Early in August an investigating committee composed of Service officials representing various branches of activity journeyed to the proposed Big Bend National Park area and spent five days making an inspection for the purpose of recommending a suitable boundary line. Those in the party were: Assistant Director Wirth; Chief Forester Coffman; Herbert Maier, Regional Officer; W. G. Carnes, Deputy Chief Architect; Carroll H. Wegemann, Regional Geologist; James O. Stevenson, Regional Wildlife Technician; Bernard F. Manney, Associate Engineer; David E. Colp, Chairman, Texas State Parks Board; Herbert Evison, Supervisor, State Park ECW; Inspectors Francis Gott, F. H. Culley, and George Nason of the Seventh Region; R. D. Morgan, Camp Superintendent; and E. E. Townsend.

Valuable notes were made by the committee members on the climatic conditions, flora and fauna, possible development, history, and geological aspects of the region. Some of these notes are quoted:

_Fauna and Flora:_ The value of fauna and flora of the region lies not only in their varied nature and
abundance but in the fact that many of their components cannot be duplicated in any other sections of the United States. Many species of animals and plants, whose center of abundance lies in Mexico, range north to the Big Bend, while others are related to Rocky Mountain forms further north.

The Chisos Mountains, ranging from low, semi-desert slopes to high, wooded canyons and peaks, form a biological island. Between 3,500 and 7,800 feet are found the Lower and Upper Sonoran Zones, the Transition, and an indication of the Canadian Zone. The Big Bend region of Texas has representatives of over 60 species of mammals. Among the larger game animals are three species of deer, bear, lions, and peccary. Big horn sheep and antelope, formerly abundant here, are now extinct or nearly so. Over 200 species of birds have been noted from the Big Bend and this region is very rich in avifauna. Reptile life is well represented with numerous species of snakes and lizards.

The lower elevations of the proposed park area lying within the Lower Sonoran life zone was characterized by such plant species as cacti, mesquite, creosote bush, lechuguilla, and desert grassed.

The Upper Sonoran Zone is characterized by pinon, juniper, various oaks, mountain mahogany, agave, grama grass and associated species.

In the Transition Zone, Douglas fir, the species of such great importance in the Pacific Northwest, is represented, together with a small amount of Ponderosa pine. With these are associated Arizona cypress, coarse-toothed maple, and numerous oaks.

According to botanical authorities, some of the Mexican species are found nowhere else in the United States.

History: Perhaps the most interesting historical values of the area are the trails of the Apache Indians, who came from the north through Black Persimmon Gap and Dog Leg Canyon, traveled along Tornillo Creek between the Chisos Mountains and the Caballo Muerta Range, and crossed into Mexico east of the Mariscal Mountains, near Johnson's Ranch, on their annual raids in Mexico. Many traces of the old Indian camps are found in this valley and in Black Persimmon Gap and Dog Leg Canyon.

Geological Aspects: The Big Bend of Texas offers to the geologist that happy combination of geologic problems which are interesting alike to the experienced scientist and to the amateur. The variety of geologic phenomena presented in this limited area is so great that illustrations can be found of almost every phase of the science and the student of physiography, stratigraphy, structure, historical geology, paleontology, vulcanism, petrography and mineralogy will find ample field for research and study. The simple examples of geologic phenomena which are apparent to all are combined in more and more intricate associations so that the student may progress from the simple to the complex until at last he reads geology as he would a printed page.

Development: In the development of this area, it is suggested a long horn Texas steer ranch of 200,000 acres be established for historical purposes. The long horns were responsible perhaps more than anything else for the development of the meat industry in the western plain country. The long horns at the present time have given way to the beef cattle and are now practically extinct. It is felt that it is as important to re-establish a herd of long horns under their original conditions
State Park Supervisor Evison and Assistant Director Wirth ready to inspect proposed Big Bend National Park Area.

The Rio Grande, proposed Big Bend National Park.

Structure in Palmetto State Park, Texas built by CCC enrollees. Assistant Director Wirth and other Service Officials inspected many State Parks during their recent Western trip.

View of "The Window", St. Helena Canyon, proposed Big Bend National Park.
as it is to preserve the buffalo that roamed the plains before them. Besides the historical value, the old fashioned spring and fall round-up and branding party would be of interest and great value to visitors. This ranch could be established along the proposed east boundary of the park.

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**SERVICE GRIEVED BY MRS. ICKES' Sudden Death**

News of the passing of Mrs. Harold L. Ickes, wife of the Secretary of the Interior, in an automobile accident on August 31, came as a shock to her many friends throughout the Service.

The accident which took Mrs. Ickes' life, as well as that of her chauffeur, Frank Allen of Gallup, New Mexico, occurred near Verilade, New Mexico, 35 miles north of Santa Fe on the Taos-Santa Fe Highway.

Riding in the car with Mrs. Ickes were Abraham Seyfullah, secretary of the Turkish Embassy in Washington, and Mrs. Genevieve Forbes Herrick, former Chicago newspaper woman now of Washington, D.C.

Mrs. Ickes, who was pinned underneath the machine, died in the automobile of a passing motorist who took the injured to Espanola, 15 miles away. The other injured were taken to St. Vincent's Hospital at Santa Fe. Mr. Allen, the chauffeur, died the following day. Latest reports are that Mrs. Herrick and Mr. Seyfullah are making good progress.

At first it was thought the Ickes' machine was sideswiped by another car, but the final verdict was that while traveling at considerable speed it struck a very soft section in the gravel road and overturned.

Mrs. Ickes was a great friend of the Pueblo and Navajo Indians and spent much time among them. Her adobe house in the desert of New Mexico, 20 miles out of Gallup, was her joy and her refuge. Shortly before leaving Washington for the Southwest she told a Washington newspaper reporter -- "I love my desert and my Indians. The anthropology of the Southwest is my first enthusiasm after my family and my constituents." Her book entitled "Mesa Land" published in 1933 presenting the story and romance of the Southwest Indians was a valuable addition to literature on the American Indian. It is understood she was gathering material for another book when death overtook her.

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**IMPROVED AIR SERVICE TO GRAND CANYON**

On August 3 impressive ceremonies were held at the Red Butte Airport, 18 miles from Grand Canyon's South Rim, marking the joining of the Grand Canyon Airlines with TWA and making transcontinental air travel available to the Grand Canyon visitor. Transcontinental airliners landing at Winslow are met by Grand Canyon Airline planes. Regular rates are published by TWA for service directly to the Grand Canyon, or a special round trip fare of $19.00 is made for those desiring to make the trip from Winslow to the Canyon.

Indications are that total visitors to national parks and monuments during the 1935 travel season will be considerably greater than during 1934.
HISTORIC SITES LEGISLATION ENACTED

On August 21, President Roosevelt signed S.2073, an Act to provide for the preservation of historic American sites, buildings, objects and antiquities of national significance and for other purposes.

In the opinion of many this is one of the most important pieces of National Park legislation since passage of the National Park Service Act in 1916.

Although the Secretary of the Interior is empowered by this Act to acquire historic areas, so long as the general fund of the Treasury is not obligated by so doing, and to administer them as national monuments, it is in the State and local potencies of the legislation that the Secretary sees the greatest opportunity for progress.

"It is certainly not desirable that the Federal Government take over all historic sites in the country". Secretary Ickes has pointed out. "By far the greater number of such areas are of local rather than national significance. They should be cared for, therefore, by State or local governments or historical societies. But the Department of the Interior, through the National Park Service, which has already done a considerable amount of work in this field, stands ready to lend every facility of its technical staff in assisting groups interested in carrying out the provisions of the Act."

While not carrying any appropriation, the Act provides for a general advisory board, the membership of which will include men qualified by their experience in history, archeology, architecture and human geography to speak authoritatively on the problems involved in the undertaking.

By the terms of the new legislation a thorough survey of all historic and prehistoric shrines is made possible, accompanied by a systematic inventory, divided into two categories. In one will be listed those sites which are preeminently and nationally significant. In the other will be those having value in local and State sentiment, but not linked with the history of the United States as a whole. The two classifications will assist in the building up of a unified and integrated system of historical parks, monuments and shrines, which, taken in their entirety, will present to the American people a graphic picture of their country's past.

Although this new law carries no appropriation for financial assistance, the Department of the Interior, through the Park Service, will make an important contribution by putting at the disposal of municipalities, local historical organizations and States this exhaustive survey and by lending assistance through its staff of technicians in working out details of projects under such sponsorship.

SERVICE FOR NEW BRANCH

Under authorization contained in the Interior Department Appropriation Act for the fiscal year 1936, a Branch of Historic Sites and Buildings has been set up in the Service. This Branch will coordinate administrative matters and supervise the educational and research program pertaining to historic and archeologic sites, including the survey, classification, and preservation of historic and archeologic sites and buildings and remains. It also will
supervise and collect drawings, photographs, sketches, and other data relating to prehistoric and historic American sites and buildings, and collect and preserve historical and archeological records. Verne E. Chatelain has been designated as Acting Assistant Director of the newly-established Branch.

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PUBLIC AFFAIRS INTERNE FINISHES WORK IN VISUAL INSTRUCTION DIVISION

Miss Marjorie Townsend, of Long Beach, California, has finished a three months' assignment with the Visual Instruction Division, National Park Service. She has edited film strip units; prepared a scenario for a motion picture of CCC activities in Rocky Mountain National Park; assisted with the preparation of teachers' manuals for use with visual aids; operated motion and still picture projectors of all kinds; and has assisted generally with other phases of the visual instruction service, including the preparation of bibliographies.

There would be nothing unusual in the above statements, except for the fact that Miss Townsend was not a regular or temporary employee of the Service. Instead, she was serving as a visual instruction intern under the National Institution of Public Affairs. With the cooperation of thirty-five units of the Federal Government, the intern-ship projects were arranged and supervised by the educational and executive staffs of the National Institution. Miss Townsend was especially interested in visual instruction and chose the National Park Service as the place in which she would be able to get training and experience in the various phases of that field.

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RESCUE IN YOSEMITE WIDELY PUBLICIZED

On August 7 and 8, the front pages of leading newspapers throughout the country carried the story of the rescue of two Yosemite Park visitors from the sheer cliff-side of Half Dome.

The principals in the event, Robert Tate of Inglewood, California, and Miss Elizabeth Lorimer of Chicopee, Massachusetts, on the afternoon of August 7, hiked to the top of Half Dome along with several others. Miss Lorimer and Mr. Tate decided to take a "short cut" on the return trip and started down what appeared to them to be a trail on the front side of the great monolith, thinking they could reach the floor of the valley in half an hour. It had taken them several hours to hike up the regular trail at the back of Half Dome.

