastics, and others on wood fibers and the arabogalactan of western larch.

Three times during the last year Dr. Jahn has represented the school of forestry at technical conferences of the lumber or pulp and paper industries. In June 1937 Dr. Jahn arranged the program, gave a paper, and was co-chairman of the forest products symposium at the Canadian Chemical Convention in Vancouver. In November 1937 he discussed a research program with the Western Lumber Manufacturer's Association of Canada, also in Vancouver. In February 1938 Dr. Jahn traveled to New York where he reported to the Technical Association of the Pulp and Paper Industry on research done here at Idaho under a grant from the association. On this trip he also visited the pulp and paper laboratory at Syracuse; The Cellulose Institute of McGill University, Montreal, Canada; the Pulp and Paper Institute, Appleton, Wisconsin; and the Forests Products Laboratory in Madison, Wisconsin.

Last December Dr. Jahn presented a paper on research in wood plastics before the Northwest Scientific Association meeting. He also wrote an article which was published this spring in the Journal of Forestry.

Early in May this year, Dr. Jahn became the father of a baby daughter.

DR. MARTELL

Many and varied are the activities that have occupied Dr. Martell for the past year. The most important problem facing him at present is the organization of the summer camp for forestry students, of which he is in charge.

Last summer he spent four weeks in the East presumably on a vacation. Even on his vacation he could not escape the duties and cares of his profession and returned to the Idaho campus with about 500 dendrological specimens of eastern tree species for the herbarium.

The latter part of last summer was spent in writing numerous articles for various forestry publications. To date three of these have appeared in print, namely: an article on fire, published in the Journal of Forestry; and an article on private forestry, published in the Forestry News Digest. In addition to these two he is co-author with Dean Jeffers of an article treating educational matters. This paper has been published in the Journal of Forestry.

Last fall the thoroughness which characterizes Dr. Martell was again demonstrated by his planning and efficient conducting of the Senior Field Trip.

Last but not least among the numerous activities that consume this man's time is his interest in athletics. Dr. Martell is the tennis coach at the university and a member of the faculty men's volleyball team. His interest in athletics does not stop here, however, as he is extra-curricular assistant to Forrest Twogood, baseball and basketball coach.

DR. YOUNG

Returning foresters this past fall found a new faculty member in Dr. Vernon A. Young, professor of range management.

Born and raised in the West, where he spent his boyhood driving cattle on the range, Dr. Young has had wide and varied experiences in forestry and related subjects. After receiving his B.S. degree in general agriculture from the Utah State Agricultural College in 1923, Dr. Young

received a fellowship at Iowa State College where he took his M.S. degree in 1924. He then became an instructor at University of Minnesota and finished work on his Doctorate there in 1929.

Before returning to the West, Dr. Young taught seven years at the New York State College of Forestry, including three summers at the sophomore camp in the Adirondack mountains. Since his graduation in 1923, Dr. Young has spent four summers as government ecologist, one summer as national park naturalist, and two seasons with the Forest Service including one at the regional office of Region four. He plans to spend next summer examining range conditions.

Dr. Young has carried on research work since his graduation, and has sixteen published papers including his doctorate, which are printed in book form. Having travelled over most of the United States, from Maine to the South, and even to Old Mexico, Dr. Young has had the chance to study forestry conditions on many different areas.

DR. EHRLICH

Dr. Ehrlich finds himself well occupied holding up his end of the duties of the forestry faculty. Spending a good share of last summer in the study of white pine blister rust, he established several plots in the Clarkia-Bovill region to observe the rate of development of blister rust on white pine under the different site conditions of northern Idaho. Dr. Ehrlich intends to continue this study next summer.

Beginning the school year, Dr. Ehrlich was co-conductor of the annual Senior Field Trip. December 8 found him in Portland attending the meeting of the Western Forestry and Conservation Association.

We can attribute the overwhelming zeal with which the rest of the faculty has taken to assigning abstracts of articles in the school library to the great amount of work done by Dr. Ehrlich in adding to and improving the collection.

DR. HATCH

Dr. Hatch has been keeping busy this year especially with his game management activities. In November, 1937, he organized the program and acted as general chairman for the first technical state game conference here at Moscow. In December, 1937, and later in January of this year, Dr. Hatch made trips to Pocatello and Boise to attend conferences in regard to the use of the Pittman-Robertson Act funds available to Idaho. Again in March he went to Pocatello for the second of the technical game conferences. On the side Dr. Hatch made a trip to the Selway Game Preserve where he was in the field with the game census workers.

Between trips Dr. Hatch keeps up with his teaching activities. Last fall the game management class made detailed studies of the pheasant population near Moscow, and during the winter he led the game class into the field on snowshoes to make studies of deer and grouse feeding habits. In addition Dr. Hatch still has charge of the nursery.

MR. WOHLETZ

Another new face was seen among the instructors in the school of forestry last fall, and upon investigation it was found to belong to Mr. Ernest Wohletz, assistant professor of forest mensuration and forest economics. Our new professor came to Idaho from the forestry staff of the University of California, where he had been teaching since 1935. It didn't take long for his California smile to become tremendously popular among Idaho's future Bunyans.

Mr. Wohletz entered the University of California on a four year scholarship and graduated with a B.S. in forestry in 1931. In this same year he passed the Junior Forester examination but returned to the University of California to start graduate work towards a Doctor's degree in the department of economics. He left this work in 1933 when he was appointed as junior forester, and later assistant forester, with the California Forest and Range Experiment Station. The work was in the field of pine management and mensuration. In 1935 Mr. Wohletz returned to his old school, becoming a member of the teaching staff.

Professor Wohletz is expecting to complete his work for a Doctor's degree in economics sometime in the near future.

MR. BECRAFT

After two years at Idaho as professor of range management Mr. Raymond J. Becraft is again with the Forest Service. He is now working in Region 6, in the Division of Lands with assignment to Soil Conservation. His title is senior forest ecologist. Watershed protection work in general is Mr. Becraft's major interest. This calls for planning work projects for the conservation of water and soil. Field work takes him over the national forests of Oregon and Washington. He says the work is most interesting and has great possibilities for accomplishment. In his letter he extends an invitation to his Idaho friends to visit him in Portland. His office is Room 418 Post Office Building.

Graduate Students

By Robert Blum

The forestry school this year has a total of eight men doing graduate work in its various departments. The increase of graduate students over previous years is an index of the progress that forestry has made at the University of Idaho in the last few years.

Wood utilization has attracted the most graduated men, there being four in that field, working under Dr. E. C. Jahn. Silviculture studies are being made by two men while range management and forest pathology drew one man each. Two of the wood utilization students are here on Potlatch Forest fellowships, having been at Idaho since September.

SELDON TINSLEY

Working under Dr. E. R. Martell is Seldon Tinsley, who is now in charge of the seeding and planting class. He graduated from the University of Maryland in 1933, receiving his B. S. in horticulture. After graduation, he worked for the Soil Conservation Service for three years and spent one year in a private nursery. For his M. S. degree, which he will receive this June, Tinsley has been working on the problem of direct seeding in the Northern Rocky Mountain region. The thousands of acres of cut and burned-over land in northern Idaho which have failed to regenerate properly are a serious problem today. Tinsley is trying to find means of reproduction by direct seeding which will adequately regenerate these areas at a lower cost than direct planting of seedlings.

DONALD McKEEVER

Don McKeever, an Idaho forestry graduate of '36 is back again working for his M. S. degree. Don is working under Dr. Martell but in conjunction with the Soil Conservation Service. He is attempting to find the best means of obtaining germination of trees and shrubs suitable for wildlife and erosion-control planting. Species bearing fruit, nuts, or berries which would furnish sustenance for wildlife, and those trees and shrubs of high soil-binding ability, are the plants given the most attention. These plants are important as farm plantings. McKeever started his undergraduate work in forestry at Pennsylvania State college but finished at Idaho. Since graduation he has been a Junior Forester in Region one as Assistant Ranger in the Clearwater. He will receive his M. S. degree this June.

LESLIE ROBINETTE

Leslie Robinette came here after graduating from the New York State college of forestry where he was a student of Dr. Young. He is now working under Dr. Young once more as an assistant in the dendrology and range management laboratories. For his Master's degree he will work on some phase of range management and possibly on the range work as it is related to wildlife. The proper balance between range stock and the wild game in the West has long been a problem. At Syracuse, Robinette majored in game management. He likes Idaho and the West and was attracted to this school by the growing reputation of the range management curriculum.

ALBERT W. SLIPP

Albert Slipp is working under Dr. Ehrlich on a research problem in forest pathology. Slipp is a Canadian who graduated in forestry from the University of New Brunswick in 1930. He spent a year in graduate work at Harvard. After receiving his M. S. degree here he expects to continue his studies for a Doctor's degree. He is measuring the conditions enabling inoculation of western white pine with the blister rust fungus. The susceptibility of the white pine to blister rust under various controlled conditions is recorded. The information obtained should be of value to foresters in all the white pine regions now battling the disease.

RALPH HOSSFELD

Ralph Hossfeld, who started in this February to work for his master's degree, is an Idaho graduate in chemical engineering. A study of arabogalactan of western larch is his research problem. Pure arabogalactan is a chalky white substance when isolated, whose properties and uses are as yet practically unknown. It is found in the western larch near the base of the tree in large quantities and often causes the butt logs to be left on the ground after logging due to excessive weight and the impossibility of their being floated. The strange and possibly valuable substance may be obtained easily as it is soluble in water.

C. VERNON HOLMBERG

Holmberg, who also started in February, is from Michigan State college and the one utilization man who took his B. S. in forestry. He is a member of Xi Sigma Pi and was the third highest in the country when he took his Junior Forester

examination. He has done some graduate work in physics at Michigan State college but will take his M. S. degree here. His research problem has to do with the measurement of changes taking place when the cellulose of wood is beaten in water. This is an important process in the pulp and paper industry. The pulp used for the study by Holmberg is commercially made.

JOHN BOWER

John Bower is from Montana State college where he received his B. S. in chemical engineering. He graduated with the highest average of his class, and afterwards won a Potlatch Forests fellowship. Research on "synthetic boards" from gelatinized wood is the project he is working on for his M. S. degree. Sawdust of western white pine is gelatinized and formed into a harder and tougher material than the original wood. Laboratory samples of this material have so far tested very favorably. Commercial production of "synthetic boards" from wood which would otherwise be wasted would mean much to the Idaho white pine industry.

RAYMOND MENNELL

Ray Mennell, the other Potlatch Forests fellow, is a University of Washington man. He also took his B. S. degree in chemical engineering. For his master's degree he is now doing research work on wood plastics. Mennell's work consists of a study of the effects of pressure on the temperature degradations of wood rather than an attempt to develop a new substance. The purpose of the process being studied is to break the lignin away from the cellulose in wood in order that it may be free to react with certain chemicals to form a plastic substance. Some very good wood plastics have been developed from white pine in the wood conversion laboratory so far but not on an industrially economical basis. If production costs can be kept low enough, the Idaho white pine mills will be able to use their wood waste in the production of plastics which will compare favorably with those now on the market.

Sustained Yield at The Crossroads

(Continued from Page 14)

at least three sessions of Congress, a certain clause of the "Omnibus Bill" has lain with its fellow clauses dormant in committee. This clause would make it possible for the Forest Service to set aside National Forest timber in logical units and guarantee it to the logical mill, provided the private timber would be operated together with the public for sustained yield. Passage of that bill or that clause would remove the barriers discussed above as far as the National Forests are concerned. Similar legislation would also be necessary for Indian and state lands.

Yet passage of this legislation would, while solving this problem, create new ones. The decision must be made to allocate timber once it is possible to do so. Local jealousies will often come into play. In some cases there will be two mills, and sustained yield capacity for only one. To which is the unit to be allocated?

Another important case is this. One large mill has sufficient private and public timber accessible, but a controlling block of it is in alienated private ownership. How is this controlling block to be swung into line? Should the public acquire it? Can it be purchased by the mill? Can the present owner be cajoled or browbeaten into holding it until it is wanted? Probably taxes and interest are forcing it upon an immediate market. To induce an owner to hold and pay carrying charges upon a large investment in timber once any chance of sale or liquidation appears, is well nigh impossible. For the established mill to buy it may be financially unwise, else they would have done it already. If the public is to support mills attempting to practice sustained yield, and to receive the public benefits of stable communities resulting therefrom, it will generally have to assume the responsibility for assuring a sufficient volume of timber, through purchase of vulnerable lands.

Besides the problems such legislation would create, there are some possible arguments against the scheme. It always becomes possible, when competitive bid for use of government resources, or competitive bid for services to government are abolished, for government to show favoritism in its sale of resources or hiring of services. The "sustained yield unit" conception is open to this criticism. The only answer to it is to point to the long record of the Forest Service in equitable administration of its responsibilities and specifically to mention its allotment of grazing leases, which appears to be satisfactory to the lessees.

A further point came to my attention recently in a discussion of this subject. If government timber is removed from competitive bid and sold on appraisal to a given mill, it protects that mill from being overbid by someone else. It may be fairly argued then, that the government would have received a higher stumpage return under competitive bidding. However this purely problematical loss of income to the government must be con-

(Continued on Page 42)

"Sparring Bucks" *by Glenn Maryott*

THE IDAHO FORESTER PHOTO CONTEST WINNERS

This year the Idaho Forester staff, believing there was a lot of hidden talent among forestry students, conducted a picture contest. The foresters responded quickly to the call and turned in a collection of pictures that would justify an exhibit. To show the pictures submitted, all entries were displayed on a special bulletin board in the forestry library.

Pictures were put into two classes—scenic pictures and candid shots of school or summer activities. They were judged on the basis of interest, composition, and photographic quality. The winners are shown on these two pages.

Above is the winning picture in the candid class, "Sparring Bucks". This was snapped by Glenn Maryott, when he was working on a game survey in the Coeur d'Alene National Forest. On the opposite page is the winner of the scenic picture class, "Trees and Clouds". It was taken by Arthur Wm. Nelson, Jr., in the Kaniksu National Forest. Art says he waited 45 minutes for the clouds to move into the right position.

