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Through SIX DECADES

1965 YEARBOOK

INTERMOUNTAIN REGION • FOREST SERVICE
U.S. DEPARTMENT OF AGRICULTURE • Ogden, Utah
"The Conservation of natural resources is the key to the future. It is the key to the safety and prosperity of the American people, and all the people of the world, for all time to come. The very existence of our Nation, and all the rest, depends on conserving the resources which are the foundations of its life. That is why Conservation is the greatest material question of all."
The early years of our nation's first conservation agency were challenging ones, and under the stimulating leadership of Gifford Pinchot the Forest Service began its work. In the Intermountain Region the first decades saw a small nucleus of professionally trained foresters develop an organization of Forest Supervisors and Rangers of the time who were outdoorsmen, many schooled only in the "University of Hard Knocks." But they were sincere men who knew how to do the things that had to be done in those days and at many times under hardship conditions.

As the years went by, more intensive resource management brought new professionally trained people into the Forest Service. Engineers, entomologists, range specialists, and accountants joined ranks with foresters and other specialized professionals to carry on the work with better equipment and places to live.

As 1965 closes, we look back — back over 60 years — to the start of the National Forest System in America and to those men who plowed the new ground of natural resource management. In this reporting of contrasts between then and now with some of the highlights of 1965, we hope to convey to you the Forest Service sense of pride in public service through its first six decades.
YESTERDAY: Nineteen hundred and five was a significant year in the annals of this nation's conservation history. Theodore Roosevelt was President, and early in the year Congress passed legislation which established the Forest Service as an agency of the U.S. Department of Agriculture. The millions of acres of forest and rangelands, known then as the Forest Reserves, were transferred from the Department of Interior to be administered by the Forest Service as America's National Forest System.

Forest Service people are proud of their heritage and strengthened by the tales of legendary early forest officers — rugged men who thrived on hard work and looked trouble in the eye wherever they found it. These courageous men took the early steps in conservation of forest and range resources without the benefit of experience or research that exists today.

Sixty years ago they found much that needed attention in the many million acres of land in the newly created National Forests. Trouble spots were found in the Intermountain Region where ranges were overgrazed and timber was burned on valuable watersheds. Sometimes the Ranger's work was made more difficult by prior occupancy of the land within the newly created National Forests.

Few things were in their favor, but the early men of the Forest Service, through trial and error, struggled to protect and manage National Forest resources for the good of all people. With compass and chain they posted and signed Forest boundaries and with simple tools built cabins and fire lookouts. Their "do-it-yourself" projects included corrals, fences, trails, and bridges. They strung single wire on trees for their first telephone lines. Hand tools and strong backs were about their only weapons against forest fires.

Transportation was an enormous problem to early Forest Rangers. Where rugged terrain prohibited horse use, they simply walked. It often took days of hiking through rugged back country to reach forest fires. They built their first crude roads using picks and shovels. Horsedrawn plows and slip scrapers helped them, and black powder was used in areas of rock.

As guardians of the resources, Forest Rangers first sought understanding and cooperation from all users to end illegal uses of National Forest land. Some people who had long enjoyed free use of resources were reluctant to accept the necessary restrictions. They did not always agree that controls on use of public land were in their best interest and found it hard to believe they were hurting themselves by abusing the land and its resources.

Rangers solved the homestead occupancy problem using guidelines established in 1906 by Congress. They determined suitable use of land within National Forest boundaries, and homesteading was permitted under the Act where sufficient crop land was found to support a family.

To guide the Ranger in making the National Forests useful to people, a small "Use Book" covering the few existing policies, procedures, and regulations was issued. It was the forerunner of a series of volumes on Forest Service shelves today detailing policies and management standards.

In the early decades, accomplishments of the Forest Service were mostly custodial in nature. Even so, these early pioneers recognized the need for scientific management of resources, and research was begun in the first decade.
Today's Forest Ranger, Modern technology has followed him even to remote corners of the National Forest where he is found living in a comfortable home, following an up-to-date custom of paying rent. He spends more time with management plans and resource records. He travels farther and gets there faster. He usually drives a pickup or a four-wheel-drive vehicle over roads much improved since the days of buckboards and buggies. But the schoolboy's image of a Forest Ranger astride his trusty horse need not be discarded, because horseback is still the best way to travel in some remote areas.