They were able to get only about halfway down before darkness overtook them and they found themselves trapped on a ledge. Tate, who tried to find a way off the ledge, fell and injured his leg, and received a severe cut on his head. Miss Lorimer, who remained on the ledge until rangers rescued her, was virtually uninjured, having received only a few scratches. The rescue party, consisting of Park Rangers and CCC men, worked all through the night of the 7th and nearly all of the following day in getting to the stranded couple and then bringing them to the foot of the cliff, ledge by ledge, with ropes.

Six million dollars from Public Works funds has been allotted by President Roosevelt for additional construction on the Shenandoah-Great Smoky Mountains Parkway.
ATTENTION CALLED TO "MISPLACED EYEBROW"

The first letter coming to the attention of the Washington Office commenting on the Rocky Mountain Ranger picture published in the last issue of the Bulletin was written by Superintendent Allen of Hot Springs National Park to Superintendent Rogers of Rocky Mountain. Here it is:

"Having carefully perused the latest issue of the Park Service Bulletin and noted the picture of the fine upstanding body of men which you had dressed up to represent the Rocky Mountain ranger force, I am taking advantage of the opportunity you gave for criticism of the picture or the group. In general, it is a fine looking outfit and one you should be and probably are very proud of; otherwise, the picture would not have been sent in. I might say that your temporary rangers appear to be almost the equal to the quality of men and appearance of the men who used to be chosen by Roger Toll and myself when we were in Rocky Mountain, and of course your permanent men were practically all graduates of that regime.

"I note with regret that Assistant Superintendent John Preston has apparently forgotten one of the rigid rulings that existed during the reign of Roger Toll, with myself as executor of this ruling. Perhaps the reason for relaxing vigilance may have been due to some preference of your own. In any case, I sincerely call your attention to the adornment on the upper lip of Chief Ranger McLaughlin. In the old days at Rocky Mountain National Park, a mustache was something to be abhorred and was strictly ruled against. Many a young man creditable in many other ways applied to Rocky Mountain National Park for ranger duty but found that that handicap could not be overcome. In fact, we were so sincere in that regard that one or two of the boys who insisted on growing them between seasons found to their regret that their re-employment was contingent upon having the mustache removed immediately. You can, therefore, imagine my horror at seeing presented for inspection of the entire Service a photograph wherein the Chief Ranger himself proudly displays a misplaced eyebrow. Knowing Chief Ranger McLaughlin as I do, I am sure he will be glad to go into consultation with you as to the advisability of improving the uniform situation at Rocky Mountain by removal of this defect. I might refer you to a recent newspaper article in which the officers of the state constabulary of some state or other were corrected in this respect due to the need, as the superior officer stated, of keeping their officers out of fights after they had been unable to explain these adornments to their commenting citizens."

The Mountain States Telephone and Telegraph Company is giving good publicity to parks and monuments. The cover of this company's telephone directory for Livingston, Montana, carries a view of Yellowstone, the directory for Rock Springs-Green River has a cover view of the Grand Tetons, the Estes Park directory cover carries a sketch of Rocky Mountain, that for Durango, Bayfield, Mancos, and Silverton, a view of Mesa Verde, and the one for Nogales, Arizona, carries a view of Tumacacori.

Only six of the national parks are closed to winter travel — Mount McKinley, Yellowstone, Grand Teton, Glacier, Bryce Canyon, and Mesa Verde.
PARK FLOAT BEST IN PARADE

A Sequoia Park float, one of 50 entered in the American Legion State Convention Parade held at Fresno, California, in August, was awarded first prize.

Constructed voluntarily by park and FCW employees on their own time under the direction of Chief Ranger Ford E. Spigelmyre, the float consisted of a truck and an open, flat trailer, both covered with greenery and depicting historical war periods of importance during the life of a Sequoia tree. The truck itself carried an erect 11-foot cross-section of a Sequoia gigantea, the ring marks being labeled on both sides with small cards bearing the dates of corresponding periods of war beginning from the early Roman period during 44 A.D. to the World War in 1914. The theme was further carried out by means of streamers attached to and extending from the labels back to stumps on the trailer which supported park employees and CCC enrollees costumed in the dress of the period indicated by the colored streamers. Representing costumes were: The Roman Wars, Crusades, Battle of Orleans (Joan of Arc), Colonial Wars, Civil War, Spanish American War and the World War.

In view of the success of the float and of the good will it served to establish for the park with residents of local communities, there is a strong possibility that it may be entered in the Pageant of Roses held at Pasadena on New Years Day.

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Another distinction for Sequoia—the name contains all the vowels in the English alphabet. This fact was brought to the Service's attention by the Superintendent of a South Dakota High School, who wanted pictorial material on the national parks.

FIELD SCHOOL STUDENTS ALL COLLEGE GRADUATES

All of the twenty men and women who attended this year's sessions of the Yosemite School of Field Natural History were college graduates, according to Assistant Director Bryant, who found it possible to be with the students for several days. Four of the students he says, had Ph. D. degrees, and one was the head of a geology department in one of the country's leading universities. Consequently, the park school now has attained its goal of becoming a full-fledged graduate school.

As in past years, the students devoted considerable time to the study of ecological problems in the research reserve, conducting actual censuses of the plant and animal life in certain marked quadrats. By making such a census year by year the Service has data available on any changes that take place. Ten days were spent on a pack trip making studies at timberline.

Before the regular sessions were completed, the students were given an opportunity to serve as nature guides, conducting groups of interested park visitors over the nature trails.

As a grand finale, the students and members of the "faculty" gathered on the shores of the Merced River and enjoyed a picnic supper, following which a baseball game was staged between members of the school and the Yosemite naturalist staff, the former being victorious.

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By Executive Order of President Roosevelt $705,000 has been made available for the acquisition of lands on Isle Royale for Emergency Conservation Work purposes.

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Members of the 1935 Class, Yosemite School of Field Natural History, resting on Mount Lyell.

One of the Classes of the Junior Nature School in front of the Yosemite Museum.

Yosemite School of Field Natural History Students get a few pointers in front of the Cabin Museum in the Mariposa Grove of Big Trees.
BAR HARBOR EVENT DRAWS MANY VISITORS TO ACADIA

Of the 6,000 persons who gathered at Bar Harbor on August 16 to participate in Maine's Third Annual Summer Visitor's Day Events many took time to make a tour of Acadia National Park.

Among the many celebrities on the island for the day's festivities were Maine's Governor, Hon. Louis J. Brann, Dr. Walter Damrosch, and Director Robert Fechner. Superintendent Dorr was one of the honor guests.

Mrs. Benjamin L. Hadley, Jr., wife of Acadia's Assistant Superintendent, served as Chairman of the entertainment committee and participated in the pageant which depicted three centuries of progress on Mount Desert Island, from the Indian occupation to the present. Assistant Superintendent Hadley and Chief Clerk Clark G. Nowack also took part in the pageant.

SUNSET SYMPHONIES POPULAR

According to Superintendent Finnman, more than 100,000 Washingtonians journeyed to the Watergate on the banks of the Potomac to hear the Sunset Symphonies of the National Symphony Orchestra Association staged for the first time this past summer on Sunday and Wednesday evenings.

Now the barge from which these outdoor concerts were given has been moored securely to its winter berth in the Anacostia River between the Pennsylvania Avenue Bridge and the Eleventh Street Bridge where, anchored 60 feet from shore, it will remain until inauguration of the second series of summer concerts.

"BOUQUET" FOR WILDLIFE PUBLICATION

Dr. J. Grinnell of the University of California has written Ben Thompson as follows regarding the publication entitled "Fauna of the National Parks of the United States, Series No. 2".

"I want you to know that my reading of Fauna was critical; I was watching for illogicalities; watching to see if the latest concepts in the field of vertebrate zoology had been handled fairly.

"Results: I am able only to declare my warmest approval of your statement of principles throughout. George (Chief of the Service's Wildlife Division) and you have done the best job yet, in this field, that I know of. And the style is such that it can't help but reach administrators, not alone in the National Park Service, but also throughout the Government departments and bureaus wherever claims are being made to conservation activities.

"Let this be also a letter of congratulation concerning your appointment as Assistant to the Director. While it is regretful that you are thus out of the Wildlife Division, I am hopeful that the new post will give you perhaps even wider opportunity to carry the principles of wildlife conservation into channels leading to more general acceptance."

This summer Mr. Thompson was designated to serve as special Assistant to the Director. Under this designation he will handle special assignments given him by the Director involving unusually difficult research work of a technical nature.

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MOTORIZATION OF MOUNTAINS

This item, quoted from a recent issue of the New Yorker magazine, gives an interesting viewpoint on a subject which is so vital in national park development:

"Fifteen years ago we climbed Whiteface Mountain in the Adirondacks. In those days a rough trail wound up it, a trail that dimmed and died out; you could get lost, if you let your mind and feet wander, and it was exciting halloowing to the rest of your party, until you found your way back to the blazed trees again. At the summit, almost a mile above sea level, you could see the shine of Lake Champlain a long way off, and, almost at your feet, smaller lakes looking tiny enough and lovely enough to hang around a lady's neck. We remember well how tranquil it was on Whiteface and silent, except for the notes of song sparrows and the laughter of friends. Fat porcupines lumbered across the path, as surprised to see people as the penguins were to see Byrd.

"A couple of Saturdays ago, a memorial highway up Whiteface was opened officially, a ribbon cut. The new road is eight miles long, took four years to build, cost a million dollars, has a roughened surface to insure good tire traction, and its curves are banked to the proper angle for modern motoring. A slick ascent and a quick one. Hundreds of fat men and querulous women, whose feet would kill them if they walked a hundred yards up the old trail, will sit in the back seats of automobiles now, drinking in the view and eating box luncheons. The time we went up Whiteface we started at sunrise, after a breakfast of wild red raspberries and bullheads which we had caught ourselves. It took four hours to reach the top, and we got good and tired. There is no need for anyone, ever again, to get tired. Au revoir, fine old mountain! How flat you've grown!

"Apparently there are other people who feel sad, as we feel sad, about the motorization of mountains. Colonel Frederick Stuart Greene, who spoke at the opening of the new highway, said that the builders of the road had been subjected from the beginning to "the most ignorant, stupid, vicious and even dishonest opposition." Perhaps it is vicious of us to want to keep mountains for those who have the strength to climb them. Perhaps it is stupid of us to resent the fact that invalids can get the view from Whiteface. But with mountains levelled by tarvia, where will the new generation go for its sense of conquest, where for its illusion of remoteness? Maybe it isn't important; maybe there are new stratospherical substitutes that our children understand and we don't. We do know that it is important to us that we once ate a raspberry and climbed all morning long, getting hot and hungry and high above sea level."