We want to thank all who entered pictures in the contest. Many of these photographs you will see elsewhere in the Idaho Forester. The lookout picture on page one and those on pages 37, 38, and 39 are all contest pictures, with the exception of the senior field trip picture. We believe that the best photographers on the campus will be found among the foresters.

Finally, we want to express our appreciation to Dr. H. B. Stough and Dr. E. R. Martell who acted as judges of the contest.

The Staff.

"Trees and Clouds" by *Arthur Wm. Nelson, Jr.*

Juniors Are Champs at Bunyan's Feats

By Howard Johnson and
Kenneth Kehrer

'Twas a sunny Saturday morning, that twenty-second day of May, 1937, when the boys pulled on their old "cork" boots, jumped into the school trucks, and rolled out to Randall's flat for the 14th Annual Barbecue. This year the faculty as well as the members participated in the fourteen events. The junior class won the barbecue with a score of 49.5 points. Seniors were second with 21.0 points, followed by the frosh who made 15.5 points. The sophomores finished in last place with 7.0 points. The events were arranged and run off by Earl Ritzheimer and Howard Johnson, with Bill Morrow as announcer.

Events started with the three-legged race which was won easily by those seniors, Caporaso and Parks. Anderson and Day (sophs) were second with Manning and Gifford (juniors) third. The 200 yard dash was won by Ernest Ahler (junior), with Caporaso, (senior) second, and Hungerford (junior) third. Bert Gifford (junior) hopped to first place in the sack race with Galbraith (frosh) second, and Caporaso (senior) in third place.

A new event, the Smoke-chaser's Deluxe Relay, proved to be very successful. It was originated by Dr. Martell and will undoubtedly be one of the major attractions of future barbecues. It follows the same procedure as a relay at a track meet. Instead of carrying a stick, a Forest Service smoke-chaser's pack was substituted. When the whistle blew, each starting man hurriedly packed up his pack and high-tailed across the flat to the next man. Upon arriving, he (number 1) had to dismantle the pack in the presence of an official, and then the second man packed up and scrammed, etc. The junior class, represented by the "Kaniksu Boys" (Douglas Wahl, "Cab" Callaway, and "Bushelfoot" Morrow), came in first. The seniors, with Parks, Wilson, and Yearsley, were second. The frosh team composed of Scott, Galbraith, and Parsons, came in third, beating the sophomore team of Forbes, McLeod, and Jeffers.

The last event before dinner was the faculty pie-eating contest. This went over in a big way and was a surprise to everyone. Each of the "profs" had his hands tied behind his back, and had a large bib tied around his neck. Two four-foot logs were placed on end, and a plank placed on top of them formed a table. Small slabs were cut for Drs. Martell and Ehrlich to stand on while a six-inch pit was dug for Mr. "Rangy" Becraft. This eliminated all handicaps. Candid cameramen and the rest of the crowd had the time of their lives watching the varied reactions, poses, etc. of their professors as they gulped away on their pies. (These pies were made of extra juicy blueberries that were not too sweet and were ordered especially for the event by Earl Ritzheimer.) Dean Jeffers came through to win and received a hearty cheer from the crowd. He had so much pie on his face that he looked worse than a smoke-chaser who hadn't seen a razor all summer.

Immediately following the pie-eating contest, the call "come and get it before we throw it out" echoed across the flat. It was Eino Nuuttila's way of making known that his eats committee was ready and as soon as the gang fell in they were served. The meal consisted of roast beef, baked beans with tomatoes, buns, pickles, coffee and doughnuts, and ice cream. Helping chairman Nuuttila on the committee were Lavelle Thompson, Jack Murphy, Kenneth Kehrer, Cliff Windl, and John Manning. After fifth and sixth helpings of ice cream the fellows seemed satisfied and ready for a strenuous afternoon.

Announcer Bill Morrow got the boys out on the field again and the afternoon's events started off with tobacco spitting. "Red" Ahler (junior) managed to spout his "load" out a good 19.5 feet, winning by inches from Ball (sophomore) and Hungerford (junior). Sawing an 18 inch lodgepole pine log was next on the program. Ritzheimer and Johnson (juniors) easily won this event in 47 seconds, Yearsley and Parks (seniors) were second with 60 seconds, Wetzel and Lukens (sophs) were third with 67 seconds, Parsons and Scott (frosh) fourth with 70 seconds, while Willison and Woodruff for the faculty were last with 95 seconds.

The biggest upset of the day was when Ober (frosh) chopped through a log in 39 seconds to beat Ritzheimer, who took 55 seconds. Third place went to Wright (senior) with 57 seconds and fourth place went to Ratliff (sophomore) with 59 seconds. Using the same log the faculty were given a chance to show what they could do outside the classroom. The results were Willison first, Martell second, Jeffers third, Jahn fourth, and Ehrlich fifth. In log rolling Helmers (frosh)

stayed "on top" the longest to win. He was followed by Ritzheimer (junior) and McKee (senior). Their times were 19, 17, and 16 seconds respectively.

The juniors showed their ability by defeating the seniors in the finals of the baseball game. In the pacing contest Chloupak (junior) was first with Callaway (junior) second, Elg (junior) and Green (frosh) tied for third, and Bloom (frosh) in fourth place. In tree climbing Parks (senior) was first, Sargent (junior) was second, Parsons (frosh) third, and Wetzel (sophomore) fourth.

Last even of the day was the tug-of-war. The teams were lined up on either side of the creek, which was especially dammed for the occasion. This made the water about five feet deep. In the first pull the frosh put the juniors through without any trouble. In the second pull, between the sophomores and seniors, the rope broke as the seniors were getting the worst of the deal. No points were given for this event because of the noticeable chiseling in the second pull.

"Red" Ahler (junior), with two first places, was high-point man. For this he won a nice double bitted cruiser's axe donated by Mr. Paul Criss of the Kelley Axe and Tool Co. Sentiment around the school indicated that everyone enjoyed the barbecue.

The Foresters' Ball

By Harold Oldson

The evening of December 3rd saw the Associated Foresters dressed up in their Sunday best to celebrate their annual ball. The new Student Union building was decorated in such a manner as to give the appearance of being a dance floor out in the open surrounded by trees. Saws and axes around the edge of the floor lent color to the forest-like atmosphere.

The programs were made of different colored slabs of veneer. On the outside slab was printed a likeness of the legendary Paul Bunyan, with pictures of Dr. Young and Mr. Wohletz, our new professors, on the pockets of Paul's mackinaw. On the inside the dances were named according to the most well-known feats of Paul and some of his friends.

Patrons and patronesses were Dean and Mrs. Jeffers, Dr. and Mrs. Gail, Dr. and Mrs. Jahn, Dr. and Mrs. Martell, Dr. and Mrs. Young, Dr. and Mrs. Hatch, Dr. and Mrs. Ehrlich, Mr. and Mrs. Wohletz, Dr. Daubenmire, and Mr. and Mrs. Tinsley.

Music was furnished by Bill Chase and his orchestra.

The Morrill Hall Meteorological Station

Arthur Wm. Nelson, Jr.

Last November, a meteorological station was established on the west roof of Morrill hall, by the author, senior in the school of forestry, with instruments formerly in storage in the forestry instrument room. The Northern Rocky Mountain Forest and Range Experiment Station, through Mr. H. T. Gisborne, was kind enough to loan the author a hygro-thermograph for the station.

The equipment of the station consists of two anemometers, (one integrating and one registering current wind velocity through electrical contacts), a wind direction vane, a set of maximum and minimum thermometers, and a hygrothermograph. Density and types of clouds, direction of wind, and the state of the weather are also recorded by the observer at 5:00 p.m. each evening.

On March 12, 1938, the author established a new ground station on the lawn west of Morrill Hall. This new station incorporates the official cooperative station, formerly located on the women's play field, the ground station for the school of forestry, and certain experimental layouts belonging to the botany department.

The enclosure measures twenty feet square, and is equipped with a fence and gate to prevent vandalism. The official Weather Bureau thermometers and rain gauge are located here, in addition to atmometers, and an integrating anemometer. A set of Region 6 wood cylinders, and a scale graduated directly in moisture contents, are installed for experimental purposes.

As far as is known, this is the first attempt to record wind velocity on the Palouse Prairie. The average wind velocity on the roof, for January,

(Continued on Page 46)

Reading left to right—
top to bottom:

1. "Trapper Dan the Bone-digger"
2. "Mushmouth"
3. Mt. Ranier at Sunrise.
4. Chow—Mens. Field Trip '37
5. Sheepherder and friend
6. Jammer, Ohio Match Sale, Coeur d'Alene Nat'l Forest
7. Along the "Bunion Derby", Senior Field Trip
8. "Winter Sports" — Game Management Lab.
9. "The Smile of Victory," Dean wins pie-eating contest
10. "Compass line"

Upper left—"Pull or Swim". Upper right—Martell wins.
Ahler spouts a load. The "Gyppo Juniors".
Left—Champ "River Pig". Below—Senior Field Trip.

Around The Loop With The Senior Foresters

By George R. Callaway, Jr.

Friday afternoon, September 17, 1937, was an epic day for the senior production majors. It was the start of the senior field trip and was probably the last time that the class would be together as a group on a pleasure trip. The trip, climaxing three strenuous years of classwork and a summer of employment in the brush, was to be thoroughly enjoyed by everyone.

As usual everyone was waiting for "Late Again" Johnson. This illustrious young man just couldn't revert to civilization and came swinging up the street, hand axe in hand, blazing every telephone pole. When interviewed and queried as to his strange behavior, he replied, "I am just blazing a trail home so I can find my way back." As the reader will no doubt gather it was an ill-assorted group of mixed personalities that made the trip.

With two toots of the air whistle on the no. 1 bus, per instructions of Dr. "Two Blast" Martell, we were off. The trip was made in two chartered Union Pacific stages. Some inventive soul in the no. 2 bus decided to nickname the drivers. No. 1 and no. 2 busses were piloted by "Overdrive" and "Doubleclutch" respectively. In all fairness it should be mentioned that "Doubleclutch" is the only stage navigator on record who could put the gear shift in all three forward speeds at the same time without scratching a cog.

No sooner had we become established in our quarters the second night out, than the "Diamond Jims" had the casino running full blast. Someone got a free trip. Isn't that right, Brower? The boys were to see the bank broken before the trip was over. The "Casino Kids", presumably thinking of easy money, persuaded Dr. Martell to sit in the game at the Low Divide Chalet in the heart of the Olympics. History was made that night. For the first time in the annals of pasteboard psychology, a man tried to lose and couldn't. "This joint will soon be mine", was his chant ere the evening was over.

Each hour was a change from the one before. The trip was well planned and excellently executed. Dr. Martell and Dr. Ehrlich deserve high praise for their efficient planning. A large part of our enjoyment of the trip can be directly attributed to them, and the pleasant memories we, as individuals, harbor are largely a result of their generalship.

A short sketch of the itinerary reveals such interesting highlights as: The Ohio Match logging on the Coeur d'Alene national forest, Grand Coulee Dam, Grand Coulee and the Dry Falls of the Columbia, Mt. Rainier national park, a ponderosa pine logging operation, Douglas fir logging operation, Olympic national monument, and the navy yard at Bremerton, Washington.

High among the memories of a chosen few will be the Fir Drug Company in Shelton, Washington. Remember "Blondie", Hungerford? "You, you, and you shave" were the ominous words of Dr. Martell—result, a mad scurry for the barber shops. Brother Hungerford, working that keen analytical mind overtime to solve the problem presented by an empty pocketbook and a dull razor, came to the conclusion that he was definitely in a dilemma. A free demonstration of the Schick Shaver solved his problem, and from what the big boys say she was really a beauty. Eh, Hungerford! "Trapper Dan" Nelson was the recipient of some very stinky perfume at the hand of the same glamorous young lady.

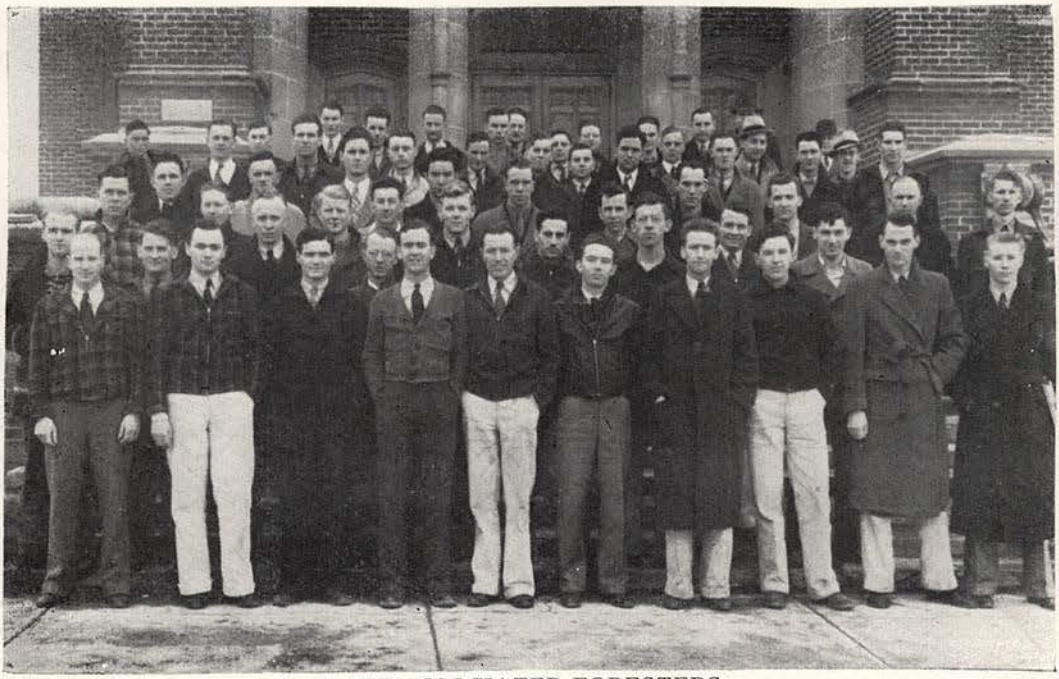
One of the highlights of the trip was the hike across the Olympic Peninsula. This event was termed the "Bunion Derby" by the participants and took place while the remainder of the crew rode around in the busses, taking in such highlights as the navy yard at Bremerton. Four days were spent hiking a total distance of 54 miles. Camp equipment was packed across by "Little Joe, The Wrangler". Many specimens strewed the path of Dr. Ehrlich. Ambitious young men, anxious to be of help, literally cluttered his path with fungi. Many and varied were the cartoons and rhymes inscribed on the underside of the etching fungus, *Fomes applanatus*. It was all taken in good fun, and none more thoroughly enjoyed the ribbing than Dr. Ehrlich.