Today's Ranger keeps in step with the world around him. Research information provided by the Forest Service's Intermountain Forest and Range Experiment Station, university scientists and other research units helps the Ranger manage his District in harmony with the needs of a growing population. When he plants range grass, sprays infested trees, or builds fences, modern tools and materials are at his disposal. Airplanes and helicopters are used for aerial mapping, timber cruising, spraying, and road location. They transport material to back-country sites and are used to detect and suppress fires. No longer does the Forest Ranger rely on the tree-line telephone system. Modern telephone lines and new frequency modulation radio systems now connect most National Forests in the Intermountain Region.

In 1960 the Multiple Use-Sustained Yield Act gave direction from Congress on management of the National Forests. Today a basic plan guides the Ranger in managing his District and carrying out the intent of the Act. Called a multiple use management plan, it provides the checks and balances necessary for scientific land management under the multiple use concept. As the key on-the-ground administrator, the Forest Ranger consults experts in different resource management fields — from engineer to entomologist, from soil and water expert to wildlife specialist. He blends each use into the overall picture of developing and protecting National Forest resources for the benefit of all people, today and in the future.

Today's Forest Ranger is fortunate to have at his disposal better ways of ever-increasing public, a greater interest in natural resources. Office or visitor to the Intermountain Ranger Station experience. The information available about the National Forests and
Livestock on the Range

Rangelands of the Intermountain Region are treated with respect by the forest officers who manage them and most people who use them. History has taught these people the value of healthy ground cover. They know that the green carpets spreading across National Forest land touch the life of every person.

Verdant ranges add to the beauty of National Forests and are enjoyed by recreationists and tourists. People living in the valleys look to grassy hillsides for their water supply and for security from floods and slides. Sportsmen see the mountain forage as wildlife habitat and a source of clean water for their fishing streams. Stockmen can see the obvious fact that rangelands in good condition are a source of food for their cattle and sheep. The Forest Service has the job of balancing these uses and protecting the resources of the range for the good of everyone.

Livestock had grazed uncontrolled before the National Forests were established in 1905. In many areas what had once been tall luxuriant grass was reduced to short stubble, and edible forage was being replaced by undesirable plants. After grazing the last blades of grass in lower areas, sheep and cattle went to higher country each spring. They ate small tasty plants and gouged the wet soil with their hoofs. Sheep trailed long distances to choice grazing spots, where they stayed until forage was completely gone. Cattlemen and sheepmen sometimes fought “range wars” over resources rightfully belonging to all citizens of the country.

When National Forest boundaries were established 60 years ago, Forest Rangers inherited a problem that had no easy solution. But they worked hard to bring order to the chaos they found. They issued permits giving preference to small local operators. Rangers designated areas on allotments for each grazing applicant or community group of individual applicants. They designated seasons of grazing, built fences to prevent range trespass, and encouraged proper distribution of stock. As they gained the cooperation of ranchers, more order came to the range.

Through the years, the research programs of the Intermountain Forest and Range Experiment Station and others have produced valuable information to help manage the rangelands. By collecting scientific data they determine how much a range can be used without damaging soil and plant cover. One way Rangers use this information is in a management system called “deferred and rotation grazing.” They delay grazing each year until seed matures on portions of allotments. This assures seed production and improved plant vigor on the entire allotment over a period of years.

The range picture on the National Forests of the Intermountain Region is improving, although much remains to be done. Cooperative work between Forest Service officers, livestock people, and state game agencies has resulted in production of more and better forage. They have developed new techniques for spraying sagebrush and establishing desirable forage plants and have eliminated grazing on many vital watersheds. Some ranges which once looked hopeless have recovered so well under proper management that permitted grazing has been increased. With continued cooperation, the Forest Service looks forward to a fine future for rangelands of the Intermountain Region.
Scientific timber management has brought about a more stable supply of wood from the National Forests of the Intermountain Region in the past six decades. Timber management consists of more than merely cutting down trees and hauling them to market. It means planning access roads to prevent erosion, protecting vital watersheds and wildlife habitat, and protecting streambanks. It means planning for the total future needs of an ever-increasing population.

The timber resources of these public lands provided the raw material for early settlement of the West. They were made into crossties for the expanding network of railroads across the land; they were lumber for buildings and fuel to warm the homes. Wood contributed to the industrial growth of the West and today continues to be a major product of National Forests.
Before 1900 no timber management existed in this part of the country. Guided by Gifford Pinchot's studies of European forests, the first forest officers — some of whom were also trained in Europe — applied management principles new to this country. They put an end to uncontrolled logging and allowed only mature trees to be cut, leaving selected trees to reforest the area. Horses were used to skid logs in these partially cut areas — this practice continued until the 1930's, when they were replaced by tractors and trucks. In the following decade, powersaws replaced axes and crosscut saws (commonly called misery whips).