Readers of the Rainier National Park News, in addition to learning all about activities pertaining to Mount Rainier National Park, also get information about other parks in the system. An article which appeared in a recent issue giving information regarding several of the larger national parks probably helped to make many a Mount Rainier visitor include other parks in his itinerary. The Rainier National Park News, published weekly, sells for ten cents.
When Superintendent C. Marshall Finnan of National Capital Parks told the story of an enterprising carp, who, not content with the food in the Potomac River, wanted to steal the corn set out for ducks at Roaches Run, we believed him for he was able to back his story up with the photograph shown on this page of the Bulletin. It will be noted the carp has come half way up the bank to get the corn intended for the waterfowl that have congregated at Roaches Run since they have been protected from molestation by hunters.

The Roaches Run Sanctuary, located on the Mount Vernon Memorial Boulevard, is one of the National Capital Park units under Superintendent Finnan's jurisdiction.
DONATION MADE TO NATIONAL PARK TRUST FUND

A check for $5,000 from the Metro-Goldwyn-Mayer Film Distributing Corporation marks the first contribution to the National Park Trust Fund created last July by Act of Congress.

The letter from the film executive with which the check was transmitted stated that the contribution was in recognition of facilities placed at the company's disposal in the filming of the picture "Sequoia" in Sequoia National Park.

The National Park Trust Fund will be used for the furtherance of national park projects, particularly those connected with the preservation and restoration of historic sites and areas of scientific and geologic interest. Contributors to the fund, Secretary Ickes has stated, will be participating in a movement of incalculable value to posterity, inasmuch as the number of such potential shrines and natural wonders is necessarily limited, while many are menaced by destruction by the elements or man, so long as they remain without protection.

"CARMEN" AND YELLOWSTONE NATIONAL PARK FURNISHED INSPIRATION

Owen Wister, 75-year-old author of "The Virginian", in the preface of one of his books confides that it was while reading "Carmen" in Yellowstone National Park he was given the final push to write, says R. H. Hancock, of Casper, Wyoming, in a recent letter to Superintendent Toll. "But for 'The Virginian' it is doubtful if Wyoming would be any more conspicuous than Idaho or New Mexico" writes Mr. Hancock. In the chapter "Superstition Trail" of "The Virginian" -- declared by his friend, Theodore Roosevelt, to be the best in the book -- Mr. Wister describes the southern half of Yellowstone National Park.

Colonel Roosevelt believed Mr. Wister to be America's first man of letters. In "Roosevelt, The Story of a Friendship" may be found a picture of Wister and Roosevelt taken at Mammoth in 1886.

Mr. Wister spent twelve summers in Wyoming.

SEQUOIA GIGANTEA SELECTED AS NATIONAL TREE

Announcement was made late in August that the California Big Tree, or Sequoia gigantea, had been chosen by nearly a million Americans to be our National Tree.

Mrs. Charles Cyrus Marshall, founder and President of the National Life Conservation Society, the organization which conducted the poll, advised Director Cammerer that the American Elm was the second choice and the Pine third. Other trees receiving a large number of votes, Mrs. Marshall advised, were the black walnut, hickory, tulip, locust, willow, and dogwood.

Krugur National Park in South Africa, covering an area about the size of Belgium, has been called the largest natural zoo in the world.
PUBLICITY FOR GRAND CANYON AND CARLSBAD CAVERNS

"Our Caverns" reads the heading to the following article which appeared in a recent issue of the Tombstone Epitaph:

"Arthur Brisbane recently in one of his daily sessions says, 'An Arab having looked upon the tomb of Mohammed at Mecca, put out both his eyes, saying there was nothing left on earth worth seeing. He made a mistake. If he had driven today, the full length of the Redwood highway, he would wish he had 30,000 eyes like a housefly and put them all out for these North California redwoods, 1,500,000 acres of them--97 per cent of all that exist on the earth--so far surpass all the earth's other wonders, in majestic dignity and beauty that comparison is futile!

"Well, all I have to say is, without detracting one iota from the redwoods of California, that if that same Arab were turned loose in Arizona and New Mexico, he would, if he had them, poke out many times 30,000 eyes, for both those states have wonder after wonder for the Arab, Eskimos or anyone else to gaze upon, and again I mention just two sights, the Carlsbad Caverns in New Mexico and the Grand Canyon in Arizona--just two of the many attractions for the tourist to see.

"Many of our readers will recall the visit of the Katzenjammer kids when they first gazed upon the Grand Canyon, 'My, how big' they exclaimed and when they went over to Col. Tom, Boles' little attraction known as Carlsbad Caverns National Park, they were speechless. I have talked to countless numbers of people who have visited both places and their unanimous verdict on the Caverns and Grand Canyon was: 'SIMPLY INDESCRIBABLE.'"

"But you only get a good start with the Grand Canyon and the Caverns, for both states are the home of so many of nature's wonders that one falls when he tries to tell about them."

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MORE GOOD PUBLICITY

Will Rogers, the beloved humorist, but a short time before his tragic death in Alaska wrote the following which, like all his other columns, received nation-wide publicity:

"DURANGO, Colo., July 29. Towns are like people; they are proud of what they have. Trinidad, Colo., with enough coal to melt the North Pole down till it runs. Wiley hits a beeline over the tops of the mountains to Durango, a beautiful little city, out of the way and glad of it.

"Gold, silver and Mesa Verde cliff dwelling ruins, where civilization flourished before it started to go backwards.

"Today Wiley is flying over Bryce Canyon, over, down and through the Grand Canyon, Hoover Dam, New Lake.

"No wonder American people are filling roads, trains and air. There is so much to see. What we lack in reading we make up in looking."

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VISITORS PAY TRIBUTE TO ROGERS AND POST

The nearly 1,200 visitors to Carlsbad Caverns on August 22, who
Superintendent Boles says represented a typical cross-section of the Southwest, paid impressive tribute to the late Will Rogers and Wiley Post. The visitors reached the "Rock of Ages" in the "Big Room" just at the moment funeral services were being held in California for Will Rogers and it was thought fitting that the usual moment of darkness and silence be dedicated to his memory, also to that of Wiley Post. Mr. and Mrs. Rogers visited Carlsbad May 10, 1932, and his story of his visit was read by millions.

The following editorial comment on this memorial tribute was carried in the Carlsbad Argus:

"Carlsbad Caverns' tribute to Will Rogers, in the God-like atmosphere engendered by one of God's most beautiful works, left 1,200 visitors to the Caverns feeling nearer God than they have before in their lives.

"In the age-old cathedral which Rogers himself said was the world's greatest cathedral, the moment of silence at the 'Rock of Ages' was dedicated to Rogers' memory.

"Following the minute of darkness, ending in the singing of the beautiful hymn 'Rock of Ages', many of the visitors were visibly in tears. All were affected.

"In additional tribute, the lights were darkened again, and a blinding calcium flare burned, after which the crowd was dismissed in silence."

Superintendent Boles of Carlsbad Caverns reports that more than the entire 1936 appropriation for his park was returned to the United States Treasury during the first two months of the 1936 fiscal year.

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PICK AND SHOVEL

A man from Kansas was looking into the depths of the Grand Canyon. "Do you know," said the guide, "it took millions of years for this great abyss to be carved out?"

The man from Kansas was tremendously impressed. "You don't tell me," he commented. "Why I didn't know this was a government job." --- Service Magazine.

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For the first time in history a newspaper extra was sold in Yellow-stone Park when the Livingston Enterprise rushed special copies announcing the disastrous crash of the Post-Rogers plane. The nearest daily newspaper to the park is more than 60 miles away, and L. E. Flint, publisher of the Enterprise, realizing that many persons in the park were eager for details of the accident, gave them complete coverage in a few hours after the first radio dispatch was received.

Over the summit of Mount Rainier at an altitude of 15,000 feet, the largest air bomber ever built in this country made her maiden test flight. Capable of doing more than 200 miles an hour with her four motors of 750-horsepower each, she recently flashed across the country from coast to coast in 9 hours setting a number of new speed records.

Paramount, in an effort to get authentic and true sounds to be incorporated in its film "So Red The Rose," dispatched a sound truck to Sequoia National Park to record the sound of the wind swishing and rustling through the trees.

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Working on relief map of Morristown Area as it existed in Revolutionary times.

Assembling model of New Interior Department Building Museum.

Scenes taken at the Service's Eastern Museum Laboratory, Morristown National Historical Park.

Painting figures for the New Interior Department museum model.

Constructing plaster relief map of New York Harbor for display at the Statue of Liberty.
HISTORICAL NOTES

Early in September a daily lecture service was inaugurated at Colonial National Monument to be continued through Sunday, November 3. Titles of the lectures follow:

1. Archeological Discoveries at Jamestown and Yorktown
2. Colonial Plantations on the York and James Rivers
3. Colonial Days at Yorktown
4. The Story of Yorktown Since 1781
5. Stories of Surviving Colonial Houses in Yorktown
6. Architecture of Colonial Houses in Yorktown
7. Williamsburg, Colonial Capital of Virginia
8. Jamestown, 1607-1698
9. How the Battlefield of 1781 Is Being Developed
10. Interesting Flora at Colonial National Monument
11. The Prelude to the Siege of Yorktown
12. The Siege of 1781
13. History Beneath the Waters of the York

Establishment of the Patrick Henry National Monument in Charlotte County, Virginia, was authorized by Act of Congress approved August 15, upon the donation of the necessary lands to the Federal Government.

Plans for development of the monument include reconstruction of the law office used by Patrick Henry, his house which was burned in 1919, and the kitchen which was burned in 1928. Several of the old buildings on the estate, which covers 1,000 acres, are still standing. The grave of Patrick Henry also is on the site.

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The evening of September 17, Constitution Day, Messrs. Demaray, Tolson, Wirth and Chatelain motored to Sharpsburg, Maryland, to attend an Antietam Battle Anniversary Dinner. All gave talks outlining different phases of National Park Service activities. September 17 was the 73rd Anniversary of the Battle of Antietam.

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Polish Army Veterans of Baltimore held a short ceremony at Fort McHenry National Park on August 8, at which time Acting Superintendent H. H. Garrett dug a spadeful of earth and presented it to the veterans along with a letter from Director Cammerer authorizing the gift, which will be sent to Poland to become a part of a mound to be erected as a memorial to the late Marshal Pilsudski, Premier of Poland.

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Another celebration was held at Fort McHenry September 12, 13 and 14, marking the anniversary of the British bombardment in the War of 1812. During the celebration the famous Bowie collection of firearms, representing the life-long avocation of the late E. Berkeley Bowie of
Baltimore, Maryland, was on public view for the first time.

The collection is now housed in one of the old barrack buildings at Fort McHenry and Mr. John A. Sachse, who is an authority on military and naval material and history, is in charge of the preparation of the collection for public display.