The trip was beneficial from several standpoints. The main thing that it did accomplish was to establish new friendships among the class and more firmly cement the old. Other aspects of four years in the University may fade and in time be forgotten while certain memories of the trip will be reviewed when we, as foresters, meet in the future.

The Associated Foresters

By Ernest Taylor

The Associated Foresters is an organization which has for its purpose the promotion of fellowship and good feeling, and to foster the best interest of the forestry profession. The officers for the year 1937-38 are: Art Nelson, president; Howard Johnson, vice-president; Ernest Ahler, secretary-treasurer; and Clifton Windl, ranger. Class representatives are: seniors, Harold Heady and Bill Morrow; juniors, Otto Baltuth and Nelson Jeffers; and sophomores, Joe Couch and Dick Van Camp.



THE ASSOCIATED FORESTERS

The year has been characterized by interesting meetings, smokers, the annual bonfire, motion pictures, the foresters dance, and the twenty-second annual banquet. We are now looking forward to the barbecue. Detailed descriptions of these activities appear elsewhere in this book.

Meetings and smokers have been held regularly to keep alive the spirit of fellowship. Interesting speakers, regular business, and songs added color to meetings. Mary Ann McCarthy has dug up the mud so often that even Dr. Hatch admits she is second to none at mixing soils. He formerly contended the earthworm held this distinction. Naturally, we cut down the old pine tree. Dean Jeffers planned a logging operation; Dr. Jahn planned a mill; Dr. Martell recommended planting; Dr. Ehrlich identified the rot; Dr. Young got some herbarium specimens; Dr. Hatch got the mycorrhizae; and the seniors got a baffling quiz in management the next day.

Everyone feels keenly the need of the barbecue to settle the question of who's who among the classes. Champion cud-hoisters, tug-o-war experts, egg tossers, and log rollers are determined at this event. The barbecue concludes the social activities of each school year.

A subject which has aroused more interest this year than any other is the proposed change of the constitution. There seems to be little doubt in anyones mind that the constitution needs modifying to meet conditions as they now exist. Just what should be done to solve the problems of membership, the name for the organization, and the power of each officer are subjects of debate. It is indeed noteworthy that the Idaho Foresters are attempting to work out a constitution which will be a benefit to themselves, to their school, and to their profession.

All Idaho Foresters expect a lot of enthusiasm for a strong organization to come from the classes that attend summer camp. Certainly, summer

camp will promote good fellowship. Through the united efforts of all Idaho Foresters their organization will achieve more fully than ever before that part of its purpose which reads, "to foster the best interest of the forestry profession".

Senior Range Party

By Bruce R. Lee

On the evening of February 8, the sixteen senior range majors held an informal get-together for all juniors and sophomores in range with approximately 85 men attending the party. Introductions were accomplished by means of a receiving line. Heading the line was our own Chief of Range, Dr. V. A. Young, who's efforts were chiefly responsible for the success of the party, followed by Mr. O. Standing and Mr. McLaughlin, personnel directors from regions four and one respectively, the school of forestry faculty, and the senior range men.

Harold Heady was a very capable master of ceremonies, although his remarks about the production professors may have been a bit rough, to say the least. Dean Jeffers related some interesting range experiences, terminating his talk with a well received humorous story. From this point onward, that old rivalry and animosity between range and production men came into full play. In spite of the fact that they were surrounded by range men, the forestry professors dared to make light of our honored and most noble profession. Dr. Hatch earned all of the fur-lined gadgets for his hunting story. Dr. Martell almost split his vest over that one.

The Range Riding Songsters gave several noble attempts at some good old cow wadie songs, Clifton Windl really tumbled on down with his accordian when he played Tumbling Tumble Weed. The Range Riders made a valient attempt to lead the gathering in a rousing song, but at this point, we had to bow down to production senior Art Nelson (how did he get in?), who stepped in and led the group in an old spiritual.

When Mr. McLaughlin was called upon, he brought in a few sun rays to our dark and gloomy job prospect by pointing out that there were many divisions in the Forest Service and that we might work in through various fields other than straight forestry. Everyone felt just a little less discouraged after Mr. McLaughlin had finished his talk. Mr. Standing presented a splendid discussion on employment in the related fields of range management and soil erosion. Mr. Standing, himself, has progressed upward through the field of range management and he gave us a clearer insight into the intrinsic values and problems of our profession.

Following these discussions, an interesting half hour was spent with Dr. Young and his fine collection of lantern slides, showing range, erosion, and scenic views throughout the United States. It was a coveted privilege to see these remarkable pictures.

Shortly after the last calf, bawling under a hot iron, had been thrown on the screen, the refreshment committee shouted, "Come and get it". Dean Jeffers led the group to a fine buffet lunch. Here, the delicious remnants of Bill Lucas' elk came to their final resting place between buns, which were served in hearty proportions to everyone. To many of the students from the East, this elk meat was a long anticipated delicacy. Simply because a man has a Doctor's degree or a prominent position in the Forest Service is no sign that he cannot consume ice cream as, no doubt, Dr. Young, Mr. McLaughlin, and Dr. Hatch can tell you.

The party rapidly broke up about 10:30 o'clock when the clean-up committee announced that any volunteer assistance would be welcome. Everyone seemed to have enjoyed this little get-together and the seniors certainly enjoyed giving it. The range class of '38 hopes that it may have established a precedent and that underclassmen and guests in future years may enjoy similar parties.

Sustained Yield at The Crossroads

(Continued from Page 33)

sidered in relation to the social benefit in stabilization of logging communities, immeasurable in terms of money, and the stability of tax base afforded to county, state, and federal governments, in considering the economic implications of such legislation. These benefits need not be discussed here as they are familiar to all foresters.

The foregoing, then, is a quick picture of this new question, a question with many angles, a question of present-day importance, a question concerning which foresters should have, if not an opinion, at least some working knowledge. The existing conditions have already brought to a standstill the sustained yield plans of one leader among private western pine operators. By the time this article is published, the necessary legislation may have been approved by Congress, but the creation and administration of these "units" will call for a far greater appreciation of the problems than did the struggle for passage of the bill.

Xi Sigma Pi

By
JOHN WRIGHT, Associate Forester

Xi Sigma Pi is the national honorary upperclassmen's forestry fraternity. The chapter at Idaho, founded in 1920, was the fifth in the United States. Since that date the organization has enlarged its roster to include chapters in ten of our leading forestry schools.

The objects of the fraternity are: to promote high scholarship in forest education, to work for the upbuilding of the profession of forestry, and to further fraternal relations among the workers in the field of forestry.

For the accomplishment of these objects, Xi Sigma Pi has a scholarship plaque, a senior scholarship award, a spring formal dance, and a number of luncheons.

Each year the names of the men having the highest grade point average in their respective classes in the school of forestry have their names engraved on the bronze scholarship plaque. From 1922 to 1936, there was one plaque, which was in the main hall of the Administration building. However, in 1937, with the filling up of all available space on this plaque, a new one was necessary. In the future these plaques will be on the third floor of Morrill hall, in a more appropriate setting. Those receiving this honor last year were: senior, Thomas I. Wilson; junior, Jonathan Wright; sophomore, Ray Stone; and freshman, Thomas Lacy.

In 1933, Idaho Epsilon chapter instituted an award for seniors. The candidates are judged on the basis of scholarship, professional interest, personality, practical experience, and leadership. The award consists of junior membership in the Society of American Foresters and a year's subscription to the Journal of Forestry. The winner in 1937

From left to right, front row: Donald McKeever, Dr. Martell, Orville Tumelson, Harold Heady, Andrew Singley, Dr. Ehrlich, and Noel Hallett. Second row: Clifton Windl, Frank Kapel, Raymond Stone, Jesse Campbell, A. W. Slipp, Prof. Wohletz, and Dwight Cable. Third row: Dean Jeffers, Prof. Young, Dr. Hatch, Royale Pierson, Seldon Tinsley, and Vernon Holmberg. Last row: Gilbert Doll, Charles Poulton, and Dr. Jahn.

was Virgil A. Gould. Harold Heady received the senior award this year.

The spring formal dance was held at the Sigma Nu house on May 14th last year. The decorations for the dance were made up entirely of wild flowers and tree boughs.

During the year Xi Sigma Pi holds a series of luncheons. Among the speakers this year have been Dean T. S. Kerr; Mr. Charles McLoughlin, personnel director for Region 1; Mr. A. R. Standing, personnel director for Region 4; and Dr. V. A. Young.

New members initiated this year were Dr. V. A. Young, Seldon L. Tinsley ,Gilbert B. Doll, Jesse Campbell, Ray Stone, J. Clifton Windl, Charles Poulton, Edwin Fargo, Frank Meneely, Carl Wilson, and Jack Martin.

The officers for the present year are: forester, Orville Tumelson; associate forester, Jonathan Wright; secretary-fiscal agent, Andrew Singley; and ranger, Harold Heady.

Idaho's First and Second Technical Game Management Conferences

In December, 1937, Idaho's first game management conference of a technical nature met at the University of Idaho in Moscow. The meeting was organized by the school of forestry faculty because of a need throughout the state for increased knowledge of the technical phases of game management. It was also recognized that the University has a definite responsibility for developing sound public thought on the subject of wildlife and is expected to take the lead in the field of research and development of further scientific knowledge of the game resources of the state.

Dr. A. B. Hatch, assistant professor of forest management, organized the program and acted as general chairman. The topics of discussion at the conference were upland game birds, migratory birds, fish, fur bearers, big game, predatory control, and the special problems of game management in Idaho. Thirty papers were presented and discussed during the three-day meeting by representatives of the various agencies interested in Idaho's game management problems. Among these agencies were the U. S. Biological Survey, U. S. Forest Service, Soil Conservation Service, Idaho State Game Department, the Idaho Wildlife Federation, and the University of Idaho.

As a result of the conference it was agreed that the state already had more authority for managing game than was being used. The Forest Service agreed to prepare for the State Game Department specific recommendations for closure of understocked game areas depleted by excessive hunting. These recommendations were to be presented by the state to game committees composed of local sportsmen's clubs and with their approval such areas would be temporarily closed to hunting. In recognition of the glaring need for wildlife research in the state a committee was appointed including members from each of the interested agencies to draw up a long-range investigative program. With Dr. A. B. Hatch as chairman this committee met in Boise, January 1938. A plan for research was developed including studies on bighorn sheep, mountain goat, and blue grouse in Idaho.

The second of Idaho's technical game conferences met in Pocatello, Idaho, on March 18 and 19, 1938. All agencies represented at the first conference were present and also the National Park Service.

One immediate result of the conference was a recommendation that legislation be enacted to enable the state to introduce the permit allotment system of fur trapping. Under this system the trapping privileges for a certain area would be allotted to an individual, usually a local farmer, who would be made a deputy game warden. The furs would be sold by the state and the trapper would receive a certain pecentage of the proceeds. The state regulates the amount of furs harvested and the trapper being a deputy warden would be able to control poaching.

Another high point of the conference was the discussion of the bighorn sheep and mountain goat problem. Floyd W. Godden, supervisor of the Salmon National Forest and a graduate of the school of forestry, reported on a series of studies made in the Salmon country. Results showed that hunting accounted for only a small percentage of the kill. The cougar was found to be the worst predator, with the coyote and the bob-cat next. Not one kill by eagles had been seen although many had been attributed to these birds with the result that last year the state undertook a control program. The low population of sheep and goat and the absence of any increase emphasized the urgent need in Idaho for a closed season on these animals and an immediate study of their life histories to learn the cause of decimation.

Many comments from over the state indicated a wide interest in the wildlife management program of the University at Moscow and at Pocatello.

Labor and Forestry in Germany

By Albrecht Behm

(Editor's Note—Mr. Behm is a special exchange student at the school of forestry this year. He has studied at schools in North and South Germany and in Tyrol, Austria. In 1936 he graduated from the forest academy at Eberswalde, Germany. After a year's study at Idaho he will return to Germany for two years training for government service.)

The commencement of modern forestry in Germany inducted labor as a most essential part of forestry. Until about 1780, men worked only for a very limited season in the woods. They were not professionals, but merely hired for fixed operations. These operations were not extensive, usually dealing only with the requirements of the local markets for timber and fuel. Sustained yield was yet undiscovered. Forest education was as unknown as forestry schools. However, harvesting went on for centuries, with few exceptions only, as long as raw material was available. The stocks, of course, could not be sufficient forever. Despite some forest regulations decreed by single royal governments, the end of the 18th century faced a tremendous decrease in more or less any supplies of lumber. The reactions of state administration and public (market) were different. The administration considered first measures of forest management and soon applied them in manifold ways (about 1800). The public took the other way and replaced lumber more by other materials like stone, coal, and iron. This change coincided with the beginning of the industrial development throughout Europe. However, it is not the place here to deal with the development of forest management except to point out background and relation of forest management and labor in the government forests. General demand was continuity of revenue; therefore continuity of production was needed. Continual production, however, depends on a spatial and temporal order of the forests based on the annual or periodical growth. Specified economical aim was to produce as much volume as possible representing as much value as possible by enduring improvement of production as well as of the product. That meant a most considerable increase of labor to be applied in forestry. On these basic and programmatic ideas the forestry of today was founded and became an economical, technical and consequently a social problem. Labor as the particular social factor in the governments' forestry will be shown here.

As mentioned before, there were no forest laborers as a group in these early days of forestry. It appeared to be most essential, however, to arrange this matter somehow as soon as possible.