In recent years, management of timber lands has changed to meet the needs of people. Each "working circle" of a timber stand is managed intensively to get maximum sustained production from the area under multiple use principles. In the Intermountain Region this usually involves clearcutting designated blocks or patches and replanting the area with new seedlings. Foresters have found, generally, that trees native to this Region grow better if the entire stand is the same age. This system is modified where recreational and scenic values are of prime importance.

Research by scientists in the Intermountain Forest and Range Experiment Station, for instance, has provided valuable information by which forests and forest products are continually improved. They are searching for better and safer ways to protect forests from the insects and diseases which destroy more timber each year than is lost in fires. Research has found more efficient ways to produce forest products, utilizing material that was once considered waste. Through its continuing research program, this branch of the Forest Service has contributed much to the economy of the timber industries.
The 18 National Forests of the Intermountain Region are home for a wide variety of wildlife. Many mammals, fish, and birds live here at least part of the year; others are permanent residents. There is no simple formula by which perfect balance can be achieved between this wildlife and available food supplies, but positive signs are seen in the cooperative work done with State Fish and Game agencies and other conservation groups.

In the early days of the National Forests big game was scarce on many overgrazed ranges. To encourage the return of wildlife, game preserves were designated where hunting was prohibited, and hunting regulations were established and enforced. On some Intermountain Region National Forests, a 5-year ban was placed on hunting elk, deer, antelope, and bighorn sheep. The result of these measures was a rapid increase of big game on the mountain ranges.

Nature has her own way of balancing the books, and by the mid-twenties forest officers and state game officials noted that many deer were starving on winter ranges. Deer and elk were contributing to the overgrazing of watersheds and damaging farms and orchards adjacent to the National Forests. It
was obvious that cooperation was needed to help establish the intricate balance between wildlife and food.

Game habitat research became an integral part of big game management. Each year hunting seasons and regulations were tailored to make game population balance with the carrying capacity of the range. Much work was done to gain public support for the increased harvest necessary to maintain this balance.

Cooperation has been the keynote between State Fish and Game Departments and the Forest Service. In the early days, state agencies were undermanned, and forest officers were designated deputy wardens to assist in the enforcement of game laws. That spirit of cooperation continues today. State game officials responsible for game laws work side by side with forest officers in management of the habitat.

The Forest Service manages wildlife habitat on National Forests to blend with other uses. For example: the temporary openings left after a timber stand is clearcut provide excellent low growing shrubs and forage for a number of years; healthy watersheds produce clear streams for fish habitat; vigorous range plants insure summer grazing for domestic livestock as well as food for wildlife. And to tourists and recreationists, the beauty of wildlife in its natural environment is an extra dividend for maintaining a balance of nature.
Water has written an eloquent story across the land of the Intermountain Region. Where it finds resource harmony, water creates beauty and abundance. Where there is discord, water can be man's enemy. Where water is absent, the land and people are impoverished. For the past 60 years the National Forests of the Intermountain Region have played a major role in this continuing story.

Instructions to early Forest Rangers made it clear that the main objective of National Forests was "to insure a perpetual supply of timber and to preserve the forest cover which regulates the flow of streams. . . ." Secretary of Agriculture James Wilson's letter to Gifford Pinchot of February 1, 1905, states, "You will see to it that the water, wood, and forage . . . are conserved and wisely used. . . ." Guided by these
words, yesterday's forest officers managed and protected the National Forest resources so that today they supply water to growing industries and communities throughout the Intermountain Region.

In the early years the Forest Service was faced with a monumental task in some places where destructive floods originated on watersheds that had been ravished by fire and overgrazing. On these mountains the Intermountain Forest and Range Experiment Station pioneered in watershed restoration. A system of terracing and revegetating slopes was developed that has been used successfully on depleted watersheds in Utah, Idaho, Nevada, and Wyoming. Forest officers corrected abusive practices and closed some important watersheds to grazing and timber cutting. Many communities have sought and obtained National Forest study for the mountains above them to insure protection for vital watersheds.