The array of guns, pistols, revolvers, cutlasses, swords, and bayonets in this assortment is generally regarded as the most complete collection of American military firearms in existence. Particularly noteworthy is the display of weapons in use by the soldiers of the Confederacy. Some are of the finest European make and were smuggled within the lines. Some were improvised and are very crude.

Weapons of much earlier date likewise tell their story. There are flintlocks of the Revolutionary period; cutlasses which were in use during the War of 1812. The Mexican War has its quota of examples. Even the World War is well represented by a variety of rifles featuring the types used by combatants of all the nations involved.

By Act of Congress approved August 21, preservation by the Federal Government of the site of Fort Stanwix, an old fort of importance during the Revolutionary War and the preceding 20 years of Colonial history, near Rome, New York, has been authorized.

It was there that General William Johnson in 1768 made a treaty with the Six Tribes Indians, whereby for the sum of $10,000 the Colonies secured titles to the lands now embraced in Kentucky, West Virginia, and the western part of Pennsylvania. There is a tradition also that from its ramparts the Stars and Stripes of the Continental flag floated in battle for the first time on August 3, 1777.

The Act provides that when title to the site with the properties located thereon shall have been vested in the United States, the area shall be set apart by Presidential Proclamation as a national monument.

In another Act of Congress, dated August 13, provision was made for establishment of a national monument at Appomattox Court House, Virginia. This Act also contains the provision that the monument will have full status when title to such lands, structures, and other property desirable for park purposes, within a distance of one and one-half miles from the Appomattox Court House, has been vested in the United States in fee simple.

The site of the proposed new monument was the scene of the surrender of Lee's Army of Northern Virginia to General Grant on April 9, 1865, which marked the termination of the Civil War, and its establishment will link together, and bring under the administration of the National Park Service, most of the areas involved in the great eastern campaigns of the Civil War.
Four bayonets and a number of bones, found recently by Mr. T. B. Fife while excavating for a pond on the southern part of his property, have been donated to the Vicksburg National Military Park Museum. The relics, found near the southwestern part of the park between the Cane Ridge Road and All Saint's College and approximately four-tenths of a mile beyond the park boundary, were close together and it is thought that this ground was used as a burial spot by Federal soldiers. It was customary to mark such graves with upright bayonets.

E. C. W. NOTES
(NATIONAL AND STATE PARKS)

CCC enrollees are busily engaged in reducing fire hazards and cleaning up trails on Isle Royale in northern Lake Superior. A camp was established in this proposed national park region in August and is being operated in cooperation with the Department of Conservation.

Work plans call also for the installation of camping facilities, placing of buoys and beacons in the channel connecting the Islands with the mainland, improvement of the Island's dock, and erection of trailside shelters and ski cabins to be utilized by patrols of the Michigan Department of Conservation in protecting the abundant game from poachers.

Movie men of the March of Time spent several days in Grand Teton National Park this summer taking scenes showing the activities of the CCC.

The August issue of "Thor-Shun" issued by CCC Camp Wildrose, Trona, California, was dedicated to "the party of William Lewis Manly, a band of brave pioneers, who staggering from a valley where death had stricken many from their midst, reached the ragged crest of the Panamints, to turn and bid farewell:

GOODBYE, DEATH VALLEY,
bestowing upon that grand, dread sink a name never to perish while memory of that incident yet lives."

Engineer T. R. Goodwin, the Service's representative at Death Valley National Monument, in submitting this news sheet to the Washington Office states that it has been awarded first prize among CCC papers. (Incidentally Thor-Shun is the Pueblo Indian word meaning Rising Sun).

Throughout the month of August a blue flag with a large white letter "S" proudly flew from the flag pole of CCC Camp No. 1, Mammoth Hot Springs, Yellowstone National Park. The pennant distinguished the camp as superior to the 33 other CCC camps in the Pocatello district.

The "superior" rating was based on camp appearance, character, and discipline of the men and interest and efficiency displayed in camp and work activities.

Dr. H. P. K. Agerborg, chief biologist of the State Park ECW staff, has just published the following papers:

1. "Prophylactical problems in trout and salmon culture", in Annales des Sciences Naturelles, Zoologie, 10
All but the first appear in "The Transactions of the American Fisheries Society, "Volume 64 (1934) Just issued.

During June and July, Dr. Agersborg visited 73 state parks, conferred with university officials on wildlife problems and with the state authorities on park problems in regions V, VI, VII, and VIII. He visited Indiana, Illinois, Wisconsin, Kentucky, Missouri, Arkansas, Oklahoma, Texas, New Mexico, Nevada, Utah, Colorado, Wyoming, South Dakota, and Iowa. He is now preparing reports on the areas studied.

Present indications are that, with the beginning of the sixth ECW period in October 1935, every State except Delaware will have come into the State and local park picture. Since April 1933 the number of States with ECW park projects has grown from 26 to 47 and the number of companies assigned to this recreation phase of the program from 105 to 482.

The newcomers since the fourth period are Rhode Island, Connecticut, Utah, Kansas, and Montana. North Carolina might also be considered in this category since the restoration of old Fort Macon was her only project until she recently secured four excellent areas, among them famed Mount Mitchell, highest spot east of the Rockies.

States with the largest number of camps continue to be New York, Illinois, Texas, California, and Massachusetts. Notable has been the increase in areas in States which formerly had two or three ECW park projects and now have a dozen or more. The Southern States have attained prominence as a group.

Biggest projects are still the reclamation of Chicago's Skokie marshes, clean-up and recreational development of the old Illinois-Michigan Canal, construction of the jetties to save Milwaukee from the littoral currents of Lake Michigan, Douthat State Park's earth dam near the little railroad town of Clifton Forge, Virginia, and the roads in the parks of Vermont and the Palo Duro Canyon in the Texas Panhandle.

If you can't catch fish in the Potomac River you can appease your disappointment by fishing in the cliffs along the river shore. H. E. Rothrock, Geologist, Washington Office, State Park Division, recently exhumed 39 inches of a jaw bone of an ancient whale (Cetotherium Cephalum) from the cliffs near Westmoreland State Park, Virginia.

Filming of the sound motion picture of the work of the Civilian Conservation Corps in the state and local parks of Minnesota began in mid-August. Camera man Walter Scott, fresh from the TVA, where he filmed sufficient footage for several reels on the work in the Valley's ECW.
recreational projects, arrived in the Twin Cities at that time and began production at once. His first scenes were of the Minneapolis city park system, recognized as a perfect example of what a city can do, and of its veteran developer, Theodore Wirth, father of Assistant Director Wirth. Other interesting features will be scenes from the Lake Itasca pageant depicting the discovery of the source of the Mississippi by Schoolcraft, and pictures of the boyhood home of Colonel Lindbergh at Little Falls, and the original "Main Street" in Sinclair Lewis' home, Sauk Centre.

PROMINENT VISITORS

John Loudon Rainier of Hanshire, England, a visitor to Mount Rainier National Park this summer, is believed to be the first of the family, for whom the mighty mountain mass was named, to set foot on its slopes.

Captain George Vancouver of the Royal British Navy, first white man to record seeing "the mountain", named it in honor of his friend, Rear Admiral Peter Rainier, May 8, 1892. John, this year's visitor, said he was the great grandson of "old Peter's brother." Peter Rainier, who never married, left no direct relatives, the visitor explained. He also stressed the fact that his name should be pronounced "Rain-iar" as in rainier weather."

Mrs. Harold L. Ickes, shortly before her death, was a visitor to several of our Southwestern National Monuments.

Count de la Fresse, Paris, France, during a visit to Fort Marion National Monument in Florida stated that he "considered Fort Marion the most interesting place in America because it was not torn down every fifty years and a skyscraper erected."

Rev. Bernard Hubbard, S. J., known throughout the world as the "Glacier Priest" because of his extensive studies of Alaskan volcanoes, visited Lassen Volcanic National Park while enroute to the Valley of Ten Thousand Smokes in Alaska.

Secretary of Agriculture Henry A. Wallace visited Grand Canyon's North Rim early in August.

Baroness Keetje de Pallandt of Amsterdam during her stay at Grand Canyon was the house guest of Superintendent and Mrs. Tillotson, as were also Artist John Held, Jr., and Mrs. Held.

Other Grand Canyon visitors during August were Arthur Newton Pack, editor of Nature Magazine, Edsel Ford, and Cornelius Vanderbilt.

Custodian Bowden of Tumacacori National Monument says in his August report: "Owing to a number of Dude Ranches in this vicinity, we have quite a number of visitors who come on horseback, muleback, and burro-back and once in a while we have visitors who have come by plane but when a man and his wife from Phoenix delivered a tractor to one of the local ranchers, it struck me that was the first time I had ever had visitors come by tractor."
Another interesting visitor to Tumacacori was Mr. Colin Timmons, Southwestern prospector and miner. Mr. Timmons and Bucky O'Neill of Grand Canyon fame, were partners.

More than one hundred members of the American Fur Association, after completing their convention in Los Angeles, reassembled in Yellowstone for entertainment sessions.

Other Yellowstone visitors were Chief Justice Charles Evans Hughes, Albert Atwood, special feature writer for the Saturday Evening Post, Dr. Joao A. de Bianchi, Envoy Extraordinary and Minister Plenipotentiary of Portugal, Dr. Oswaldo Aranha, Ambassador Extraordinary and Minister Plenipotentiary of Brazil, Richard Sallet, Attache, German Embassy, Washington, and former vice president Charles G. Dawes.

Dr. John C. Merriam was a recent Yosemite visitor.

Prof. Jean Piccard, noted Stratosphere Balloonist, with Mrs. Piccard and their three sons visited Yellowstone and Yosemite National Parks.

Mr. Frederick A. Delano, vice chairman of the National Resources Board and uncle of President Roosevelt, enjoyed a short stay in Glacier. Mr. Delano said he could not understand why anyone should go to the Alps to see mountain scenery with Glacier Park in the United States. It was his third visit to the park.

Wind Cave National Park received an unusual visit on August 19 from Harry R. West, electrical engineer with the General Electric Company at Pittsfield, Massachusetts. Mr. West spent a summer vacation there 34 years ago on his grandfather's homestead, which occupied a portion of what is now the northern part of the park. Most visitors to Wind Cave are interested primarily in making a trip through the cave itself, but Mr. West was anxious mainly to locate some Indian tepee rings—stones placed in circles around the bottoms of the tepees to hold the hides to the ground—which he remembered seeing as a boy only a few hundred feet from his grandfather's log home.

Before inquiring at the park office for information, Mr. West and his wife visited the site of the old homestead cabin, but because of changes which have been made there during the past quarter century they were unable to locate the vestiges of Indian life which had so impressed him in 1901. When he questioned Superintendent Freeland he was surprised to learn that these old tepee rings are still plainly visible near the present game preserve ranch house, and was still more surprised to hear that this house includes the original log walls of the homestead cabin, which was remodeled and enlarged by the Government after its acquisition of the property for the Wind Cave Game Preserve.