Originally for forest labor, cutting, planting, road building and maintaining etc., men from the agricultural environment had to be hired. Soon this method in some regions appeared to be unsatisfactory. In North and East-Germany with a preponderance of large land properties it was sometimes very difficult to get laborers. These regions were and are too thinly settled. However, in regions with a preponderance of peasants it was always much easier. To solve the problem North and East-Germany became the regions where for the first time laborers have been taken on a special contract solely for steadier, coherent forest work. Nevertheless, the problem, arose; how to keep the man on the job. In order to achieve that, the forest laborer had to be settled down in the vicinity of his work-place; he had to be held in the agricultural environment. Furthermore, he had to be insured financially against accident, illness (both so far as resulting from his work), and old-age disability. Actually much has been done for our laborers since about 1850, when a settlement-program was started. With a 4 or 5 room house (plus kitchen) he is given a barn, a little farm-land (about 6 acres) and a share of forest meadow. In other words, by these small means a small peasant's place—a one man's job—had been furnished, which the laborer with family could handle and take on lease easily. In this way, finally, it was possible to make forestry independent of agriculture on the local labor-markets. This method proved to be successful in securing the steadiness of forest labor-supply. Evidently these problems in North and East-Germany solely resulted from the regional socioliogical structures.

Different was the situation in districts with extensive industry and those with preponderance of peasantry. Most important for forestry was and is the competition of wages in the industrial regions, which sometimes caused—though forest labor in the West was higher paid than in the East—an exodus not only from the forest but also of the agricultural laborers into industry. Presently it was attempted to regulate this matter by prohibiting industrial employment for laborers of this type in such regions. The peasant-settled districts always were a comparatively easy labor-market, since forest-labor mainly occurs in a period when the small farmer is not very busy with his own job and is glad to make some money in forest work. Difficulties of labor supply developed and still exist

mostly in industrial regions, though some attempts were made to solve this problem as had been done in the East.

When more human strength was needed, because more labor had to be done, so much the more of intelligence and experience of the forest laborer was wanted in order to increase the value of production and product by improving systems and methods of labor. With high costs of planting, for example, it is most essential to make the most of material, labor, and time of work; i.e. the afforestation must be a complete success from the very start. The same principle applies in any other forest work requiring high efficiency of the laborer though it did not suit the state of affairs. During the last three years this set-up has been considerably improved, especially by providing training camps (now 7 in Germany) for young forest workers-to-be, that will give him enough experience and qualification as a skilled laborer. Of course, that means an increase of wages (especially for hourly paid work), probably a qualitative improvement of the laborer, and a securing guarantee against the competition of industrial wages.

In government-owned forests (about 8 million acres) today about 45,000 men work at least 9 months of the year. The average income runs up to $500. The extra-income from small farming and cattle-raising amounts to an average of about $300. That yields altogether about $800 net, annually. The forest laborer is organized in the German Labor Front, in that he is represented and protected. In fact today one of the most important factors in the German government's forestry is the forest laborer. His experience, his skill, and his intelligence influence greatly the efficiency and accomplishment of our forestry. Therefore, he is our best cooperant at this job—maintainance, care, and improvement of Germany's beautiful and valuable forests.

Morrill Hall Meteriological Station

(Continued from Page 37)

was 215 miles per day, or an average hourly velocity of about 9 miles. As much as 410 miles have blown past in a 24 hour period. The highest wind velocity so far recorded, was at noon, January 10, when it reached 42 miles per hour. Velocities were above this by gusts, but the vanes were whirling so fast that they were lifted from the electrical contacts.

Several underclassmen will be trained to carry on the work of the station next year.

Foresters' Bonfire

By Foster Robertson

The Idaho Foresters began their year's activities with perhaps one of the most enjoyed bonfires in several seasons. In a large crowd they gathered at the southwest corner of MacLean Field on the evening of Friday, October 8, 1937, and showed the real enthusiasm characteristic of a good stand of foresters.

Bill Morrow, master of ceremonies, started the evening in a lively manner by introducing Dean Jeffers who gave a very interesting and inspiring talk on the enjoyment received from a true understanding of forestry. Dean Jeffers was followed by Dr. Martell, Dr. Jahn, Dr. Ehrlich, and Dr. Hatch. Each added his bit and emphasized the points brought out by Dean Jeffers by citing personal experiences. Bill then introduced the new faculty members, Dr. Young and Professor Wohletz. Each expressed his gratitude for the warm feelings of acceptance given by Idaho students and offered his full appreciation.

By this time the seniors, fresh from their three weeks field trip, could not be restrained further, so they burst forth with several lively songs in a manner second to none.

Art Nelson, president of the Associated Foresters, was next brought to light and he introduced the other officers; Howard Johnson, vice-president; Ernest Ahler, secretary-treasurer; and Cliff Windl, ranger. Art then called on "Cab" Callaway for his account of the senior field trip. From "Cab's" description there must not have been a dull moment. When "Cab" was finally quieted down the spot was turned over to Xi Sigma Pi. Orville Tumelson, forester, announced the pledging of the new members.

Abe Goff, loyal alumnus, was next called on to give a few words. His short talk showed the value of participation in all ASUI activities. He pointed out that college should be associated with pleasant memories and not remembered as a drudgery. In concluding, he emphasized that studies were after all the main object for our being present and not to forget to "crack the books".

By this time Frank Kapel and company were ready to dish out the lunch so the meeting was dismissed in their favor. An abundance of hot chocolate, doughnuts, and hamburgers soon had the meeting again under control. The general opinion prevailing as the meeting finally broke up was that the evening had been well spent.

TWENTY-SECOND ANNUAL BANQUET

By Claude Brower

The annual foresters' banquet was held this year at the Student Union Building on the evening of March 31.

Mr. H. T. Gisborne, in charge of forest protection at the Northern Rocky Mountain Experiment Station, was the speaker of the evening. His explanations of the techniques in use and contemplated techniques in fire control methods were both highly informative and interesting.

The use of small name-cards attached to the coat lapels of those present contributed to an informality which resulted in a good old bullfest.

A foresters' skit entitled, "Mellerdramer: Because there wasn't any J.F. or J.R.E. in 1938," or, "How ya Doin, Chum?", provided laugh upon laugh. The time of the skit was 1948; the place, Ada, Louisiana. The act opened with five '38 graduates on the bread line talking about the experiences they had encountered since getting their sheepskins, and what their classmates and faculty were doing. Here are a few of the highlights: Dr. "Shorty" Martell is greasing chutes for Billings; Brother Watson is head of the pathology department; Dean Jeffers had to pawn his watch; Dr. Hatch is counting bear signs; Vic Sellers is wondering what he is going to do when he is too old for WPA and too young for an old age pension; and Dr. Ehrlich is tacking bark on pres-to-logs.

All in all a swell time was experienced. The food was superb, but the cigars resembled those Dr. Martell gives away.

George Callaway proved to be a congenial host in his capacity as toastmaster. Much of the success of the banquet can be attributed to Claude Brower—general chairman, Phil Bender—assistant chairman, Bill Morrow—chairman of program committee, Orville Tumelson—chairman of reception committee, John Wright—chairman of menu committee, and Ernest Ahler—chairman of ticket committee.

Taking the backs off approximately 900 beef steers to make a belt almost an inch thick and more than 300 feet long was the job required to meet the demands of a new installation at the Potlatch, Idaho, sawmill of Potlatch Forests Inc. A new belt on the great fly wheel in the engine room at that plant has just been installed. It is expected to last twenty years. Nine hundred steers furnished their backs for the belt, and enough meat to feed 630,000 persons with at least two good portions of steaks, roasts, stews, and soup.

SUMMER CAMP

The final plans are being made for the first summer camp of the school of forestry. The camp will be held on the school forest, utilizing as living quarters the buildings of the abandoned Big Meadow CCC camp near Troy. The quarters were loaned to the University by the State of Idaho, and although not definitely arranged the University will probably pay the maintenance on the buildings.

Camp will begin June 15 and last for 10 weeks. Mess will be run on a cooperative basis, the only hired help consisting of a cook. Resident students will be admitted upon the completion of the first two years' curriculum of the school of forestry, University of Idaho. All transfer students must have acceptable credits equivalent to the first two years' curriculum at Idaho.

The courses to be taught at the camp will take the place of courses now being taught on the campus. The following subjects are offered at the camp:

1. During the first 5 weeks a surveying course will take the place of CE 3a and CE 4 and will be taught by a member of the engineering department from the campus.

2. The 6th to 9th weeks inclusive will be spent on mensuration, which will take the place of For. 143 on the campus and will be taught by Professor Wohletz.

3. The 10th week will be spent in studying the forest communities of the local region and will be taught by Dr. Young.

A typical day will consist of field work by parties from 8 a.m. to 5 p.m., and in general all students will be doing the same type of work. The camp will be under the directorship of Dr. Martell.

Recreation facilities have been provided including a baseball diamond and swimming facilities. Weekend trips are encouraged for all students.

Utilization Majors Organize

The wood utilization majors have, in the past, had no contact with one another or with current developments in their field except through the classroom. This spring the need for some medium of exchanging ideas was realized and the result is the "Xylem Colloquium". The purpose of this organization is to sponsor general discussions among the members and to bring in outside speakers from time to time. Officers of the club are: president, Herbert Angell; vice-president, Otto Baltuth; secretary, Warren MacGregor. Dr. Jahn will act as adviser and assist the group in obtaining speakers.

Coordinating Game Management With Other Land Uses

(Continued from Page 16)

business in Idaho is so definitely dependent upon public lands for its existence that to eliminate livestock, even sheep, from the public ranges would destroy the economic structure of the state and result in a complete financial collapse.

The conflict between game and livestock is not nearly so serious as is generally believed. While it is true that big game animals and livestock forage to quite an extent on the same plant species, yet there is a difference in their feeding habits. Many plants palatable to game are of little importance to livestock. Deer studies in the Middle Fork of the Salmon river showed that deer subsist largely on browse. Their first choice is normally browse, second, weeds, and third, grass. The latter is eaten sparingly in the spring and again in the fall when new growth begins. Elk utilize considerable browse, especially in winter, but also consume grasses and weeds in quantity. Investigations on the Middle Fork showed the winter feed of deer to consist chiefly of mountain mahogany, bitterbrush, snowbrush, myrtle brush, gray rabbit-brush, shrubby eriogonum, forsellesia, balsamroot, sagebrush, Oregon grape, Douglas fir, ponderosa pine, and wild rose.

Of the above plants bitterbrush, shrubby eriogonum, balsomroot, and sagebrush are the only species that can be considered as being of any importance to livestock, in the summer at least. In winter livestock, if forced to do so, would, of course, extend their feeding to include more of the shrubs listed. Different vegetative types will naturally depict a different condition. The degree of conflict that may be obtained on any range depends on the extent of stocking, the class of stock, the forage type, and the season of use. Each individual area must be carefully studied to determine the facts and degree of conflict, if any. The point is, no one can say livestock compete with game or vice versa without first knowing the facts. Another point to remember is that competition exists only when there is not enough forage to meet the requirements of both game and livestock. Competition comes only with scarcity.

National forests are mountainous regions and contain but very little foothill and valley country which is the natural winter home of big game. Only about 6 per cent of the total national forest area in Idaho is suitable as big game wintering grounds. It is estimated that in severe winters 1,650 elk, 400 bighorn sheep, 28,000 deer, and 3,500 antelope leave the national forests for public and private lands outside.

Land use planners should give particular attention to the winter needs of wildlife.

Much of the natural winter habitat of game is in private ownership. Supplying ample and suitable winter range is today's troublesome big game problem but there is a ray of hope. The Pittman-Robertson Act which diverts the receipts from the federal tax on arms and ammunition, amounting to about $3,000,000 annually, to the states for wildlife restoration will greatly assist the states in meeting the winter needs of wildlife. The money will become available July 1, this year. Idaho's share will be about $65,000 to which the State Game Department must add 25 per cent to participate, making a total of approximately $80,000. Part of these funds will most likely be spent to purchase privately owned range lands important as winter homes for game. Such acquisition will help much in eliminating damage to private property by big game and in time, if wisely planned, should greatly benefit wildlife and result in getting better correlation of land use.

Planning Applied to Land Use Problems

(Continued from Page 11)

thoroughly understood. It might be of interest to list some of the tools which are being considered: (1) rural zoning; (2) grazing district regulations; (3) soil conservation districts; (4) differential taxation; (5) retention of chronically tax delinquent lands in public ownership; (6) public and private credit policies; and (7) submarginal land purchase.

It is unfortunate that misunderstandings have arisen concerning the possibilities of some of these instruments. Rural zoning is not a cure-all for maladjustments in land use. Ordinarily, it must be supplemented by other devices because rural zoning is primarily a preventive rather than a curative measure. That is to say, it is much more useful in preventing additional settlement in sparsely populated areas than it is in solving a problem in an area which contains a relatively large number of non-conforming users.

Because of its obvious and direct effect upon land use, the importance of public land purchase has been somewhat overemphasized. The experience of the past few years has demonstrated that it is unrealistic to look upon public land purchase

(Continued on Page 68)

ALUMNI NEWS

The Grand Teton, Eastern Idaho

1937 Graduates Hibernate With the Selway Elk Herd

To four Idaho graduates of 1937, the winter trails of big game and the adventurous appeal of the snow-clad wilds are no longer shrouded in mystery. Last January 10, Verne Greco, Maurice Yearsley (only five days married!), Chester Hagedorn, and Jack Oliver forsook the easy ways of civilized man and took to the ice-clad fastness of the Selway-Bitterroot Primitive Area in central Idaho, there to help solve the growing problem of what to do about America's second greatest elk herd.

When Captains Lewis and Clark crossed the Bitterroot divide on the Lolo Trail in 1805, they found no game and would have starved had they not eaten their horses. Last fall in the same country along the old Lolo Trail, the State Game department issued 1500 elk tags in a desperate attempt to prevent mass starvation of the 11,000 elk and 7,000 deer of the Selway. In summer, these animals roam some two million acres of lush summer forage and wax exceedingly fat. But with winter, life's summer dream becomes a nightmare on the meager 75,000 acres of south slopes on Moose creek and the Lochsa river which provide their only winter range.