Today the National Forests supply an estimated 75 percent of all water used in the Intermountain Region. While these lands are managed for multiple use and sustained yield of all resources, the Forest Ranger is careful that other uses do not harm water supplies. When planning timber sales, he takes special care to protect soil and to prevent erosion. He protects and renews ranges, stabilizes streambanks, and guards lakes, streams, and reservoirs from pollution. He plans roads and trails to prevent erosion and clogging of stream channels.

Today's citizens are well aware that the future growth, development, and prosperity of the West depend on water.
Outdoor recreation has become a way of life for most Americans, and more and more they look to their National Forests to find it. In the early years of this century, few people of the Intermountain Region welcomed an opportunity to vacation in the great outdoors. Perhaps it offered little change from their daily life. But today tourists come to the Intermountain West from every corner of the world. Some stop for only a day; others stay longer and visit often. They are rarely disappointed in this land of many contrasts where the welcome mat is always rolled out.

Each individual has a favorite kind of recreation. One may wish to spend his day fishing along the mountain streams, then “camp” in a nearby luxury motel, while another will want to leave civilization completely behind. Some families arrive with house trailers equipped with the comforts of home; and other families will come with only tents and packs — prepared to hit the back country trails for a fine wilderness experience. Many local residents travel to mountain lakes and reservoirs with boats and water skis to enjoy a warm summer afternoon. Still others live only for winter months when they find happiness in the world of snow. Multiple use forest management makes room for all of these people and many more.

Motor vehicles and improved roads have shortened the travel time to most National Forest recreation areas in the past few decades. This partly accounts for the greatly increased number of visitors. Today’s recreationist also finds more attractive facilities which a few years ago were only ideas on the drafting board. Many facilities date back to the 1930’s when they were constructed by the Civilian Conservation Corps. Most of these, long outdated, have undergone face lifting and renovation.

Forest managers today have many ways to communicate with their visitors. Popular recreation areas offer visitor information services. Here people are invited to attend lectures and movies, walk nature trails, study exhibits, and read handout material. They enjoy their National Forest vacation more because they understand and become involved with their surroundings.

The Intermountain Region has three visitor information centers. Two are on the Ashley National Forest within the Flaming Gorge Recreation Area.
The Forest Service manages one of these centers at Flaming Gorge Dam jointly with the National Park Service and Bureau of Reclamation. The third center is at Redfish Lake on the Sawtooth National Forest in Idaho. These centers interpret the geology and ecology of the area, tell a story of the history and culture of its inhabitants, and show how the National Forests are managed.

Sixty years ago the Forest Ranger had no way of knowing the major role National Forests would play in the lives of people today. He protected the resources, and people occasionally visited his District. The Forest Ranger of 1965 is concerned with the growing need for recreation on National Forests and is planning for the years ahead.
As the twentieth century began, the frequency of forest fires burning uncontrolled was one of the major spurs to establishment of the U. S. Forest Service. Prompt control of wildfire was one of the early Ranger's most important and difficult jobs. At first he had no established lookouts, and as a result forest fires became large before he could reach them on foot or horseback with the few firefighters he could recruit. With only hand tools the strenuous labor of firefighting was discouraging in those days.

Advancements in fire control were made on many fronts, and soon the numbers of big fires were reduced. Lookout stations and detection methods were improved. Well trained fire control personnel enforced high standards for making quick getaway and for insuring fires were "dead out." Better firefighting tools and methods of suppression were developed, and more and better roads and trails were constructed.

Fighting the common enemy of forest and range fires is a cooperative effort. The U. S. Weather Bureau furnishes special current weather forecasts to all fire control agencies. The Forest Service, Bureau of Land Management, National Park Service, State Forestry Departments, county officials, and private owners of timberlands pool their resources for cooperative fire control. Recognizing the need for such a joint effort, Congress makes funds available for a comprehensive state and private fire control program.

Specialists in the Intermountain Forest and Range Experiment Station contribute much to fire control. With standardized methods they determine relationships of all important atmospheric and fuel conditions to fire danger. Recently they have developed an infrared scanning device to locate and map fires from the air through haze and smoke.