Mr. West recalled going through the cave in 1901 with his mother, accompanied by one of the brothers of Alva McDonald, the youth who discovered the vast size of the cavern and did most of the early exploring in its multitudinous passageways. On that trip, Mr. West said, at least four or five hours were consumed in seeing the main passageways, and as he was then only a lad some of the rooms
seemed much larger than at present. He was glad to notice that the Post Office—a room so called because it contains hundreds of compartments of the "box-work" characteristic of this cave—no longer resembles a dead letter office, as it did in 1901 when most of the boxes were filled to overflowing with old postal cards, letters, calling and business cards, and what not, all left by previous visitors.

Lt. Col. Joseph Wade Denton, who policed sections of Yellowstone Park in 1905 as a soldier under Captain John Pitcher, took in the beauties of that park again this past summer.

Visiting Old Faithful where he was billeted in a small cabin with one other soldier during the winter of 1905-06, Colonel Denton recalled the siege of cabin fever which took hold of their little outpost.

"After being shut in for two solid weeks, we both were complete victims of cabin fever," he recalled. "We were so completely sick of the monotony of our food and the sight of each other that we roped off the cabin into two sections. Each man stayed in his section. The stove was neutral ground. We both had to use it, but never at the same time. We cooked our meals individually and didn't speak to each other for days."

This particular siege didn't last all winter, however, the Colonel hastened to add. One trip into a blinding blizzard convinced both of them that the cabin was a mighty good shelter and they endured the winter a bit more complacently after that.

One of the experiences which Colonel Denton recalls as the most difficult of his entire stay was to pack a mowing machine from Old Faithful all the way along the Firehole River to a meadow beyond the Kepler Cascades to mow hay for the elk. The larger game animals had had a difficult winter during the preceding snow, he recounted, and army officials had ordered the men in each district to guard against a recurrence of starvation among the elk particularly.

Colonel Denton, who is retired, after making a tour of the United States plans to return to his home in Honolulu.

Two interesting Indian visitors to Yellowstone were Chief White Hawk, Nez Perce Indian, and the Chief of the Bannock Indian Tribe. When 16, Chief White Hawk took part in the famous battles between United States soldiers and the band of Nez Perce led by Chief Joseph.

Never a warrior, White Hawk served Chief Joseph as caretaker for the band's horses, but he recalled some of the pitched battles waged by that intrepid leader. The long 2,000-mile retreat which Joseph ordered after his band had disagreed with the whites over treaty matters, led them through the heart of the Yellowstone region. Only a few of the landmarks remained in White Hawk's memory. He remembered the Madison River where it forks into the Firehole and the Gibbon. He remembered the Fountain geyser as "the big steam" which had awed and frightened him as a boy. But he could not recall the famous Nez Perce trail which has now become a landmark.

The Chief of the Bannock Indian Tribe in charge of the reservation at Fort Hall, Idaho, says that the Yellowstone was often visited by his grandfather.
Refuting the tradition that Indians shunned the park because of their fear of an area where geysers spouted and pools boiled during winter and summer, this Chief stated that his people went there often to spend the winter. Standing on the shore of Yellowstone Lake at West Thumb, he pointed to some of the boiling pools and geysers that line the area. "There my forefathers cooked their meat. And the story about men cooking fish right out of Yellowstone Lake by putting them into the Fishing Cone, that is true, too, for my people cooked their food that way in the winter time."

Custodian Turnbow of the Arches National Monument reports that Prof. Larry M. Gould of Minnesota visited the Monument on August 3 and 4 and during his stay took a number of photographs which will be published in a forthcoming issue of the National Geographic Magazine.

Hon. Michael Mac White, Envoy Extraordinary and Minister Plenipotentiary of the Irish Free State, with Mrs. Mac White and their son, Oein, were visitors to several of the national parks and monuments in the West.

Hon. James A. Farley, Postmaster General, Mrs. Farley and Ambrose O'Connell, Executive Assistant and Secretary to Mr. Farley, took in the beauties of Yellowstone, Grand Canyon, Muir Woods and Hawaii on their recent western trip.

Dr. H. A. Brouwer and Herman Cansen of Amsterdam University, Holland, paid a visit to Yellowstone to make a study of rhyolite, its origin and special characteristics. Dr. Brouwer stated that Yellowstone is one of the few spots in the world where the rhyolite flow has been of such an even nature.

Mr. and Mrs. John Boettinger, son-in-law and daughter of President Roosevelt, recently vacationed for two weeks in the Two Medicine region of Glacier National Park.

Former Director Albright didn't forget the national parks and monuments this summer. During August he traveled 2,000 miles in New Mexico with his business associate, T. M. Cramer of Carlsbad. They took in White Sands, El Morro, Chaco Canyon, Aztec, Sunset Crater, Wupatki, and Petrified Forest National Monuments as well as Mesa Verde, Carlsbad, and Grand Canyon Parks.

William O. Owen, member of the first party to ascend the Grand Teton in 1898, was a visitor to Grand Teton National Park early in August. He also visited Yellowstone.

Just one day before the fatal crash at Point Barrow in which they lost their lives, Will Rogers and Wiley Post flew from Fairbanks to Mount McKinley National Park, arriving at Savage River Camp at noon on August 14. They stopped on the field for ten minutes, then continued their flight on to Mount McKinley, viewing the park from the air.
On August 15 there was beauty everywhere in the Carlsbad Caverns, for on that day Superintendent Boles had a host of beautiful visitors in his beautiful cave — twenty-six young ladies from New Mexico, Oklahoma, and Texas, each one of whom had won a beauty contest in her own community.

Four interested visitors to Carlsbad Caverns on August 28 were Mary, Mona, Leota and Roberta Key, 20-year-old Oklahoma quadruplets.

Director Robert Fechner, in charge of Emergency Conservation Work, spent several days in Acadia in mid-August. Earlier in the month Director Fechner visited Colonial National Monument.

Judge and Mrs. Louis C. Cramton recently paid a visit to Colonial National Monument.

BOOKS AND PUBLICATIONS OF INTEREST

BOB FLAME, ROCKY MOUNTAIN RANGER, by Dorr G. Yeager, Dodd, Mead & Co., Inc. $2.00

Those who followed the exciting adventures of "Bob Flame, Ranger" in Yellowstone National Park will be glad to learn that Dorr Yeager has a new book "Bob Flame, Rocky Mountain Ranger" just off the press.

The two Bob Flame books are as different as the parks in which the scenes are laid.

Instead of keeping people from walking into hot pools and poking their heads into geysers about to erupt, as in the Yellowstone, in Rocky Mountain Park Chief Ranger Bob Flame searches and rescues over-adventurous youths lost in making unguided climbs up almost unscalable mountains, with treacherous chasms and ice fields; he directs man-hunts for poachers intent on stocking their larders — and perhaps nearby butcher shops — with deer and elk meat from the park herds. As in Yellowstone he patrols on skis, but over the backbone of the continent instead of across seemingly endless miles of comparatively level country.

Dorr Yeager's characters are vital, living; and the incidents he tells are colorful and convincing. The reason is, they all are real. As naturalist in Yellowstone and Rocky Mountain Parks for a number of years, he actually observed and participated in most of the incidents he relates; and his characters are real men, disguised by name and location.

He voices the philosophy of all the rangers of the National Park Service when he makes one of his characters say: "As long as there are people they'll climb the peak, or try to at least, from the most dangerous side; and as long as there are rangers it'll be their job to pick up the pieces."

The first of a Natural History Bulletin series, "Mammals of Grand Canyon" by Dr. Vernon Bailey, has been published by the Grand Canyon Natural History Association.
"Commemorative Stamps of the National Parks" by Samuel Raymond High of Sellersville, Pennsylvania, covers the series of stamps issued during July, August, September and October, 1934, as part of the National Park Year program. Park Service publications were used in compiling the data contained therein.

A second edition (300 copies) of the bulletin, "Material Culture of the Pima, Papago, and Western Apache", by Dr. Ralph L. Beals, has been issued by the Field Division of Education at Berkeley.

Limited editions of 4-page leaflets descriptive of Acadia, El Morro, and Fort Pulaski National Monument, also a 13-page pamphlet on the Fredericksburg and Spotsylvania National Military Park, were done by the multilith process in the Department's Miscellaneous Service Division. Practically all copies were forwarded to the areas which they cover.

Custodian Tom Charles attributes some of the increased travel to his monument to the fine article on the White Sands by Dr. Carl P. Russell in the August issue of the National Geographic Magazine. Says Tom Charles, "Dozens of cars have come into the monument recently with one member of the party carrying that issue of the Geographic and referring to it frequently."

An interesting 41-page mimeographed publication entitled "Famous Trees" has been issued by the United States Forest Service, Washington, D. C. In it the author, D. Priscilla Edgerton, Assistant Editor of the Forest Service, tells of trees associated with notable persons, events, and places.

This is the first of a series of 3 publications to be issued by that Service relating to trees. The second will be entitled "Big Trees" and will refer to trees notable for their size and age, while the third will be entitled "Freak Trees."

Grand Teton National Park put out its first issue of Nature Notes in August. Superintendent Edwards says credit for the issue belongs to Dr. Earl W. Count, Park Naturalist.

ABOUT FOLKS

Director Cammerer, shortly after Associate Director Demaray's return to Washington from the West late in August, left headquarters for the West to accompany members of the Senate Committee investigating parks and monuments. Ben H. Thompson, formerly of the Wildlife Division Staff and now Special Assistant to the Director, accompanied Director Cammerer.

Miss Story left for the Southwest in mid-September where she will gather material on the monuments located in that area. On her return to Washington she will write a circular covering these areas which, when printed, will be available for free distribution.
Dr. Fritiof M. Fryxell, formerly of Grand Teton National Park, has been assigned to temporary duty with the Eastern Museum Division, Washington Office.

Branch Spalding, who has been serving as Acting Superintendent of the Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park, has received appointment as Superintendent of that area.

From Park Naturalist C. Frank Brockman of Mount Rainier National Park comes word that he and Mrs. Brockman are residing at 465 Ocean Avenue, West Haven, Connecticut. Mr. Brockman will spend the winter matriculating at Yale University under a special scholarship, his studies to be along lines which will aid him in his work as Park Naturalist.

Howard Chittick of the Branch of Forestry, Washington Office, recently received a B. S. degree from George Washington University.

Dr. Ralph Beals, who served as a member of the E.C.W staff at the Field Division of Education in Berkeley for about a year, tendered his resignation in August. Dr. Beals, in addition to planning and laying out exhibits, carried on an important part of the administrative work of the E.C.W at Berkeley headquarters.