Just how much game these 75,000 acres will support is the biggest problem which could not be solved during the last three winters when the Forest Service, with E.C.W. labor, conducted the first real study of the Selway game herds. In the opinion of W. E. Fry, assistant supervisor of the Nezperce forest, and Jack Parsell, ranger-at-large, who have directed these studies, two severe winters might all but annihilate these 18,000 big game animals of the Selway.

Much of the winter range is badly overgrazed and eroded, so last spring Dr. Hatch began a series of cooperative experiments with the Forest Service to discover methods for bringing back the dying overbrowsed shrubs. At his suggestion, Greco, Yearsley, Hagedorn, and Oliver volunteered their free services this winter and the Forest Service provided food and equipment for conducting a range reconnaissance and a carrying-capacity study of the winter range.

Besides mastering the arts of snowshoeing, of dodging bull moose, and of counting elk, the boys completed the reconnaissance and determined the poundage of the annual growth of the principle browse shrubs per acre. But while dame fortune was kind to the big game of the Selway, she was unkind to our four bewhiskered graduates, for the winter was so mild that the game remained all winter on their summer and fall ranges. On April 1 with their job well done but unavoidably incomplete, the boys returned to civilization. Now we are wondering how to choose four "38" graduates from all who have applied to complete the job next winter!

Incidentally, when the boys arrived in Lewiston April 1st, fresh from the Selway, it is reported on good authority that they had to be roped and tied before they could be shaved and their snowshoes removed.

Federal Funds Made Available For Wild Life Restoration in Idaho

Wildlife history was made in Idaho early this January when William R. McIntyre, State Game Warden, called a meeting of all agencies in the state which are interested in wildlife. The School of Forestry was represented by Dr. A. B. Hatch, who acted as secretary of the conference. The purpose of the meeting was to provide the State Game Department with suggestions for the wildlife restoration program in Idaho made possible by the Pittman-Robertson Act. The funds must be expended on the restoration of native animals and birds under plans proposed by the State Game Department and approved by the U. S. Biological Survey. The sum available for Idaho is approximately $80,000 of which one fourth must be supplied by the state.

It was proposed by the committee that the funds available during the first several years be expended on the restoration of beaver, big game, and sage grouse.

Less than a century ago Idaho's streams teemed with beaver and the waters were clear and cold. Today, particularly in the southern part of the state, the same streams are muddy torrents in the spring and dry runs in mid-summer. Restoration of the beaver is expected to bring back the clear cold creeks that run throughout the dry summers. Eventually, with scientific management, the beaver trapping days may again be common in Idaho.

In restoring Idaho's big game the big problem is winter range. In the days of Lewis and Clark the big game lived in the grassland foothills of the mountains during the winter. Today these winter range areas are in private ownership and no longer available. Big game has been forced back into the mountains to subsist on browse on snowbound slopes during the winter. In many regions the game can be saved only by providing

lowland winter range. Many submarginal mountain valleys in Idaho are suitable for such range and the funds will enable the purchase or lease of such lands for game use.

In the restoration of sage grouse, as well as big game, an unusual opportunity exists for cooperation between stockmen and sportsmen. Ninety per cent of the sage grouse nesting areas are owned by stockmen, the very spots used most intensively by stock. Sage grouse can nest nowhere but near water and for years the heavy use of this part of the range has nearly eliminated the sage grouse from the semi-desert country. The plan is to lease, purchase, or take easement on watering grounds, fence the creeks and waterholes and pipe the fresh water to troughs outside the fence. Besides a pure water supply for stock the sage grouse will find ideal nesting cover within the protected area. The vegetation within the fence once it is restored may be grazed during late summer and early fall by the stock when nesting season is over.

In addition, the committee recommended that approximately twenty per cent of the funds be used for restoration studies to be administered from the University of Idaho in Moscow and Pocatello. The studies will be directed toward facilitating the restoration projects mentioned above and gathering information on animals which face extinction in Idaho from little known causes. The first of these study projects is a management plan for beaver. A survey of southern Idaho streams will be made and a long-range management program prepared which will enable the stocking of all desirable streams. The second project will enable the preparation of a management plan for the restoration of big game, especially sheep and goat. A third investigative project is the assembling, analysis, and compilation of the data on wildlife resources of the state and the past, present, and possible future ranges of the more important game animals.

In Honor of Francis Garner Miller

By Harold F. Heady

Francis Garner Miller was born in Illinois, the son of Isiah and Isabel Jane Miller. He was graduated from the University of Iowa in 1900 and took the degree of B.A. in agriculture in the State College of Iowa in the following year. Entering post graduate work at the Yale school of forestry he received the degree of master of forestry in 1903. He married Evelyn Depew in 1906. As a young man he had served as a superintendent of schools in Iowa prior to taking his university degree. In the year in which he took his Master's degree in forestry at Yale he became professor of forestry in the University of Nebraska, serving there successfully until his call to the deanship in the University of Washington in 1907, where he organized the College of Forestry. In 1915 he took over the forestry department of the State College of Washington where he remained until 1917. In the fall of that year he became dean of the school of forestry, University of Idaho, when the department was organized as a separate division of the University. He held this position from 1917 until his death in 1934.

Dean Miller was prominent in professional forestry circles and belonged to many forestry and scientific associations. His persistent devotion to duty, complete unselfishness, absolute honesty, and confidence he placed in any man working with him are ideals that will remain with us always. The following is one of the comments made reguarding the loss of Dean Miller: "Dean Miller was a very outstanding man and so modest that many people did not realize the real work which he had done for the University of Idaho, and the standing which he had. Also, as a man, he had a very keen and subtle sense of humor, which was very much out of ordinary. I was extremely fond of him personally, in addition to which I had a very great respect for his ability and knowledge. The loss of Dean Miller will be keenly felt."

Although the men graduating from the Idaho school of forestry this year and in future years have not had personal contact with Dean Miller, they should be proud of the high standing of the school made possible by Dean Miller's efforts.

Approximately $105 was donated by the alumni for the erection of a memorial in honor of our late dean. A placque has been purchased at a cost of $72 and is now ready for erection on a tentative site near the Shattuck Arboretum as soon as weather permits. It will be affixed to a granite or a concrete monument.

The placque bears the following inscription:

IN MEMORIAM

FRANCIS GARNER MILLER

1866-1934

Dean School of Forestry 1917-1934
University of Idaho

ALUMNI DIRECTORY

In compiling this section of the Forester we, the editors, realize errors may have been made regarding some of the Alumni included and even names omitted. This has happened in the past, but it should be obvious to all concerned that the correctness of material is entirely dependent upon cooperation from the Alumni. We are anxious to have an accurate Alumni Directory & News section as we realize you are. Therefore, we urge your cooperation in making this possible.

AHLSKOG, RALPH, '33, U.S.F.S. District Forest Ranger at Rapid River, Michigan. We have not heard from Ralph this year, but from last reports he was enjoying his work with the Forest Service.

AHRENHOLZ, R. W., '——. Our last account of Mr. Ahrenholz found him at Day Lake Camp R-34, Marcell, Minnesota.

ALBEE, LESLIE R., '35 is J.R.E. with the Soil Conservation Service. He is permanently located at Landon, Wyoming, having been transfered from Albuquerque, New Mexico. "I am still single, intending to win a $5.00 bet from "Teabone" Hultman for being single longer than he."

ANDERSON, BERNARD A., M.S.(For.), '28. Assistant Supervisor, Nezperce National Forest, with address at Grangeville, Idaho. "Dean Jeffers has promised to pay us a visit several times. As a special inducement, in the hopes the visit will materialize, we are adding a trip to the Seven Devils region. If that isn't sufficient inducement we'll just have to conclude he has scratched the Nezperce from his list."

ANDERSON, PAUL L., '36. We have been informed that Paul is now doing survey work for the Forest Service, at Ogden, Utah. He was with us last year as an assistant instructor. What's this about your having a wife now, Paul?

ANDERSON, E. WILLIAM, '37. "Red" is Junior Range Examiner, employed with the Soil conservation Service as assistant project range examiner. His work consists of planning range management on farms in demonstration work areas. He is also planning correct use and management of native range, pasture and hay resources so as to result in maximum conservation of soil and water possible under existing conditions on the ranch.

ANDREWS, MILTON D., '32. No word was received from Milton this year, information of last year stated that he was U. S. Forest Service nurseryman in charge of the Eveleth Nursery on the Superior National Forest.

ANNELL, ARTHUR B., '37, Moscow, Idaho. Arthur is now a draftsman for the A.A.A. here in Moscow.

ARTHURS, AUBREY J., '34. We did not hear from Aubrey this year. Last year he was working on the Shelter Belt out of Redfield, South Dakota, with address of P. O. building, Redfield, South Dakota.

BAIRD, JOHN C., '27. Associate range examiner in charge of Western Range Survey project in North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and Texas, with address at Lincoln, Nebraska. John was married in 1929, and now has a girl six year old. "Expect to leave this position shortly—destination unknown."

BALCH, A. P., '29, District Forest Ranger, Kelly, Wyoming. "Bones" was married in 1931, but reports no children.

BAUMAN, HERMAN, '24. Our last word from Herman found him with the Caterpillar Tractor Company, San Bernardino, Calif.

BEALS, WILFRED F., '27. We have had no recent news of Wilfred. His last address was Conconully, Wash.

BENNETT, CAREY H., '29. The only word about Carey this year was that he is now with the U. S. Biological Survey in Denver, Colorado.

BICKFORD, RICHARD F., '36. 422 East Huron, Ann Arbor, Michigan was the last address we had of Richard.

BEDWELL, JESSE L., '20. M.S. Oregon State College '27; Ph.D., Yale '32, 630 Post Office building, Portland, Oregon. Pathology, U. S. Forest Service, Portland, Oregon.

BENSON, RUDOLPH J., '34. No word from "Rudy" this year. Last year he was Assistant Ranger, Phelps Ranger district, Eagle River, Wisconsin. How about the family "Rudy"?

BIKER, JOHN BARNEL, '28. Present address, % Consolidated Mining & Smelting Co., Trail B.C. Canada. He is testing in the Chemical Fertilizer Department of the Ammonium Sulphate and Shipping Division. John was married in 1928, and now has two daughters. "I appreciate all news sent from the University. In fact, I might go further and say both my wife and myself eagerly read anything and everything that comes to us. We are naturally out of touch with former classmates and this is the only means we have of getting news."

BOLLES, WARREN H., '26, M.F., Yale '29. 424 U.S. court house, Portland, Oregon. Ass't. forester. Employed at the Pacific Northwest Forest Experiment Station on flood control work. Warren is still single.

BRADO, GLENN, '36, U.S.F.S. District ranger at Ketchum, Idaho. In regard to being married Glenn says, "No, but I'm thinking!"

BROWN, CHARLES G., '36, 314 W-24th, Vancouver, Wash. Junior forester, Columbia National Forest, supervisor's staff. "No special news about myself for publication. Am engaged in varied activities from fire control to administrative studies."

BROWN, DR. FANK A., '22. His last address was 127 South Los Robles, Pasadena, Calif.

BROWN, HAROLD G., '33. Harold was in Washington, D.C., last year engaged in emergency conservation work by the Indian Service. His address was then 3500—14th N.W., Washington, D.C.

BROWN, J. P., '37, U.S.F.S. Waldron, Arkansas. Assistant ranger, junior forester, on Ouachita National Forest. "At present marking and scaling on timber sales. As for the future—?"

BROWN, RICHARD I., '31. His last address was U. S. Forest Service, Arcadia, Missouri.

BROWN, STEWART E., '35. Our last report from "Stew" found him working in the silviculture department of the Northern Rocky Mountain Experiment Station, Missoula, Mont.

BUCHANAN, THOMAS S., '35, M.S. California '37, 2914 SE Tibbetts, Portland, Oregon, division of forest pathology, U.S.D.A. assistant pathologist. "General forest pathology with special emphasis on blister rust research and decay of windthrown timber."

BUCKINGHAM, ARTHUR, '30. Last year "Buck" was assistant supervisor on the Teton Forest, with headquarters at Jackson Hole, Wyoming.

BUROUGHS, I. C., '27, M.F., Yale '28. Ike is working with Wiesehuegel on the T.V.A. project, Norris, Tennessee.

BURTON, C. LESLIE, '30, forest ranger, South Platte District, Pike National Forest, Buffalo Creek, Colorado. Leslie was married in 1931 and is now the father of two children.

CALLENDER, WILLIAM C., '27. Bill is Assistant supervisor on the Kisatchie National Forest at Alexandria, La.

CAPORASO, ALESSIO, '37, 15 Young St. Waterbury, Conn., Conn. State Forest Service Recreation Development. "If present business conditions in the East continue I have a very good opportunity of being promoted to the AOU (Army of Unemployed.)"

CARLSON, CHAS., '36. No word from "Chuck" this year. Last reports were that he was with the U.S.F.S. working on range conservation for the Forest Service. We hear he is now located in Tucson, Arizona.

CHOHLIS, G. JOHN, '37. John has been doing grazing inspection work for the past summer season but is at present unemployed. He has hopes of being married this fall. Good luck to you John.

CLARKE, STANLEY C., '32. Last year his address was 421 North Amherst St., Albuquerque, New Mexico. He was cooperating with the State of Utah on research studies. (A cooperative arrangement between S.C.S. and Utah Agriculture Experiment Station.)

COCHRAN, A. R., '34. Last year he was with the Forest Service in Warren, Pa., as assistant supervisor, Allegheny National Forest.

CONNAUGHTON, CHARLES A., '28, M.F. Yale, '34. He is silviculturist at the Rocky Mountain Forest & Range Experiment Station at Fort Collins, Colorado. At present he is in charge of watershed management research. Has had an addition to the family—Sharon Sue, born July 30, 1937.

COONROD, MELVIN, '32. Mel is ranger on the Porcupine District of the Targhee, stationed at Ashton, Idaho. Didn't hear from Mel this year.

COSSIT, F. M., '24, 2029 Tuxedo Ave., Atlanta, Ga., U.S.F.S. Inspector Division Timber Mgt., Region 8. "Nursery and planting for Southern Region my principal concern. Three nurseries with an annual output of fifty millions of trees leaves but little time to do much else."