The Forest Service and other agencies with fire control responsibilities inform the public of the importance of fire prevention through press, radio, and TV throughout the Intermountain Region. The Smokey Bear Program sponsored by the National Advertising Council represents millions of dollars of highly effective contributed advertising. The number of man-caused fires and acreage burned has been reduced, but the record is still far from satisfactory. Loss of resources, lives, and property by forest and range fires is still tragic and excessive.
The upswing in National Forest use and ever increasing complexities of managing, protecting, and harvesting natural resources created heavy demands for engineering services. In early years, maps that were needed were nonexistent or of poor quality. New maps were made by triangulation from high peaks climbed on foot or horseback. Built mostly by settlers, roads were low standard in the old days. As time went on, more and better roads and bridges were built, using surveying transits and professional engineering techniques. In the rough terrain of Intermountain Region National Forests, special skill has been required in designing roads to avoid causing erosion and to cope with high water from melting snow and summer floods.

Forest Service engineers today use advanced techniques and equipment. Detailed and accurate maps are drafted from aerial photographs. By use of stereoptical viewers, these photographs are also used in timber cruising, range management planning, and other forms of resource management. Roads are located and designed from maps and photographs by use of complex stereoptical plotting machines, and design data flows through electronic computers.

Forest Service buildings and other structures needed on National Forests are designed by professional architects. Private water storage dams, ski lifts, and related structures, which are built by individuals or concerns under special use permit, are reviewed by Forest Service engineers to assure adequate engineering design.

The engineering job ahead is a challenging one for the Intermountain Region. More people using and enjoying their National Forests mean more facilities to be designed adequately and safely in the public interest.
HIGHLIGHTS OF 1965

THE YEAR IN PERSPECTIVE
During the Intermountain Region's 60th year a number of events took place along with the expanding regular work programs on the 18 National Forests and the Curlew National Grassland. They are representative of the many interesting and significant highlights of 1965.

TO WORK MORE EFFICIENTLY
A thorough top-to-bottom study of the Forest Service organization was started in 1965 and will continue in 1966. Called "Position Management," it aims to critically review the entire organization structure to eliminate any possible duplication of effort and increase efficiency. This study complements President Johnson's drive for overall economy in government by making certain that the nation is receiving the most from its expenditures for National Forest administration.

Moving the Regional Office to the Federal Building was a major step toward more efficient management. Personnel moved from four buildings in downtown Ogden; finally the entire team of the Regional Office is housed under one roof. The Intermountain Forest and Range Experiment Station has been able to bring together its Ogden staff in the Forest Service Building.

New Ranger Station offices were constructed at Ketchum and Lowman, Idaho, and a new Supervisor's Office at Jackson, Wyoming. These modern buildings, conveniently located to serve the public, replace buildings constructed many years ago and no longer adequate for current needs.

To better serve forest users and the general public in southwestern Wyoming, headquarters for the Pinedale District were moved to Rock Springs,
Wyoming. The District was renamed Jim Bridger in honor of the famous mountain man. Headquarters for the Green River District remain at Pinedale.

OPPORTUNITY FOR YOUTH
The Clear Creek Conservation Center, which opened in September, was the first Job Corps facility in the Intermountain Region. The Center is located eight miles south of Carson City, Nevada, in the Toiyabe National Forest. Authorized by the Economic Opportunity Act of 1964, the Center offers education and work training opportunities to boys from 16 to 21. Young men for this 210-man Center have come from underprivileged families throughout the nation. Typical of the first corpsmen was a youngster from a large family who, when issued his new work shoes, told the camp director they were the first unused pair he had ever had.
Conservation work projects on National Forest lands of Nevada are now underway. On-the-job training, educational study, good food, and a wholesome environment offer new horizons for the corpsmen.

Youth Employment Provisions of the Economic Opportunity Act also show promise of being a rewarding effort. These provisions allow the employment of young men and women, ages 16 to 21, in nonhazardous jobs for training and educational purposes. Applicants are referred by the State Employment Security Agency on the basis of need and ability. In addition to receiving a minimum wage, these people are given work experience — for many the first regular job they have had. These young people are employed in positions such as clerks and warehouse assistants.

**MANAGING FOR WILDLIFE VALUES**

Many hunters and fishermen associate their National Forests as places to go for elusive big game or trout. The National Forests of the Intermountain Region are the private hunting and fishing preserves of all citizens. They are also the residing places for many species of birds and mammals, some of which are relatively rare. Forest Service wildlife management programs are oriented to enhance the environment of these lesser known species along with those more commonly sought by the outdoorsman.

For instance, remnant populations of sharp-tailed grouse are found in several locations in the Intermountain Region. The dwindling number of this species is a result of the agricultural activities of man. The Idaho State Fish and Game Department and the Forest Service are cooperating in a joint effort to study the sharp-tailed grouse and improve its habitat by artificial planting of chokecherry and other important food plants.