Mrs. Archibald M. McCrea of Carters Grove, Virginia, was a recent visitor in the Washington Office. She also visited Secretary Ickes, extending him a personal invitation to attend the Yorktown Surrender Celebration in October.

Several Eastern Service officials, at the invitation of Mr. and Mrs. McCrea, have enjoyed visits at beautiful and historic Carters Grove which is located on the road connecting Williamsburg and Yorktown.

Edouard Evartt Exline, Junior Landscape Architect at Great Smoky Mountains National Park, has been elected a member of the Royal Photographic Society of Great Britain. He is sending an exhibit of photographic work, which consists of four pictures taken in the Great Smoky Mountain region, to the 80th Annual Exhibition of that Society.

Dr. Carl P. Russell, in charge of Eastern Museum activities of the Service, left Washington in late September for a visit to the Field Division of Education at Berkeley, California. Dr. Louis Schellbach, Assistant to Dr. Russell, left Washington at the same time for Berkeley where he plans to remain to direct museum work in western parks and monuments.

As stated in the August issue of the Bulletin, copy of the article written by Fred H. Arnold of the Service's State Park Division, entitled "From Commercial to Recreational Forester" is appended to this issue. This article appeared in the July issue of the Journal of Forestry.
Donald E. Lee has been appointed a member of the legal staff, Branch of Lands and Use, Washington Office. Mr. Lee formerly was private secretary to Secretary Ickes in the latter's capacity as Administrator of Public Works.

Charles A. Peters, Jr. has been named Acting Assistant Director in charge of buildings, to succeed Assistant Director James F. Gill. Mr. Peters has been serving as Chief Engineer of the Buildings Branch.

Herbert L. Wooten, Chief of the Service's Accounting Division, has been named Acting Executive Officer of the Buildings Branch.

Wayne Replogle, one of the temporary rangers who did duty at Old Faithful in Yellowstone, is a Kentucky Colonel. For many years he served as director of athletics at Pikeville, Kentucky and received the Colonelcy last Spring.

Efforts are being made by officials of the Yosemite Park and Curry Company to secure Hannes Schroll, noted Austrian skier, as head of the Yosemite Ski School. Schroll now holds the American National Title in Downhill and Slalom Racing.

By Executive Order of President Roosevelt signed at the White House on July 30, Ranger William H. Nelson, of Yosemite National Park was exempted from compulsory retirement for age. Under the provisions of the Executive Order Ranger Nelson can continue to serve Uncle Sam until August 1, 1935.

Jesse L. Musbaum, Director of the Laboratory of Anthropology at Santa Fe, and Mrs. Musbaum took time out this summer for a visit to Mesa Verde National Park, their old stamping ground. Mr. Musbaum, in a letter to the Washington Office speaks of young Bob Albright, who was one of the rangers there this summer. "When I was saying goodbye to Bob," writes Mr. Musbaum, "I asked him when he was leaving and he said he had to go by the middle of August, to his great regret, adding, 'Gee, this work is swell.'" Then Mr. Musbaum says later on: "One of the most enjoyable features of our return to Mesa Verde was the dinner arranged in the messhall Sunday night by the personnel of the park who were associated with us during our regime there. Thirty-eight attended, with Sam Akkeah—a Navaho Indian foreman—being the earliest member of my forces represented. Sam is just now completing his eleventh year of service there. It was a great joy to be back among old friends in such a beautiful environment, where the flowers this year have excelled any former beauty and abundance that we have known in times past."

Allen Rinehart, Washington Office photographer, left Washington late in August for a tour of south-eastern historic areas for the purpose of securing photographs for a publication describing these reservations.

Regina M. Schmidt of the Branch of Historic Sites and Buildings, Washington Office, is now on an extensive vacation tour of the west during which time she will visit a number of national parks and monuments. 
Mrs. Frances S. Dean, Division of Public Relations, Washington Office, returned from her official trip to Wind Cave, Rocky Mountain, Yellowstone and Grand Teton National Parks full of enthusiasm for these units of the park system.

She says she was particularly impressed with the patience and tact of the rangers.

Chief Forester Coffman spent the entire month of August in the field. He left Washington August 1, en route to the Proposed Big Bend National Park area in Texas and accompanied Assistant Director Wirth and party in an examination of that area from August 4 to 8.

After leaving the Big Bend region, Mr. Coffman proceeded to Lordsburg, N. Mex., where he was met by Forester L. F. Cook and Associate Forester W. H. Wirt. Travel during the balance of August was performed in National Park Service automobile, and the ECW and other forestry and fire protection work was inspected in the Chiricahua, Bandelier, Colorado, Scotts Bluff and Devils Tower National Monuments and in the Mesa Verde, Rocky Mountain, Wind Cave, Grand Teton and Yellowstone National Parks.

The route followed also permitted a brief inspection of Chaco Canyon, Aztec Ruins and Black Canyon of the Gunnison National Monuments and of Custer State Park in South Dakota; brief inspections were also made of the work of the Bureau of Reclamation CCC camps supervised by the State Park Division at the Elephant Butte and Guernsey Lake Reservoirs and also of the General Land Office CCC companies on coal fire control work at Gillette, Wyoming.

Custodian and Mrs. Vogt of El Morro in celebration of their 20th wedding anniversary took their four children to the headwaters of the Upper Pecos across the range from Santa Fe in the Sangre de Cristo Mountains. It was there that the Vogts spent their honeymoon on snow-clad peaks in 1915. The entire party rode to timberline through carpets of wild flowers and green grass three feet high, to the tops of peaks from which the entire glorious panorama of the state's highest mountains were unfolded to their view. Custodian Vogt says, "It was a grand experience. We made the 500-mile round trip, camping out and cooking our meals on camp fires, and sleeping in our bed rolls, at an expense of $50, including the hire of 6 horses."

Mr. G. L. Baker of Vicksburg National Military Park met with a heart-rending accident early in August.

Mr. Baker had taken his family to Alligator Lake, a few miles out of Vicksburg, to spend the week-end fishing. Sunday morning as Mr. Baker lay sleeping in his blankets, a careless motorist drove over him. X-ray pictures revealed that Mr. Baker had a crushed vertebra, and it will probably be some time before he will be able to return to his duties at the park.

Kenneth Flewelling has been designated as technician in charge of CCC activities at the California Pacific International Exposition in San Diego by Ansel F. Hall, Chief of the Field Division of Education.
George L. Collins, who has been serving as the Interior Department's representative at the San Diego Exposition, is now at Boulder City where he has charge of the Service's three Civilian Conservation Corps camps.

Temporary Ranger Erik Reed, traveling Ranger for the Southwestern National Monuments, resigned late in August. He received an ECW appointment as Assistant Archeologist in the State Park Division, headquartered at Goliad, Texas.

Woodrow Spires, who has served as ranger and guide at Casa Grande intermittently for the past two years, has been appointed trail foreman at Tonto National Monument.

Evon Vogt, son of our Custodian at El Morro, has been elected President of the senior class at Gallup High School.

Dr. A. C. Boyle has been designated to serve as Acting Custodian at the Dinosaur National Monument.

Temporary Ranger E. W. Lewis of Aztec Ruins National Monument left late in August for a teaching position in Texas.

Superintendent Guy D. Edwards is one of the Directors of the Izaak Walton League.

Charlie R. Steen, who has served capably as Temporary Ranger and Trail Foreman at Tonto National Monument for the past year, has been appointed Park Ranger at Casa Grande National Monument.

Ansel F. Hall, Chief of Field Division of Education, Jesse L. Mussem, Director of the Museum of Anthropology at Santa Fe, and Superintendent Allen of Hot Springs National Park were recent visitors to the Washington Office.

Ernest P. Leavitt, Superintendent at Mesa Verde National Park for several years, has been appointed to serve as Superintendent of Lassen Volcanic National Park. He succeeds Lynne W. Collins, who was dismissed by Secretary Ickes following an inspection of park records by general accounting representatives which disclosed serious irregularities of accounts.

In a note just received from Major William M. Robinson, Jr. he says that his headquarters as Sub-District Inspector-Instructor, District C-4th Corps Area, are at Pikeville, Tennessee.

Major Robinson served as the first Superintendent of Colonial National Monument.
Assistant Director Bryant as he went "around the loop" this summer, found that his staff of naturalists was rather "shot". He found Ranger Carl Sharpsmith in the hospital at Yosemite, recovering from injuries received in a fall while climbing Mt. McClure. Acting Park Naturalist Swartzlow of Crater Lake was in the Veterans Hospital at Roseburg, Oregon, with a sacro-iliac displacement, and when he got to Glacier, he found that Park Naturalist Ruhle was absent at the Mayo Brothers clinic due to a bad appendix.

Charles Herbert, who began his career as a movie camera artist in Yellowstone Park ten years ago with a series of scenic pictures on the park phenomena, returned recently to make a series of camera studies of CCC activities, for "The March of Time", a news reel feature. Herbert, who had been guided through the park on his first camera venture by Dick Randall, veteran dude rancher and guide, renewed his acquaintance at Old Faithful where he found Randall in charge of saddle horses and cowboy guides as head "dude wrangler." Herbert was formerly with Fox Films, having made a series of scenics under the title of "The Magic Carpet."

Olinus Smith, of the Engineering Division, Washington Office, is now Colonel Smith of Kentucky.

**BIRTHS:**

On July 23, a son, Weston Miller, was born to Mr. and Mrs. Foster M. Warwick at Great Smoky Mountains National Park. Mr. Warwick is a Junior Landscape Architect at that park.

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A novel announcement comes in from "Cozy" and Mrs. McSparron of Chin Lee, Arizona. It reads as follows:

"The stork again soars over Thunderbird Ranch announcing the arrival of Marion Constant McSparron Tuesday, August 27, 1935 7 pounds, 11 ounces"

And the card has a photograph of the Ranch with a stork bearing little Marion Constant sketched in above it.

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Assistant Park Engineer and Mrs. Francis Gascio of Vicksburg National Military Park are the proud parents of a baby girl, Ann, born August 27.

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A baby girl was born to Mr. and Mrs. Tom Lane of Carlsbad Caverns National Park on August 6. Mr. Lane is a member of that park’s trail maintenance crew.

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Ranger and Mrs. E. E. Williamson of Grand Canyon have a son, Robert Mace, born August 23.
On July 8, Mr. and Mrs. Sam Brown announced the birth of a son, David. Mr. Brown is a member of the permanent force at Carlsbad Caverns National Park.

MARRIAGES:

On July 25 Ranger Thomas J. Williams of Sequoia National Park and Aileen Lawler were married at Berkeley, California. There are now no bachelors on that park's permanent ranger force.

George T. Wilkinson, Jr., of the Division of Accounts, Washington Office, and Lillian M. Morris of Washington, were married at Forestville, Maryland, on August 3.