CRANCTON, WILLIAM V., '33. Our last word from William was that he was assistant ranger on Womble Ranger District.

CRAWFORD, KENNETH, '36, present address is 1759 A. Street, Corvallis, Ore. Kenneth is taking advanced work in Forestry at O.S.C. Still unmarried, but feels himself slipping as classmates fall all 'round him. Ken says that Paul Talich, who you will remember as a graduate student at the U. of I. in 1932-33, is now working for his M.F. at Corvallis.

CRUZ, EUGENIO S. De la, '26. M.F., Yale, '27, School of Forestry, Los Panos, Laquna, Philippines. His present title is Chief Division of Forest Studies and Research and Associate

Professor in Forest Policy and History. "I am the youngest, in point of service, among the five chiefs of Divisions in the Bureau of Forestry." We find from information received from Mr. Cruz that he has had wide and varied experiences in the field of forestry.

CUMMINGS, LEWIS A., '25. We received no word from Lewis this year, his last address was U.S.F.S., Del Norte, Colorado.

CUNNINGHAM, R. N., '17, 1465 N. Cleveland Ave., St. Paul, Minn. We believe that Russ is now in charge of Forest Survey at the Lake States Forest Experiment Station at St. Paul.

DANIELS, A. S., '23, 2633 Pemberton Drive, Houston, Tex. According to last year's report, he is superintendent of the Southern Pacific's wood preserving plant. "Would like to get in touch with any Idahoans who get down into Texas."

DANIELS, K. M., '33. Kenneth was last heard of as district ranger on the Long Valley District of the Cascade National Forest.

DAVIS, BRENNAN RIGGS, '35. We believe him to be a junior forester at Camp Jackson, Jackson, Ohio.

DAVIS, ROBERT, '28. Since we have not heard from Robert for at least two years we cannot offer much information regarding his whereabouts. The last address we had was U.S.F.S., Ogden, Utah.

DECKER, ARLIE D., '13, M.F., Yale, '17. Arlie may be reached at 1223 Third St. Lewiston, Idaho, where he is Western Manager for the Weyerhauser Pole Co. Arlie was found selling poles at Bryce Canyon in Southern Utah.

DIERKEN, RICHARD H., '37. We have received no word from Richard this year.

DITTMAN, CLARENCE P., '31. So far as we know he is located with the Lake States Forest Experiment Station, University Farm, St. Paul, Minn.

DOUGLAS, JOHN, '37, Camp F-1, Mystic, S.D. We have no further information of John.

DRISSEN, JOHN P., '21. John was last heard of as Forest Supervisor, Fort Hall Indian Reservation, Fort Hall, Idaho.

EASTMAN, VIRGIL H., '31 Present address 601 North 6th Ave., Sandpoint, Idaho. His present title is district forest ranger, and his duties are general administrative work. He is the proud father of a daughter, age five years.

EDWARDS, Milton Bromely, '35. Milton was last reported as a junior forester at Camp Sawyer, U.S.F.S., Winter, Wisconsin.

ELLIS, F. GORDON, '28. We haven't heard from "Fran" for three years.

ENSIGN, WARREN W., '33, Warland, Montana. He is district forest ranger of the Warland District, detailed to timber management, Forest Service, Missoula, from Dec. 1, to Feb. 15. He is now helping work up data on a saw mill study made at J. Neil's Mill, Libby, Mont. The results are to be used in making the appraisal on this year's timber sale on Kootenai National Forest.

FAVRE, C. E., '14, M.S.(For.) '14, 2545 Brinker Ave., Ogden, Utah. At present, is Grazing Inspectory U.S.F.S. He has been married since 1919, and has one daughter Christine, age 17.

FARMER, LOWELL J., '30, M.S.(For.), '31. He is doing insect control work in Ponderosa Pine (Black Hills Beetle) on the Powell National Forest. Hobby—"taking poor pictures and reading about insects." Title—junior entomologist. (The above information was received last year.)

FARRELL, J. W., '22, U.S.F.S., Ogden, Utah. Jim is assistant to assistant regional forester of the Intermountain Region. He has a son, Bob, who will probably follow in Dad's footsteps.

FENN, LLOYD ALFRED, '11. The last address we had of Mr. Fenn was Kooskia, Idaho.

FICKE, HERMAN, '31, 816 Breckenridge Ave., Helena, Montana, district forest ranger, Helena National Forest. Herman was married in '35.

FICKES, EARL MAURICE, '35. We haven't heard from Earl since his graduation. The last address was U.S.F.S., Rapid River, Mich.

FIELD, WALTER D., '26, Headquarters, Idaho, logging engineer for Potlatch Forests, Inc. His work consists of general land surveying and railroad surveying together with timber estimating and truck road location. He was married in 1936, and has a baby daughter born Nov. 17, 1937.

FIFIELD, CHARLES E., '32, Wapiti, Wyoming. He was transferred from the Shelterbelt Project, July, 1936, to Medicine Bow Forest at Douglas, Wyoming and then in November, 1936, to Wapiti as ranger. Charles writes of the devastation of the Blackwater fire last summer. His duties include all the normal activities of a ranger with emphasis on recreation and game management. He sends greetings from Wapiti Ranger Station, the oldest in the U. S. "The 'Idaho Forester' is anxiously awaited each year." Thanks for the encouragement, Chuck.

FISHER, GEORGE M., '33. George is district ranger, Anaconda District, Deerlodge National

Forest, with headquarters at Anaconda, Mont. He is the proud father of a year-old future forester—name Earl.

FORE, ORLANDO, '36, 857 N. Hays, Pocatello, Idaho. We did not hear from Orlando this year. Indirectly we heard he was working in Pocatello. The second semester of last year found him here doing graduate work.

FOX, CHARLES E., '28, Leadville, Colorado, district forest ranger, Leadville District, Cochetopa National Forest. "I believe this is the highest ranger district in the United States Due to the elevation, timber is small and sales are relatively unimportant. There is a good deal of grazing, mostly sheep. Lee Frost is on the next district north, on the Holy Cross Forest.

FRAYER, HUME C., '33, 114 Connecticut Avenue, Warren, Pennsylvania. He is now J. F. Staff Asst. in Education and Information, Allegheny National Forest. Has been connected with Allegheny National Forest since leaving Idaho. Enjoyed making the asquaintance of Dean Jeffers at Syracuse, N.Y., in December, where he also renewed acquaintance with Chuck Wellner, Bill Gaffney, and Hugo Kraemer. He married Elizabeth Mitchell of Warren, in 1935.

FREDERIC, JACK L., '34. As we haven't heard from Jack for over thre years, any report we might make would be inaccurate. His home address is 306 Garden Avenue, Coeur d'Alene, Idaho.

FREESE, HEFBERT J., '35. Our latest information shows Herb to be a junior forester on the Boise National Forest, working on a timber survey.

FRITCHMAN, HOLT, '31., Cascade, Idaho. "Fritz" is District Forest Ranger, Payette National Forest. He has been married since March '34.

GAFFNEY, WILLIAM S., '34. Present address is 18 Bradley Pt., West Haven, Connecticut. After June 1, Kalispell, Mont. Is on leave now taking M.F. degree at Yale. Major: forest management. Thesis: Winter Elk Browsing. "My district is entirely within the South Fork Primitive Area. An interesting feature is that all our men, supplies, and equipment are shipped in by airplane, making in 45 minutes a trip that ordinarily requires from two to three days by pack string. Biggest problem right now, outside of fire, is the management of a herd of 2600 elk, which have eaten themselves out of a winter range. Also have a lot of bear, both black and grizzlies."

GALBRAITH, MARLIN C., '37, Thorton, Idaho. From what we can learn Marlin is now at home and at present unemployed.

GARIN, GEORGE I., '29, M.S.(For.), '30. George may be contacted at Flathead Agency, Dixon, Montana, where he is senior project manager, C.C.C. He has two children, ages one and three.

GENAUX, CHARLES M., M.S.(For.), '29. Last year Charles was with the Dept. of Forestry, Iowa State College, Ames, Iowa, as Forest Mensuration Professor.

GERRARD, PAUL H., '23, U.S.F.S., Franklin, N. C. Paul is now forest supervisor of the Nantahala National Forest, where he has been for the past two years.

GILL, TYLER S., '31. We believe he is ranger on the Chequamagon National Forest, Park Falls, Wisconsin.

GILLHAM, NORMAN F., '26, Reno, Nevada. Our last word from Norman found him with the U.S. Biological Survey, acting junior District agent in Reno.

GODDEN, FLOYD W., '27, Salmon, Idaho, forest supervisor of the Salmon National Forest. Floyd has a family of three children.

GOENNE, FRED W., '36. Fred is working as clerk for Potlatch Forests, Inc., at Headquarters, Idaho.

GOULD, VIRGIL A., '37, Harvard Forest, Petersham, Massachusetts. Permanent address, Buhl, Idaho. Expects to receive a M.F. degree from Harvard University this spring. He is dividing his time studying wild life, and bragging about the west—where trees are trees. To the question as to whether or not he is married, the answer is an emphatic "No."

GRECO, VERNE, '37, Burley, Idaho. Verne was range inspector on R-4 last summer but is now occupied in making a forage estimate and game count of the elk and deer in Nez Perce National Forest. Still unmarried.

GREENE, EDWIN G., '27, Moscow, Idaho. "Long" is still operating the old stand at the Valet Press Shop.

GREGORY, C. A., '28. Last news we have, places him in the Mesaba District, Superior National Forest, as district ranger, Isabella, Minnesota.

GROOM, JACK I., '35, Unity, Ore. Jack is District Forest Ranger, and has been married since the spring of 1936 to Ruby Case of Weston, Ore.

GROVES, BRUCE V., '37, is working in the Helena National Forest, Helena, Montana at fire control planning and as principal forest guard. He is making an analysis of man-caused

fires as the basis for a fire prevention plan. Bruce writes that the supervisor's office is often a scene of turmoil, what with sheep herders, cattlemen, and sportsmen's associations all fighting for next year's blade of grass and drop of rain.

GUERNSEY, WILLIAM G., '29, Couer d'Alene, Idaho, Assistant Supervisor, Coeur d'Alene National Forest. He writes that the college B.S. degree in forestry is just a start. "The national forests offer a large field for cooperative effort and study in land management. It is possible for one to become either a specialist or develop in the administrative branch of the service. While most of use are interested in the various phases of our work, the administrative side is our natural bent."

HAMM, HARLEY, '36, U.S.F.S., Winona, Mo. Harley sends us no details about himself except that he is not married. He is a junior forester.

HARLAN, PAUL M., '25. Our last address of Paul was 1329 Clay Street, San Francisco, California.

HARRIS, Thomas H., M.S.(For.), '30. 610 Syndicate Bldg., Oakland, Calif. He is still engaged in blister rust control work in the Sugar Pine Region of California Ribes eradication. He is associate forester, Blister Rust Control. He has been married since 1932 to Sarah Keene of Spokane, Wash., and is the proud father of Mellisa, age 4, and Perry, age 11 months.

HATCH, A. B., '28, Yale forest school 1928-29.; M.F.; Royal Academy of Forestry, Sweden, 1929-30; Harvard University 1931-35, Ph.D. biology. Dr. Hatch has been married since 1929, and is the father of three children. He adds that he met Cary Bennet '29, who is now Asst. Regional Biologist, U.S. Biological Survey, Denver, Colo. Dr. Hatch is now assistant professor in the Idaho forestry school.

HAYES, G. LLOYD, '34, Northern Rocky Mt. Forest and Range Experiment Station, Missoula, Mont. Lloyd is assistant forester engaged in fire research work, also acting superintendent of Priest River Experimental Forest. He is still unmarried.

HAYS, JOHN F., '36. We have not heard from John for the past two years. The last address was Forest Experiment Station, Priest River, Idaho.

HAGEDORN, CHESTER, '37, Route 1, Buhl, Idaho. For the past winter Chester has been engaged in the Selway game study.

HAMPF, FREDERICK E., '37. Fred is another of last year's graduates that we have not heard from. The only address we have of him is 348 Hanza Ave., Garfield, New Jersey.

HEGGIE, TRACY L., '27. Through the cooperation of Mr. Liter E. Spence we have learned that Tracy is with the Soil Conservation Service, in charge of range management on the Navajo Indian Reservation.

HEPHER, WILLIAM S., '31, M.S.(For.), '32. Address your letters to Boswell, B.C., and hope for the best. We haven't heard from Bill.

HERMAN, CHARLES HENRY, '13. He is located at 631 West Jackson, Medford, Oregon, where he is General superintendent of the Timber Products Company. Has been married since 1917, and has a daughter, Lois, age 18, and a son, Charles Henry, Jr., age 13.

HIGGINSON, L. CYRIL, '37, 1220 Cleveland Blvd., Caldwell, Idaho. Cyril was with the Forest Service last summer.

HILL, EDWARD., '31. Write to Ed care of U.S.F.S., Painter, Wyo., via Cody. He is senior forest ranger in charge of Clark's Fork Ranger District, Shoshone National Forest. His wife will be remembered as the former Louise Riddle of Moscow, Idaho. They have two children.

HJORT, GEORGE VINCENT, '31. No word has been received from George for some time. His last address was Burley, Idaho.

HOCKADAY, JAMES M., '31, May, Idaho. Jim is now District Forest Ranger at May. He was married in 1932.

HOFFMAN, HENRY C., '26, M.S. (Yale) '28, Paris, Idaho. U.S.F.S. Says things are just a little dead around Paris, but with the summer months coming he hopes to be plenty busy. We'd like to know more about "Hank's" work, but he won't talk much.

HOPKINS, JESSE K., '33. Last address was 36 Bengal Terr., Rochester, New York. "Pete" has vanished and we're wondering if some female didn't have a hand in it.—How about it Pete?

HULTMAN, ANDERS G., '35. We have re-received no word from "Teabone" this year. His last address was Camp F-20, Cassville, Missouri.

HUME, JOHN F. '31. He is still with the National Park Service, State Park Division, as Technical Foreman, Forestry, Chatcolet, Idaho. Rex Wendle is Project Supervisor and Jack Dodd is Forestry Inspector there. John now has a daughter six months old.