Consideration of the habitat requirements of big game is a continuing job. At this time there are 332 big game management units in the Intermountain Region. On nearly half of these herd units analysis has been completed. This process considers the habits of the herd and its habitat management needs.

**INVESTMENTS ON THE RANGE**

Gaining the most production of livestock forage from suitable rangelands is a constant objective of the Forest Service range improvement program. It is a wise investment to improve those areas which can be properly grazed without damage to the soil or vegetation. These lands, called suitable range, are determined by a careful analysis of the conditions of terrain, soil, vegetation, and other factors on each grazing allotment.

Production of more and better feed can be accomplished in a number of ways. Water storage structures such as troughs, ponds, or plastic apron rain-catchers to impound water from rain or snowfall are constructed on suitable ranges where water is needed for livestock or as an aid to management. In 1965, 227 water facilities were developed to make areas accessible and provide water for livestock use. Range fences help improve management of livestock by distributing cattle and sheep properly over suitable grazing areas. Nearly 270 miles of fences were built in 1965 for this purpose. To improve forage production, more than 47,000 acres of suitable rangeland were revegetated by seeding of palatable forage grasses or improved by chemical control of undesirable plants.
ASSURING AMERICA’S BEAUTY

Twin conventions of the American Forestry Association and the National Council of State Garden Clubs rendezvoused in Jackson Hole, Wyoming, September 3 through 8, to explore ways and means of assuring America’s beauty.

The keynote for the meetings was established September 4 when Togwotee Overlook on the Teton National Forest was dedicated as “one of America’s most beautiful places.” Regional Forester Iverson invited National Council President Lucile Mauntel to unveil with him a bronze plaque memorializing the importance of natural beauty to America.

The AFA annual meeting, themed to “America the Beautiful,” celebrated the 90th anniversary of this pioneer group in the field of forestry. “Natural Beauty: the Follow Through” guided the Garden Clubs’ special sessions — the first to be called as a direct follow through on the recommendations coming out of the White House Conference on Natural Beauty held in May. Mrs. Lyndon B. Johnson hostess to the White House Conference, spoke Tuesday evening at Jackson Lake Lodge at a joint banquet of the two groups.

To highlight some of the thinking of the Forest Service about how the American outdoors can be managed for beauty as well as for use, the Teton National Forest led three field trips — including a general tour of the Jackson Hole area with a visit to the new Forest headquarters building in Jackson and the new ski resort; a visit to the timber stud mill at Dubois, Wyoming; and a one-day trail ride into the Teton Wilderness.
NEVADA HAS A NEW SCENIC AREA

The Ruby Mountain Scenic Area was established in March of 1965 on the Humboldt National Forest. Topped by the 11,350-foot Ruby Dome, this area of mountains and valleys covers 40,720 acres of spectacular recreational land.

The scenic area classification recognizes the prime recreational and scenic values of the Ruby Range. Multiple use management will continue to apply but with an increased emphasis on the protection of the natural beauties and the development of recreational opportunities.

For more and better public enjoyment, long-range development plans are already underway. The construction of a paved road in Lamoille Canyon will provide improved access from Elko, Nevada, 20 miles to the north. Besides access roads, trails will be improved and expanded. Along roads new campgrounds will be built, and for the back-country recreationist limited facility campsites are planned.

PROTECTION FOR PROVO

More permanent protection for the Provo City watershed was the goal of city officials in proposing the purchase of private land in the south fork of the Provo River. Efforts of the people of Utah County through their elected representatives in Washington resulted in a bill passed by the Congress in 1965. This Act authorized the Secretary of Agriculture to purchase about 10,000 acres of private land on this critical watershed which will be managed and protected by the Uinta National Forest. Completion of the purchase now awaits fund appropriation by the Congress.

A QUESTION TO BE ANSWERED

Denuded areas left by the pit mining of phosphate are becoming an increasing problem primarily in southeastern Idaho, western Wyoming, and northern Utah. Fertilizers and elemental phosphorus, important to the national and regional economy, are manufactured from phosphate shales found in this area. The situation is exemplified on the Caribou National Forest where these shales occur under nearly 300,000 acres of land. Presently 30,000 acres have been leased to mining companies.