Another Washington Office marriage was that of Horton S. Allen, connected with Assistant Director Wirth's Office, and Miss Evelyn Pepper of Rockville, Maryland. The marriage took place on August 10 in Rockville.

R. A. Wilhelm, Associate Landscape Architect at Great Smoky Mountains National Park, and Miss Margaret Wear of Charlotte, North Carolina, were married July 26 at the Catholic Parish House, Towson, Maryland.

Frank T. Gartside, Assistant Superintendent of National Capital Parks and Frances M. Morris of the Horticultural Division, National Capital Parks, were married at Hagerstown, Maryland, on September 11.

Margaret Stokes Carroll and Olaf Theodore Hagen were married on September 10 at Natchez, Mississippi. Mr. Hagen was assigned to Vicksburg National Military Park as Historical Assistant in 1933. Since that time he has had several assignments, one of which was the historical research work on the Natchez Trace. After a visit with his family in Minnesota the couple plan to go to California and the western parks to cover Mr. Hagen's new assignment as Chief, Western Division, Branch of Historic Sites and Buildings.

Miss Elizabeth Morris of New Haven, Connecticut, and Custodian Earl Jackson of Bandelier National Monument were married in August. Enroute from Connecticut to the monument they stopped off in Washington where, as Custodian Jackson puts it, "it was so hot one's shoes curled, but we had a wonderful time. The reason can be laid at the door of the National Park Service offices. Mr. Tolson and Charley and Mrs. Brill took it upon themselves to treat us like visiting royalty, and they certainly made that Washington visit fascinating and enjoyable. Had the pleasure of meeting Mr. Cammerer, renewed acquaintances with Carl Russell and Louis Schellbach, and met several other Park Service folk. That Washington bunch is all right, and believe me they do the work. If any of you fellows have the idea they don't work in Washington, you have two more thinks coming."
"Going west we visited Shenandoah National Park and the Luray Caverns, and met Superintendent Lassiter. We left the park by the famous Skyline Drive."

"In Tennessee we drove through a corner of Great Smoky Mountains National Park. That is one of the most beautiful places God ever made. Every foot of that country is fascinating to one who has always been able to count the trees in his own state."

Anna Elizabeth Cox and John Jacob Walker were married in Annapolis, Maryland, September 16. Mr. Cox is connected with the Service’s Photographic Laboratory.

Virginia Warden and Fred Rowe Morrell of the Service’s State Park Division were married in Washington September 24.

The bride’s father, Oliver S. Warden of Great Falls, Montana, is a director of the United States Chamber of Commerce, Democratic National Committeeman from Montana and publisher of the Great Falls Tribune.

Mr. Morrell, an ex-Yellowstone Park Ranger, is the son of Fred Morrell, Chief of the Division of Public Relations, United States Forest Service.

DEATHS

Mr. James F. Gill, Assistant Director in Charge of the Branch of Buildings, passed away September 5 in Danbury, Connecticut.

Mr. Gill, accompanied by Mrs. Gill and friends, had motored to Canada and were returning to Washington when he suffered a heart attack.

He was well liked by all who knew him and did considerable charitable work, of which his friends knew little. When news of his death was received, the folks in the Service collected more than $300 for a floral tribute but only about a fourth of this sum was spent for flowers. The remainder was contributed to the St. Vincent de Paul Society, a charitable organization of which Mr. Gill was an officer. Mrs. Gill said that nothing would have pleased him better than to have the money dispensed in such a manner.

Mrs. E. L. Bryant, mother of our Assistant Director, passed away at her home in Pasadena, California, on August 25. She was 84 years of age. Fortunately Dr. Bryant was able to visit with her just a few weeks prior to her death.

Dr. Walter Hough, 76, head curator of anthropology, at the Smithsonian Institution, and father-in-law of Assistant Director Tolson, died on September 20.

Dr. Hough was internationally recognized in his field and belonged
to nearly all the prominent national scientific organizations having headquarters in Washington, as well as a number of foreign organizations. He had achieved prominence for his research in the evolution of lighting. In connection with his many expeditions in the American Southwest and Mexico, he had written a number of books on the American Indian.

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Kenneth Allen, baby son of Mr. and Mrs. Kenneth H. Pennebaker, died of heart failure on July 31. Mr. Pennebaker is the cost accountant in Yosemite Park.

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Mr. Sidney Logan of Kalispell, Montana, died on August 25.

Leader of the opposition in his section to enactment of the law calling for the establishment of Glacier National Park, he later admitted that it was one of the biggest mistakes of his life and during the last 15 years he has been one of the best friends of the National Park Service in Montana.

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Mr. Joe Swindlehurst of Livingston, Montana, who was connected with the camping operations in Yellowstone Park in the early days, died in Livingston on August 20.

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William Fisher, who for many years was employed with the Yellowstone Park Transportation Company, died at Livingston, Montana, on August 25.

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Ex-Geological Survey employees, now in the Park Service, who knew Tom Pendleton, will be interested in the following poem written by his father, the late S. A. Pendleton, sometime in the 1890's.

Glacier (Yosemite) Point

Thou who art privileged to reach this place,
Lift up thine eyes, and homage do to God!
Here thou canst feel thou art the veriest clod,
Held by His finger, trembling over space.
Behold! how awesome; poised here by His grace
Three thousand feet above Yosemite's sod.
Observe the paths by human feet untrod
Down which the seething waters wildly race,
Into the fearful chasm's dread abyss,
With frightful leaps, down dizzy heights they fall
As souls plunge headlong to their awful curse!
Search through the earth there is no scene like this
Whose weird sublimity mankind shall call
The grandest altar of God's universe.

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* 34 *
WITH the great nation-wide impetus and encouragement given to the outdoor recreation movement during these days of national readjustment and emergency conservation activity, there has developed an unprecedented demand for and an inadequate supply of forestry trained men with the recreational viewpoint. There has also been an unprecedented demand for foresters generally, but the class shortage has been proportionately greater in the recreational than in the other fields of forestry. For the most part, this is due primarily to the fact that the country's foresters have been prepared for careers in economic forest management, silviculture, and forest utilization. Some of our leading forestry colleges have previously foreseen this sudden expansion in recreational development and have responded accordingly, while others have not as yet introduced recreational forestry studies into their schedules of courses. At any rate, it is sufficient to indicate here that there is now, and probably will continue to be in the future, a growing need for outdoor recreation-minded foresters. In the meantime, however, until the forest schools can meet this demand, how will the immediate requirements be answered?

Probably because of the breadth of his academic background the forester, of all professional men, is one of the most adaptable. It is logical, therefore, that part of this demand should be, as it actually has been and will continue to be, met satisfactorily by the adaptation of a few silviculturists, management foresters, forest utilizationists, and other specialized foresters who have the proper aptitude and inclination toward recreation in the forest.

It is not contested generally that there are several fundamental and essential differences between what may be termed commercial forestry practice on the one hand, and recreational forestry practice on the other. What is sometimes contested, however, is the question of what constitutes these differences. It would be interesting and appropriate, therefore, to answer this question by an analysis of the change of professional viewpoint that actually takes place when an erstwhile commercial forester turns toward the field of recreational forestry. What well grounded concepts must he modify or perhaps abandon completely? What old ideals must he recast or even discard, and what new ones will he substitute? In short, which of his former views may he retain, which must he transform, and which must he renounce entirely? How drastic is this metamorphosis which he undergoes? And after the transition is complete, does he emerge from it all still essentially a forester?

THE CONCEPT OF THE NATURAL FOREST

In "going recreational" a commercial forester first of all comes face to face with the paramount issue: How shall he regard the forest now, and what shall be its new symbolism to him? With
this problem once successfully overcome, the remainder of his transition evolves by a series of logical cor-
relaries to this master principle. He surmounts this first and all-important difficulty when he ceases to regard
the forest as a source or production factory of tangible forest products
which, if properly regulated, may be harvested periodically on a sustained yield basis. Instead, he looks upon
the forest as a natural reservation devoted to the preservation of native flora and fauna in their normal
ecological environment. He sees the forest as a living community which is both harmonious and competing within
itself at the same time, but which competition he has no desire to re-
lease. He recognizes the many and varied ecological interrelationships whose sensitivity brings response to
every stimulus, and whose delicate balance may be disrupted by thought-
less acts of man or by other exterior influences. He sees all the native tenants of the wilderness as playing
a definite role with respect to one another and all bearing a definite relationship to the whole. He has no
preconceived prejudices and makes no discrimination between one native
species and another, nor between one individual and another of the same
species. His attitude toward all things native is that of "live and let
live," of permitting natural selection by "Survival of the fittest." The
vine is not taboo because it chokes the tree. He views the entire forest
community as an association in which all endemic life and objects have a right
to be and are an integral part. He resents the intrusion of the exotic.

In time he subscribes fully to a policy which calls for preservation of
natural forest conditions or which fosters the return thereof where they
have been disturbed. Thus, high stumps and logging slash, that evi-
dence the work of man, are seen as objectionable. Pruned or artificially
shaped trees in the forest are dis-
tasteful and create a "beer garden
effect." He develops an appreciation
of and a reverence for the genuinely
natural and the aesthetic in the forest.

FOREST STAND IMPROVEMENT
INCONGRUOUS

As a recreational forester he comes to realize that forest stand
improvement is not an appropriate nor
a necessary form of treatment in the
forest that is to be preserved for
its natural features. Accordingly,
he no longer prescribes measures such
as weeding, thinning, or selective
or improvement cutting. Except where
abusive treatment in the past has
brought about such abnormal conditions
that some assistance by man is neces-
sary in an effort to restore normalcy,
he is satisfied with the natural distri-
bution and stocking within the
stand, with the composition of the
stand, with the forms of the individual
trees, and with their rates of growth.
Thus the erstwhile poor commercial timber
species are looked upon as favor-
ably as the more marketable species,
and they cease to be scorned as "weed
species." The "wolf tree" is not
girdled or removed, regardless of how
oppressive it may be to other individ-
uals that may be struggling for ex-
istence beneath or about it. The
sharp tapering, short boled individual
is not taken out to make room for the
more thrifty or better formed individ-
uals. The "stag headed" tree is not
fellad because it has passed maturity,
has ceased to be an efficient producer,
and is usurping growing space that
should be available for other growth
that is more economically desirable.

There are no crop trees, and for-
est increment is merely an outward
manifestation of the phenomenon of
growth. It is not necessary to favor certain individuals in the stand at the expense of others. No native species is outcast from the forest because it is too stunted, misshapen, or deformed, too crooked or leaning, too limby or delinquent, or too thriftless or decadent to permit it to remain. On the contrary, it is usually trees of this nature that are most interesting to the visitor, and that lend character and richness to the landscape by their grotesqueness.