JACKSON, TOM B., '19, Logging Supt., Crown Willamette Paper Co., Seaside Oregon. He is raising two future foresters.

JAY, JAMES WILBUR, '34. The last we heard he was Assistant Superintendent of the U. S. Forest Nursery in Manistique, Michigan. Jim must be too busy with his work to give us any of his personal life.

JAMES, CORLAND L. '33, is employed as a junior forester in the Kaniksu National Forest, Sandpoint, Idaho. His duties consist of timber sales and stand improvement. He is married but has no children.

JEMMISON, GEORGE M., '31; M.F., Yale, '36. Associate forester, in charge of fire research, at the Appalachian Forest Experiment Sta., Asheville, N.C. "Idaho foresters are scarce in the Appalachian Mts." He sees A. R. Cochran, Asst. Supervisor of the Jefferson National Forest in Virginia, occasionally.

JENSEN, RALPH, '35, Junior Range Examiner, La Sal National Forest of Moab, Utah, Box 52. Took graduate course at Brigham Young University, Ogden, Utah, in winter of 1936-37. Not married, but still looking for the inclination. He would like to know what has happened to the Dean Miller Memorial, and thinks the Alumni Association support is low at U. of I.

JEPPESEN, MARVIN S., '31, Forest Ranger, Austin, Nevada. The lucky girl hasn't crossed any of his many paths; so he is still single.

JOHNSON, ROBERT B., '32. Bob is now Assistant Forest Supervisor of the Challis National Forest at Challis, Idaho. From April 1, 1937 to January 31, 1938, he was in charge of A.A.A. Range Survey work in Region Four.

JOHNSON, ROBERT H. '37, Graduate Assistant in Wildlife Conservation, Division of Wild life Research, University of Maine, Orono, Maine. He is now working for his Master's Degree in Wildlife Conservation. "Doing some work on the life history and management of the Raccoon in Maine, along with some distribution studies on the snowshoe hare. 'Burning the midnight oil' takes up most of my time. Future—more studying for two years."

JOHNSTON, ROYAL H., '27. No word from Royal this year. He was with the Potlatch Forests, Inc., last year and we suppose he is still there.

KEENE, W. L., '29, Russelville, Arkansas, where he is Technical Assistant for the Forest Service. We haven't heard from Ed for some time.

KEMP, PAUL D., '29, Associate Forest Economist, in charge of inventory phase of forestry survey of Northern Rock Mt. Region. He is married and has one boy, Daniel, one year old.

KENNEDY, FRED H., '29, Assistant Forest Supervisor, Lewis and Clark National Forest, Great Falls, Montana. He reports that the Dean's letters to ex-Idahoans are greatly appreciated. "The drought we have been experiencing

is certainly testing our skill and knowledge in range management. In addition, eastern Montana Forests are taking on the 'ear marks of fire forests', and this has added to our load. All in all we are very busy." He sends his regards to "Doc" Gail.

KRAEMER, J. HUGO, '34; M.F., Harvard University '35. Instructor in Forestry, Dept. of Forestry, Michigan State College, East Lansing, Michigan. He is Assistant, teaching in advanced mensuration and silviculture and is also teaching a forest management course.

KRUEGER, OTTO F., '29, Fire Chief and Grazing Assistant, Klamath Indian Reservation, Klamath Agency, Oregon. "Work consists of handling the fire protection and grazing of cattle and sheep on the Klamath Indian Reservation consisting of 1,000,000 acres of land." He is married and has a boy and girl.

KRUMMES, WILLIAM T., '30, Associate Refuge Manager, U.S. Biological Survey, Albuquerque, N. Mexico. He was married in '32.

LADLE, JOSEPH W., '37. We have had no word from Joe since graduation. His last address was 53 Wilber St., Malden, Mass.

LANGER, CHARLES J., '30, District Forest Ranger, U.S.F.S., Stanley, Idaho, on the Challis National Forest. "Sheep and the weather vie for honors and the fact that the sheep are out of here in the winter makes it a standoff. My duties are regular routine of which you have read thousands. Sheep, cattle, camp grounds, fire, and whatever else comes along that needs attention, special or otherwise. . . . Had seven fires last summer with a total burned acreage of less than ¾ acre. Pretty lucky."

LANDSON, WILLIAM H., '27, Box 511, Athens, Tennessee. Ass't Erosion Engineer, Tennessee Valley Authority. "Plannig and supervising engineering phase of erosion control work on federal and private land including badly eroded farm lands and water disposal systems on terraced lands."

LE BARRON, RUSSELL K., '31. His last address was Box 248, Ely, Minnesota, Last year Russell was with the Lake States Forest Experiment Station at Ely.

LEHRBAS, MARK M., '27, Silviculturist, Southern Forest Experiment Station, (Forest Survey), New Orleans, La. He says these New Orleans "Mandi Gras" are quite the thing. "Polly" is still single.

LINDSAY, CLIVE J., '31, Hazelton, Idaho. The last we heard he was manager of the Hazelton Bean Growers' Corporation Warehouse. He has a big part in seeing the Army and Navy are well fed.

LORD, PHILLIP B., '33. Not heard from this year. Last year he was at Lakeshore, California as a District Ranger on the High Sierra District of the Sierra National Forest.

LOWNIK, EDWARD CHESTER, '36. Edward was last heard of working for the Crown Willamette Paper Mill at Camas, Wisconsin.

LUNDSTROM, F. J., '11. Last address, 1613 North Harvard Blvd., Los Angeles, California where he was resident engineer, L. A. County Road Department.

LYONS, RAYMOND D., '35, Technical Foreman at Camp Irons, Irons, Michigan. He visited Dean McArdle in Ft. Collins Dec. 14, 1937. He reports a new boy in the McArdle home. "Henry 'Mac' McCormick is at Rosscommon, Michigan—a proud parent of Michael Henry, born in October I believe."

MAKARA, FRANK, '——, No word from Frank this year. He has completed his Ph.D. work at Columbia in the Department of Chemistry. We hope he has found a desirable position by this time.

MALHOTRA, DES RAH, '25. Was last reported as Assistant Conservator of Forestry, State of Dashmire, Jammu, Dashmire State, India.

MALMSTEM, HARRY E., '17, Assistant Professor of Forestry, University of California, teaching fire protection and range management. Did not hear from him this year.

MARSHALL, MARVIN M., '37, 102 Main St. Bonne Terre, Mo. He would like to hear from some of the gang. At present he is unemployed.

He says he has a "sweet little thing" under control and she sure can cook those Missouri biscuits (even better than Mom).

MARCH, MAURICE W., '37, Junior Range Examiner, Intermountain Forest & Range Experiment Station, Ogden, Utah. "Scoop" is assisting in erosion and revegetation research. He is married and says his two and a half year old boy can whip "Phil" Lord blindfolded. He spends the summer in Idaho on field work and winters in Utah on analysis.

MARCH, RICHARD M., '37. We have received no word from Richard since graduation.

MATTHEWS, FRED W., '37, 218 W. 6th South, St. Anthony, Idaho. At present Fred is a grocery clerk in his home town. He is now a married man, being married to Gladys J. Smith of Nampa, Idaho last December. "Expect to work for the Targhee Forest next summer, pending a possible J.F. appointment." We are glad to hear you are returning next fall for a Master's degree, Fred.

MAUL, DAVID C., '37. Dave is working at the Deerlodge National Forest, Butte, Montana. He is planning on taking graduate work at the University of Michigan.

McKEEVER, DONALD G., '36. Don is back again working toward a Master's degree which he will receive in June. He is working under Dr. Martell, but in conjunction with the Soil Conservation Service. Don was married last year to Miss Mary Curtis.

McKEE, BILL E., '37, 508 W. First, Moscow, Idaho. Bill is now Draftsman for the A.A.A. here in Moscow.

McCormick, Henry F., '35, Junior Forester, Eldorado Camp, Huron National Forest, Roscommon, Michigan. Henry has been doing statistical work and various types of forest surveys on the Huron. "Saw Art Sowder in D.C. last Christmas and he seems very happy in his present position. Doesn't have that worried look he used to have when pushing us fellows through a course in mensuration." Henry is married and the first edition is Michael Henry, born October 7, 1937.

McLAUGHLIN, ROBERT P., '25; M.F., Yale, '26; Ph.D., Yale '32, 628 Canyon Road, Logan, Utah. He is associate professor of forestry, Utah State Agricultural College, Logan, Utah. Bob says Idaho foresters had better get on their toes or the Utah boys will be taking jobs from under their noses.

McNAIR, J., M.S.(For.), '34. Last address was Longview, Washington, where he was established with the Weyerhauser Corporation doing work toward making a better grade of paper for less money.

MELICK, HARVEY ALLEN, '23. We have received no word from Harvey for sometime. Last address was Nampa, Idaho.

MILLER, DOUGLAS R., M.S.(For.) '32, Associate Forester, Eldorado National Forest, 610 Syndicate Bldg. Oakland, Calif. He is in charge of blister rust activities. He is married and has a daughter and son.

MILLER, WILLIAM BYRON, '32. Last year he was Associate Range Examiner, U. S. Biological Survey. His home was in Stevenson, Washington and from last reports he has had no increase in the family.

MITCHELL, WILLIAM W., '28, Junior Forester, 1739 Eye St., N. W., Washington, D.C. He is working for LL.B. degree at George Washington U. He thinks the Idaho Forester has improved over previous years. (Thanks Bill.)

MORGANROTH, EARL S., '32, Assistant Forester in charge of Forest Management on the Boise National Forest. His work on the Boise Forest has been exteremely interesting, as it has consisted of different phases of forestry. He is married and has two daughters who will be looking for suitors of the forestry classes of '52 and '55. (Too bad you modern foresters.)

MOSS, VIRGIL D., '32, M.S.(For.), '33. No word from Virgil this year. Address last year was 618 Realty Bldge., Spokane, Washington, where he was Assistant Pathologist, Blister Rust Control.

MUNSON, OSCAR C., '21, Supervising Wire Chief, The Pacific Telegraph and Telephone Co., 603 So. 8th St., San Jose, Calif. His work is interesting, and anyone wishing to know a few of the highlights on modern telephone equipment would be enlightened through a conversation with him. "We have approximately 27,000 phones in service in San Jose and 5 smaller towns."

MUNTHE, BERT P., '35. Last report was that he was at Camp Vinton, McArthur, Ohio. Bert was a Junior Forester and semed to enjoy his work.

NADEAU, LEON R., '37, Ogden, Utah, % Forest Service. Leon is Assistant to Technician, Research Bureau of Agricultural Economics Coop. Forest Service. "Unless a permanent appointment is forth coming elsewhere, I likely will be transferred from the office here to field work in Nevada about April 1. At any rate, I am still

working and have hopes of continuing so for some time." Leon was married last January to Iona Charters of Garden Valley, Idaho.

NELSON, HARVEY F., '36. Harvey is now logging for the Diamond Match Co. at Cusick, Washington.

NELSON, NORMAN T., '37. We hear "Tal" is with the Forest Service working out of Portland, Oregon, doing range survey work.

NERO, EDWARD T., '23, 1307 Washington St., Boise, Idaho. Ed is superintendent at plant "C", Boise-Payette Co. He says he is interested in developing sawmills at the stump.

NETTLETON, H. I., M.S.(For.), '28, Central Agency, Arizona. The last we heard, Harry was Assistant Director of Land Management, Navajo Indian Reservation.

NEWCOMB, LAWRENCE S., '34, Box 40, Montgomery, Alabama. Larry is working as Assistant Forester in the Alabama National Forest. His official title is Assistant Forester. "Under presnt conditions the future is very uncertain."

NEWCOMBER, FRED R., Halsey, Nebraska. We haven't heard from Fred for a year. At that time he was Senior Forest Ranger on the Bessey District of the Nebraska National Forest.

OLIVER, JACK, '37, U.S.F.S., Grangeville, Idaho. Jack is working on the Selway Game Preserve on the winter elk range study. "I would say the field is overcrowded both in Industry and Government work. I have spent Nov. and Dec. looking over the job situation on the coast and the aspect is not too good."

OLSEN, CLARENCE C., '26. We regret to inform you that Mr. Olsen passed away at his home in Enterprise, Ore. on January 1, 1938. At the time of his sudden death, due to cerebral hemorrage, he was Assistant Forest Supervisor of the Wallawa National Forest. During his senior year Mr. Olsen was president of the Associated Foresters and editor of the Idaho Forester.

OLSON, OSCAR A., JR., Ex-'27. Last address was 120 Wall Street, New York, N.Y. He was handling sugar sales to manufactures and others.

OPIE, ROBERT S., '34: M.S.(For.) '37, 128 N. Higgins, Missoula, Montana. So far as we can learn Robert is with the Forest Service. He was with us here last year doing graduate work, receiving his Masters degree last June.

OTTER, FLOYD, '29, M.F., University of Michigan '33. Last address, Soil Conservation Service, Spokane, Washington. Floyd has spent a few years as a member of our school of forestry faculty.

PARKER, JOHN W., '34, Cascade, Idaho. We haven't heard from John for two years. At that time he was Forest Ranger on the Thunder Mt. District of the Payette National Forest.

PARKS, HOMER W., '37, Boise, Idaho, % Camp F175, Alexandrew Flats. Bill is foreman of Forest Service Camp 175.

PARSONS, Russell M., '24, 406 Ninth St., Coeur d'Alene, Idaho. Russell is Senior Resident Engineer, Bureau of Highways. He has two children.

PATRIE, CARTHAN RAY, '21. Have not heard from Carthan for some time. Last address 424 Federal Bldg., Spokane, Washington. He was then with the U. S. Indian Service.

PECHANEC, JOSEPH F., '32, Forest Service, Ogden, Utah. Joe is Associate Forest Ecologist, Spring-fall range investigations. At present he is working at Iowa State College studying statistics. He is still a bachelor.

PHELPS, EUGENE VINCENT, '27. Last address 735. Clarence Ave., Oak Park, Ill. No word from him this year.

PIERSON, ROYALE K., M.S.(For.), '33, school of forestry, Moscow, Idaho. Pierson is Extension Forester for the state of Idaho.

PIKE, GALEN K., '27. No word from Galen for the past two years.