To get at the problem, the phosphate industry and the Forest Service have entered into a 5-year cooperative study to perfect methods for rehabilitating pits and spoil areas left by this mining operation. Joint studies of various mining methods as well as the test planting of many grasses and forbs are planned. Objective of this mutual study is to perfect an economical method of re-establishing the watershed values of the mined area by restoring the protective plant cover as quickly as possible.
RECREATION FOR THE FUTURE

The first season of administration of the Land and Water Conservation Fund Act of 1965 drew to a close with over $165,000 in recreation fees being collected on the 18 National Forests in the Intermountain Region.

Nearly half of the 881 recreation areas in the Region were designated as charge areas. The public using these improved recreation areas could purchase the annual $7 sticker which would permit a car and its occupants access to any of the charge areas on the National Forests and most areas in the National Park System. Persons not wishing to buy the annual sticker could purchase a daily ticket or seasonal pass for one National Forest.

Sixty percent of the total revenues from the Act are being returned to state and county governments for planning and development of recreation areas. State recreation agencies in the Region are underway with recreation plans to take advantage of the benefits of the Act. Forty percent of the fees collected are appropriated to federal agencies managing recreation resources for purchase of key tracts for future recreation development.

As the Act anticipated, need for recreation facilities continues to grow. Over 400 family camp and picnic units were built throughout the Region in 1965. The Pine Valley Campground, for use by organized groups, is a “first” for this area. Located on the Wasatch National Forest and uniquely designed to accommodate organized groups, this campground will relieve regular “family type” facilities from the heavy use of large organized groups.
A SAFER INSECTICIDE IS FOUND

Use of malathion to control spruce budworm shows encouraging results. In a continuing search for better insecticides, 8,000 acres in the Salmon National Forest were test sprayed with malathion this year. The goal of National Forest Administration and Research is to find a short-lived insecticide to replace DDT but still adequately control the serious spruce budworm epidemic in the Region.

This year's results indicate that aerial application of technical grade malathion achieved a satisfactory "kill" of the budworm. This control spraying had much less effect on aquatic insect life than did DDT. Fish and pheasants, live-trapped for the test, showed no effect from the spraying.

Encouraged by the success of this year's project, additional malathion control projects will be planned for the future. One and one-half million acres of timber on forests in Idaho are now slowly dying from the attacks of this insect. It is, therefore, imperative that control measures be accelerated to control the epidemic.

TIMBER PLANS AND ECONOMICS

The timber management plan provides direction to the land manager on growing timber crops. The plan contains an inventory of the timber and the amount that can be harvested each year on a sustained or continuing yield basis. Past planning for the annual cut of timber from National Forests has been based on inventory of the total commercial forest area without regard to its availability. Since the road transportation system has been slow in developing
in many areas in the Region, large areas of commercial timber currently cannot be removed at a reasonable profit. The costs of building the roads to gain access to some areas of the timber or special logging requirements to protect soil and water values in rough country make harvesting the timber a losing proposition for the average private operator.

In 1965 work was started on new timber management plans prepared on the basis of timber that is economically available during the planning period. The first of the new plans was completed during the year for the Salmon National Forest of Idaho. Inventory data is currently being assembled for new plans on other National Forests in the Region.

Timber on the National Forests of the Intermountain Region is an important resource, vital to the welfare of a number of communities. The long-term objective of the Forest Service is to make this resource available for public use in harmony with other important uses of the National Forests. The economic operability concept is a principal means of accomplishing this objective. Too, the timber operator will have a better basis to determine the available supply of timber in the future.

**COORDINATION OF USES INTENSIFIES**

Effective coordination of the many and varied uses of the National Forests is the challenging goal of multiple use planning. This on-the-ground coordination can only be done by the Forest Ranger in the day-to-day administration of his Ranger District.

To give positive direction for the decisions that the Ranger must make, a recently revised Intermountain Region Multiple Use Management Guide is provided. Based on long-term management objectives for the Region, the Guide provides the framework for individually tailored multiple use plans for each Ranger District.

Policy governing land management decisions for each Ranger District are intensively and precisely molded into these plans. The Ranger District Multiple Use Plan incorporates the best thinking of the Ranger and the Forest Supervisor on proper coordination of uses. It utilizes all available resource information and the advice of specialists.

Each new use or activity proposed for National Forest land is carefully considered in light of the direction for management in the Ranger District Multiple Use Plan. Appropriate decisions and action are then taken.