PLUNGUIAN, MARK, '31. Last address Mead Corp., Chillicothe, Ohio.

PORTER, DONALD B. '36. Potlatch Forests, Inc., Lewiston, Idaho. Don is now employed at the Lewiston mill.

PUGH, L. R., '26, Springston, Idaho. Sales manager for the Russell and Pugh Lumber Company.

QUESNELL, CLINTON, '36, Lemhi, Idaho. The last we heard, Clinton was working as J. F. on the Salmon National Forest.

REDMAN, E. E., '34, Philipsburg, Montana. District Forest Ranger, Deerlodge National Forest. "Just the usual 1001 jobs found on a district. George Fisher is my neighbor just over the hill at Anaconda." Mr. Redman is married and has a girl.

RICHARDSON, KENNETH FRED, '37. About all the information we have on Kenneth is that he is with the Soil Conservation Service. We heard he was working out of Dayton, Washington.

RENSHAW, E. W., '25. Last address was U.S.FS., Cleveland, Tennessee.

RETTIG, E. C., '19, 1309-8th Ave., Lewiston, Idaho. Rettig is Land Agent and Forester for the Potlatch Forests Inc. He is also secretary of North Idaho Forestry Association.

RICHARDS, HOD, '32, Route 2, Box 275, Bend, Oregon. Hod is yard foreman for Brooks-Scanlon Lumber Co. He also has a 20 acre farm 2 miles out of Bend.

RICHELSON, PAUL N., '37, Burgoyne Hotel, Montpelier, Idaho. Paul is Hotel Clerk at the Burgoyne.

ROBERTS, EARL C., '36, Montepelier, Idaho. Earl is Junior Range Examiner, for the past year acting as District Forest Ranger on the Montpelier District of the Caribou Forest. He has three children.

ROBERTSON, GARNET A., '36, U.S.F.S., Lapwai, Idaho. Garnet is in the Facilitation Personnel. He is teaching Indians how to cruise timber and draw contour maps.

ROWE, PERCY B., '28, M.F., Yale '30, California Forest and Range Experiment Station, Berkeley, California. The last we heard he was Associate Silivculturist in charge of watercycle and soil studies.

SAJOR, VALENTIN, '26; M.F., Yale, '27, Forest Station, Cagayan, Oriental Misamis, Philippines, Forester in charge Grazing Survey Party and District Forester, Forest District No. XIII, Cagayan, Or. Misamis. He now has four children.

SALING, WALLACE M., '28, District Forest Ranger Sawtooth National Forest, Soldier Mt. District, Hailey, Idaho. "Smoky" was transferred from the Minidoka Forest April 1937.

SARGEANT, HOWARD J., '30, Camas Refuge, Hamer, Idaho, "Sarg" is Assistant Refuge Manager in charge Camas Migratory Waterfowl Refuge at Camas. The work is enough to keep him busy, but he still has a few spare moments to enjoy a happy homelife.

SCHOFIELD, WILLIAM R., '16, 2728 Ohio St., Sacramento, Calif. Bill hasn't let out any information about himself for some time.

SCHULTZ, FREDERIC J., Ranger Course '23 & '24. Box 13, Vail, Wash., Weyerhauser Timber Co. He is both Conk Inspector and Safety Inspector. "Jerry is not too sure of what the future holds for himself."

SCHUMAKER, FRANKLIN O., '31, 2011 Hill Ave., Alexandria, Louisiana. Frank is working on land acquisition according to the last report from him.

SCRIBNER, C. H., Ranger Course, '24. He is a Ranger, Calden District, St. Joe National Forest. Address is St. Maries, Idaho. Scribner hasn't given us any real low-down on himself for a year or two.

SHANER, FRED K., Ranger Course, '24. From last report he was District Ranger at Kooskia, Idaho, in the Nez Perce Forest.

SHANK, PAUL J., '31, Senior Ranger on the Big Springs District, Island Park, Idaho. Paul is now the father of two boys and one girl. We're still looking for the ice cream.

SHARP, A. G., '——. Last year Sharp was with the Spruce Falls Power and Paper Co., as control engineer making newsprint and sulphate pulp. We did not hear from him this year.

SHAW, WILLIAM HOWARD, '36. His last address was U.S.F.S., McCall, Idaho. We are quite sure he has gone from there, however.

SILVERBERG, SAVEL B., '36, 1411 Chelmsford St., St. Paul, Minnesota. He is working toward his Master's degree in Wood Technology (major) and Forest Pathology (minor) at the University of Minnesota. Good luck to you Sam.

SMITH, RUSSELL E., '36, Box 357, Emmett, Idaho. "Russ" is Junior Range Examiner with the Soil Conservation Service. He has had charge of the field work and office compilation. Santa brought him a wife for Xmas this past December.—What will he bring next Xmas; who knows?

SNOW, E. A., '25. He was last heard of as Forest Supervisor on the Harney National Forest, Custer, South Dakota. We know the Pony Express isn't running anymore so lets have a letter, Snow.

SOWDER, ARTHUR M., '25; M.S.(For.), '27, M.F. Yale, '35. His present address is 4917 First St. N. W. No. 1, Washington, D.C. He is working on requirements phase of forest survey. "Attending night school at American University, Washington since leaving our school of forestry in 1936."

SOWDER, JAMES E., Klamath Agency, Oregon. The last report from Jim told us he was working for the forestry branch of the Indian Service on the Klamath.

SPACE, J. W., '27. Last heard of in Glorieta, New Mexico as Senior Ranger on the Santa Fe National Forest.

SPACE, RALPH S., '25. Ralph is the Assistant to the Assistant Regional Forester in the Division of Recreation and Lands, Forest Service, Missoula, Montana. He was married last fall to a W.S.C. girl. We know definitely that the feud between the two schools is over. Are we right, Ralph?

SPENCE, LITER E., '28; M.S.(For.), Univ. of California, '30, Standard Oil Bldg., Washington, D.C., Range Examiner, U. S. Soil Conserva-

tion service. We are glad to hear of your promotion to a better job in Washington, D.C. We appreciate your criticisms as it will go to make next years book a better issue.

STANLEY, WILFRED B., '30, E-12-27th Ave., Spokane, Washington, Equitable Life Insurance Society Agent. He is now the father of a boy and a girl.

STAPLES, H. W., '20, Moscow, Idaho. Howard is working for the First National Bank in Moscow.

STEVENS, COURTENAY E., '37. He is now attending O.S.C. working on his Master's degree in Forestry.

STILLINGER, C. ROY, Special '19, 618 Realty Bldg., Spokane, Washington. Roy is with the Blister Rust Control and sees where a lot of improvement has been done in that line.

STILLWELL, Clarence E., '34. Last address U.S.F.S., Hamilton, Montana. Last year he was working under a technician appointment in Region 1.

STOUFFER, DAVID J., M.S.(For.), '32, Forest Service, Flagstaff, Arizona. He is Assistant Ranger, Flagstaff District, on the Coconino National Forest, working as a Junior Forester. David was married last fall to Mirian Clifford of Safford, Arizona.

STOWASSER, CLARENCE E., '30. Last address Route 1, Coeur d'Alene, Idaho.

STYFFE, HOBART H., '37, Port Arthur, Canada, Assistant, doing field work for his father's pulp and paper plant, Oscar Styffe, Ltd.

SWAYNE, ALLEN P., '32, Halfway Camp F-1, Ely, Minnesota. Our last letter from "Al" informed us that he was to do some experimental work on the Superior Branch of the Lake States Forest Experiment Station.

TAYLOR, CYPRIAN D. N., '32. Last address Route 1, Nelson, British Columbia, Canada.

TEED, RYLE, '13. No word has been heard from Ryle this year. His last address was Box 60, Vancouver, Wash, where he was with Forrest Service on the Columbia National Forest.

TIPPETS, VAUGHN E., '36, St. Anthony, Idaho. Vaughn is still a Junior Forester on the Targhee National Forest.

TOOLE, ARLIE W., '27, 4062 N. Stowell Ave., Milwaukee, Wis. Arlie is working in the Division of State and Private Foresty, Region 9, as Forester. "At present on a short detail to the Washington Office.

TOWNS, W. L., '34, 227 Federal Office Building, Des Moines, Iowa. He is Assistant Land Valuation Engineer, Division of Land Acquisition, Bureau of Biological Survey. Bill is the father of a son and daughter.

TURNER, GEORGE T., '36, Botany Dept., New York State College, Syracuse, N.Y., George will receive his M.S. degree in June. "I plan to go West in June to seek a fortune." He's still single, too.

UNDERWOOD, VERNON L., '37. No news from Vernon this year. Drop us a line sometime Vernon, we'd like to hear from you. His home address is Myrtle, Idaho.

WADSWORTH, HERBERT A., '10, Fort Thomas, Kentucky. Wadsworth is Lieut. Col., 10th Infantry. Since leaving the University of Idaho, he has attended the Infantry School, 1923-24; Command and General Staff School, 1924-25; the Tank School, 1931-32.

WALRATH, F. J., '27, 610 N. W. Eubanks, Oklahoma City, Okla. He is administrative assistant to Oklahoma State Forester, supervising camps and constructing fire lookout towers, telephone lines, truck trails, and other fire protection improvements.

WARD, WALT, '37, U.S.F.S., Coeur d'Alene, Idaho. Walt is in the office doing drafting work. We have had a few visits from Walt this year.

WELLNER, CHARLES A., '33, Northern Rocky Mountain Forest and Range Experiment Station, Missoula, Mont. Charles is working as Junior Forester in Silvicultural Research. At the present he is on educational leave working toward his M.S. degree at Yale forest school.

WEYERMAN, GEORGE F., '37, 1112 N. 9th. St., Spokane, Washington. Indirectly we heard that George has a job in Spokane as grocery clerk. He was in Region 1 working for the Forest Service last summer. George was married last fall to Miss Ida Allen of Moscow.

WHEATON, RODGERS G., '24, M.F., Yale, '25, 47 Englewood Road, Longmeadow, Mass. Rod is still with the Line Material Co., So. Milwaukee, Wis., as salesman. He is married and has a daughter nine years old.

WHEELER, JOE B., '37, Headquarters, Idaho. Joe is working in the woods. His title is "Lumberjack" and his future ambition is to cut more logs faster and cheaper.

WHITE, HAROLD Z., '26, 1113-10th St., Lewiston, Idaho. Harold is superintendent of dry kilns for the Potlatch Forests Inc.

WIESEHUEGEL, E. G., M.S.(For.), '29, Norris, Tenn. Weise is Chief of Forest Resources Planning Division of the T.V.A. "I. C. Burroughs and Bill Lansdon also with T.V.A. Ike is my right hand man and Bill is a soil erosion doctor."

WILLIAMS, GUY VERANUS, Mountain States Tel. & Tel., Twin Falls, Idaho. No news from Guy this year.

WOODWARD, DOREN E., '30, 548 Custom House, Denver, Colo. He is supervisor, Western Area, Division of Land Acquisition, Bureau of Biological Survey. "My job is the supervision of land examination, mapping, appraisal, negotiation, survey, and where necessary, condemnation."

WRIGHT, LORAN H., '37. Loran is with the Forest Service in Alabama.

YEARSLEY, MAURICE C., '37, Menan, Idaho. Maurice has been doing game survey work on the Selway game preserve this winter along with three other last year's graduates. He was married last year to Cleo Shope, a former Idaho student.

ZIMINSKY, HENRY V., '35. The last we heard "Zim" was holding down a J. F. position on the Chippewa Forest, Cass Lake, Minn. He was to be transferred to the administration end of the forest. We don't know what he is doing now.

The New Cover Design

Probably the first thing you will notice about the 1938 Idaho Forester is the new cover design. The old design was made in 1921 by Mrs. Vernice Behre, the wife of a forestry professor. Since that time no change has been made until the present issue. The use of the Associated Forester's pin in a cover design was suggested by John Compagnoni, a senior in forest production. This idea was put on paper by Otto Baltuth, advertising manager of the Idaho Forester.

Slash disposal, following logging operations, will be studied by a group made up of three organizations this year, with the site to be selected in the Clearwater district. Cooperating are the forest practices committee of the Western Pine association, the Society of American Foresters, and the Idaho state cooperative board of forestry.

There are 32 Pres-to-log machines in operation in the West, making briquette fuel of wood waste. Fifteen of these are in Idaho; four at Everett and six at Longview, Washington; four at Scotia, California; one at Grants Pass, Oregon; and two in Sacramento, California. Another was recently shipped to South Africa.

Planning Applied to Land Use Problem

(Continued from Page 48)

as the sole solution for the problems of large areas. A more rational policy is contemplated under the Bankhead-Jones Farm Tenant Act which recognizes land purchase as an instrument which will achieve greatest effectiveness only when it is coordinated with the programs of private, county, and State agencies. For example, special consideration might be given to a proposal for public purchase of submarginal land with the objective of removing non-conforming users from zoned areas.

As far as the State of Idaho is concerned, perhaps the prime need at the present time is for the development of active cooperation in the testing and application of action programs on the part of all of the agencies concerned with the use of rural lands. The lack of efflcient instruments of social policy constitutes one of the chief obstacles to the pushing back of the boundaries of the social frontier.

It must not be inferred, however, that anything but a democratic approach to the correction of maladjustments in land use is contemplated. On the contrary, it should be definitely understood that local opinion must understand and approve the measures of social control which are proposed for the solution of local problems. Without the active support of such local opinion, no social program can be expected to be effective.

Dr. Gail Travels in Europe

Tiring of the continual grind of attempting to force general botany, plant physiology, and systematic botany into forestry students, Dr. F. W. Gail took his sabbatical leave. Sailing from New York City, on February 9, 1938, Dr. Gail expected to visit museums, botany schools, and universities in England, Germany, France, and Sweden. Following his return in the latter part of May, we will expect Dr. Gail to give us a little foreign color in his lectures next fall.

Old time wannigans, symbolic of the river drives down the Mississippi river thirty or forty years ago, are used on the Clearwater in northern Idaho. The wannigans are rafts on which tents are framed to house and feed the "river rats" during the big drive.

Last but not least we wish to thank our hard-working forestry secretary, Miss Helen Bue (Boo to you).