**A YEAR FOR FLOODS**

Rain swollen streams ripped at watersheds throughout much of the Intermountain Region this year. Examples of losses reported were washed out bridges, flooded campgrounds, destroyed roads, and
damaged farms and towns. Property damage tallied in the millions. But damage to streambeds and watersheds, where healing is slow, was immeasurable. The tragic deaths, such as occurred in the Sheep Creek Canyon flood on the Ashley National Forest, overshadow the serious financial and resource losses from these storms.

Weather and watershed conditions were major factors. In some places, December rains fell on already wet soils. In other places, there were high intensity spring and summer rains. In many areas, watersheds in unsatisfactory condition contributed to the flooding.

HEALING WATERSHEDS

Ferron Creek, with headwaters in the Manti-LaSal National Forest in Utah, was among those areas damaged by the 1965 floods. Long recognized as a problem watershed, periodic floods have been cutting the topsoil from this canyon for many years.

Over the past three years a comprehensive watershed plan, covering nearly 200,000 acres, has been developed jointly by state, federal, and local agencies. The plan provides for the rehabilitation of this watershed, to prevent disastrous floods, under the provisions of Public Law 566. The 89th Congress authorized work to begin.

Contour trenching, gully plugging, and range reseeding are some of the land treatment techniques that will be used in rehabilitating this important watershed. The ten years of work planned for the 112,000 acres of National Forest land will cost an estimated $2 million. Approximately $7 million will be spent on rehabilitation measures outside the National Forest.

FEWER FOREST FIRES IN 1965

A generous Mother Nature sent showers in the usually dry months of July and August which resulted in one of the least destructive fire seasons in recent years. Abundant and timely rains maintained the green vegetation and helped insulate the forest against lightning and man's carelessness.

There were only 150 man-caused fires compared with last year's figure of 403. The reduction in the number of acres burned is even more heartening. Crews were able to keep fires small with a total burned area of only 1,952 acres. This is the lowest number of acres burned since 1941. Although weather conditions brought a favorable fire season, millions of visitors were in the forests and rangelands of the Region.

FIGHTING THE COMMON ENEMY

The role of every citizen is important in preventing costly forest and range fires. Some people give unstintingly of their time and public service organizations carry on effective programs in the cause of forest fire prevention. The good record of man-caused fires in recent years in the Intermountain Region is due in large part to these public spirited groups and individuals. In 1965, three national awards under the Cooperative Forest Fire Prevention Program were given in the Intermountain Region in recognition of outstanding contributions in this work. Receiving the awards were the Idaho Junior Chamber of Commerce; S. S. "Buck" Wheeler, Reno, Nevada, science teacher; and Salt Lake Tribune Editorial Writer, Erne Linford.

PARTNERS IN CONSERVATION

Ponderosa pine seedlings from the Lucky Peak Nursery on the Boise National Forest are now growing on state owned lands in Idaho. The cooperative effort on the part of Idaho's State Forester and the Forest Service is authorized by Title IV, Agricultural Conservation Act of 1956.

The Cooperative Fire Control Program now includes all counties in the State of Utah. Due to the efforts of the State Forester, fire protection has been extended to all qualifying private land in this state. During 1965 Teton County in western Wyoming qualified for fire protection assistance under the program.

Such cooperative forest management and fire control programs receive technical advice from the state and private forestry arm of the Forest Service.
1965
U. S. FOREST SERVICE
INTERMOUNTAIN REGION ORGANIZATION

Regional Headquarters: 324 25th Street, Ogden, Utah

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Floyd Iverson</td>
<td>Regional Forester</td>
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<tr>
<td>William D. Hurst</td>
<td>Deputy Regional Forester</td>
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<tr>
<td>John Mattoon</td>
<td>Chief, Division of Information and Education</td>
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<tr>
<td>Frank C. Curtiss</td>
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<tr>
<td>D. M. Gaufin</td>
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<td>John M. Herbert</td>
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<td>Gordon L. Watts</td>
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<td>Harold S. Coons</td>
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<td>Jack C. Kern</td>
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<td>James M. Usher</td>
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<tr>
<td>Errol C. Crary</td>
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NATIONAL FOREST

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<tr>
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<td>Ashley</td>
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<td>A. R. McConkie</td>
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<td>C. S. Thornock</td>
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<tr>
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<td>G. W. Tourtillott</td>
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"The Forest Service of the U.S. Department of Agriculture is dedicated to the principle of multiple use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives—as directed by Congress—to provide increasingly greater service to a growing Nation."

Orville L. Freeman, Secretary of Agriculture
Edward P. Cliff, Chief, Forest Service