Dead trees are no longer looked upon by him with disfavor simply because they are dead trees and have ceased to grow and produce wood. Knowing that natural forces are constantly at work in the forest producing decay and death as well as growth and reproduction, he expects to see a number of dead trees occurring naturally and scattered about in the forest. Some, however, may be in such condition and so located that they may be dangerous from the standpoint of spreading fire should they become ignited. Others located along roads, trails, or in camp grounds, or other intensively used areas may endanger life and property, or obstruct access should they fall. In the interest of fire protection and safety, therefore, he may prescribe that such dead trees be felled. Abnormally large numbers of dead trees may occur in certain areas, such as those swept by fire or ravaged by the chestnut blight disease or the western pine beetle. For the sake of furthering the return of more normal appearances, the recreational forester may recommend the cutting of some of the dead trees in such areas. He recognizes, however, the value of the dead tree as an existing or potential abode or nesting site for birds and other forms of wildlife and would not, therefore, seek to remove it without due cause. Likewise, he is aware of the importance as cover for wildlife of the fallen or recumbent dead trees, or dead parts of trees in the forest, and he weighs these considerations along with the requirements for fire protection.

PLANTING AND NATURAL REGENERATION

The forester becomes patient with nature, knowing that if given protection against her worst enemies he may be confidant of her ability to work out her own destination satisfactorily. He recognizes the use of artificial means to reestablish forest cover as a possible expedient that need be resorted to only where nature exhibits difficulty in recovering from abuse. Even though slower, and even though the first forest types to become established may be only temporary, he holds that where natural regeneration is successful, it is preferable to artificial reforestation because the resulting forest is more natural in composition by species, and in distribution of individuals and age classes. When he plants, he does not plant in rows, nor does he space mechanically or regularly throughout the plantation. He tries to effect a natural frequency of distribution and a natural composition and arrangement, using none but local species. He observes that often after serious abuse of an area, such as by destructive logging followed by fire, the former forest type cannot be restored immediately at man's will by merely planting. It is apparent to him that after such maltreatment one or more essential temporary vegetative type successions may be required in many situations before the site is repaired and restored to the state where it is able again to support successfully the former type of vegetative cover. Accordingly, in instances where natural restocking is inevitable, he is content to protect and wait, for to plant might result in utter failure sooner or later. Moreover, he does not have as his governing objective
that of making every idle or open acre produce forest. He appreciates that a large area of solid and unbroken forest may be decidedly monotonous and tiresome to the visitor, and that for aesthetic, scenic visibility, wildlife, and utilitarian purposes a certain amount of open land is highly desirable, if not absolutely essential. As a matter of fact, he is far-sighted enough to conceive of a coming time when, in response to his protective influence, natural reproduction may encroach upon open areas, at which time he may be confronted with the problem of keeping open areas that for aesthetic or recreational reasons should remain open.

In the event that his recreational area requires the establishment of a forest nursery, the recreational forester may need to make use of all knowledge of nursery practice that he might have acquired as a commercial forester. In this he will be concerned primarily with the propagation of native species, with the possible exception of a few ornamental varieties grown for the use of the landscape architect in his more or less formal treatment around buildings or in other developed centers.

His conversance with silvics and pathological aspects of woody plants should enable him to render helpful assistance in the establishment, grouping, and arrangement of plantings. He may be called upon to furnish information on the soil and other site requirements of tree and shrub species. He should be prepared to answer questions concerning the tolerance, size characteristics, and habits of growth of the species, and of the disease relationships between them, or between them and their environment. A background of good planting practice will be a great asset to him, and may contribute much toward the success of planted stock in his area.

FOREST AND TREE PROTECTION

Since the foremost activity of the recreational forester is that of forest protection, he will require all of his previous experience in this field of endeavor. He must pursue practical fire, insect, and disease control to the point where it affords ample protection, if such is possible, but not to the extent that it may destroy that which he seeks to safeguard. He must organize, equip, and train an effective fire protection organization. His artificial fire breaks are placed where they are definitely essential for adequate protection, but where they are not too obvious from the scenic standpoint. They are of no greater width than the local conditions necessitate. He seeks to prevent them from being ugly scars upon the landscape by making them follow a somewhat irregular rather than a rigidly straight course, by allowing their width to vary at times, by leaving harmless trees within the strip, and by barring no more of the mineral soil than the situation requires, or than can be reasonably maintained in the future.

He designates for fire hazard reduction only those areas wherein a definitely severe hazard is susceptible to a definite risk which may cause a fire to start. He recognizes that hazard and risk constitute a danger only when they may occur together, and not when they exist alone and by virtue of themselves. He warns against aimless intensive forest clean-up because of the evils and uselessness of this treatment to the forest. He is mindful that repeated intensive forest clean-up robs the soil of that constant replenishment by organic substances which is essential to the production of thrifty forest growth. He considers that from a practical standpoint intensively cleaned-up conditions cannot be maintained in the forest, and that so long as there will be needles
or leaves on the forest floor it is possible to have a fire. It is obvious to him, therefore, that forest clean-up will not prevent the occurrence of fire, but that it will reduce the intensity of a fire and facilitate its control. He realizes that forest clean-up treatment involving the actual removal of inflammable material is not always the only method by which fire hazards may be effectively reduced, but that, under certain forest, climatic, and topographic conditions, equally satisfactory and often more desirable results may be accomplished by flattening and leaving the material close to the ground.

He is interested in keeping to a minimum the mileage of truck trails that is necessary to provide adequate protection. He concedes that the width, grade, and other standards of such truck trails need be no greater than reasonable protection requirements demand. He is interested in designating, on the basis of visibility studies, the minimum number of lookout points that are needed for detection purposes. On such points he desires to erect effective lookout structures, but which at the same time will be as harmonious and unobtrusive in the landscape as possible.

Like the commercial forester, in cases of destructive native tree insect pests or diseases which attain epidemic proportions, the recreational forester's aim is to reduce the intensity of peak epidemics by directing appropriate control measures, knowing that it is physically impossible to stamp out such tree-destroying agents completely. He recognizes the urgency of exterminating destructive exotic insect pests and of extirpating harmful exotic fungi, if possible, before they have had an opportunity to establish a firm foothold in their new environment. In order to confine their ravages to the smallest possible area, he is energetic to wage war upon these enemies after they have become established. In eradicating the alternate host plants of certain disease-producing fungi, notably Ribes in the control of the white pine blister rust, he appreciates that, in some recreational areas, the alternate host may be more desirable, aesthetically or otherwise, than the species which are ordinarily protected against the disease.

As a recreational forester he may have occasion to exercise his previous training in forest type mapping, and in reconnaissance "spotting" work in connection with insect or disease control operations.

He inherits and acquires to an even greater degree the forester's traditional condemnation of grazing of domestic stock in the forest. He sees its evil influences as incompatible with recreational use. But more than this, however, he is called upon to safeguard the forest against man himself, and the evils that man brings with him into the forest. Intensive human use of certain recreational sites, such as camp grounds, is very destructive to the vegetation therein, due to direct mechanical injury to the vegetation, or to indirect injury by influences which impair the soil. He must devise means of regulating the use of these areas in order to safeguard one of the very features that makes them adaptable to such use. Through his ever-exploitive malpractices, man has also induced erosion, the control of which is of vital concern to the recreational as well as to the commercial forester.

On the way to becoming a recreational forester, he may need to acquire a knowledge of treatment of individual trees for their preservation in a state of health. Certain trees or
groups of trees in an area may be irreplaceable, and hence warrant special care in an effort to prolong their life. This special treatment may be justified by virtue of some outstanding characteristic that the individual tree or group of trees may possess, due to historical associations, or to high intrinsic value accruing to aesthetic, scientific, or physical qualities, or to the tree or group as an oddity.

KNOWLEDGE OF WOOD AND TIMBER SALVAGE

His formerly gained supply of knowledge of structural timbers, of the durability, the physical and chemical properties, and the identity of various woods used in all types of construction, will not have been gathered in vain nor lost through disuse. His technical advice in these matters will be sought often by the engineer and the architect in connection with the construction of recreational and utility structures and other physical improvements in the recreational area. His counsel will be valuable also in the preservative treatment of structural timbers.

Often it will be possible, economical, and altogether desirable to salvage timber produced within the recreational area in cases where abnormally large quantities of it have been killed, or so badly damaged that it will die by storm, fire, insects, disease, or other destructive agency. In addition to providing for use quantities of wood products which otherwise would be lost, a further advantage of this work is that it will relieve more quickly the distressed appearance of areas so affected and will favor the earlier return of more normal conditions therein. It will be the forester's responsibility to conduct such salvage operations, and they will call forth the best of his knowledge of good logging practice so that no undue damage is done, so that the slash is disposed of properly, and so that conditions will be favorable for the establishment of new growth. Campers and picnickers require a constant supply of fuel wood, but there is a limit to which the forest of a recreational area can be expected to furnish it. This limit is being exceeded in many places, and the present need for fuel is fast becoming a very acute problem in certain recreational areas that have been used for some time. The extent to which an area should provide its own fuel wood may well be a question for the forester to decide, but the answer in many cases will have to be wood from elsewhere, or charcoal. Meeting the demand for fuel does not justify the destruction of the recreational forest or its natural appearance.

FINAL CONSIDERATIONS

He sees the impermanence of things about him, and he realizes that the conditions which he produces today will not be the same tomorrow. In other words, his operations are guided by practical and farsighted considerations which are tempered by a recognition of the inevitable and unavoidable problem of future maintenance. Thus, in addition to other elements, the value of present work is also gauged by the probability or assurance of continued upkeep, for if that which is done now will be allowed to revert in a short time to its former state or to worse than that, the work has little worth.

His attitude toward the other fields of activity in the recreational area, such as that of the landscape architect, the engineer, the historian, the naturalist, and others will be one of respect and cooperation.

Lastly, as a full-fledged recre-
ational forester, he is not impelled by a dominating desire to create effects in the forest purely for the sake of such effects, or for their edification of him as an individual, or of his profession, or as vaunted evidence of what man can do if he so chooses. He does not delight in bending nature to his will, nor does he boast that he can do this with ultimate success in the end. He esteems and elevates the simplicity and the genuineness of the natural condition far above the man-made or man-induced effect. He regards the forest with an exclamation of, "See the beauty that nature has bestowed upon this place!" rather than of, "See the effects that I have created here!"

Surely a man whose work is thus dedicated to the protection and preservation of that which nourishes the mental and inspirational needs of man is just as much a forester as he who provides for man’s material wants; for both mental and physical sustenance are essential to life. Surely such a man is truly a forester, but before he is a forester he must be something broader. Ahead of any pettiness of professional pride he must place his higher duty toward the general welfare of his recreational area as a place dedicated to the preservation of nature for the enjoyment of the people, in so far as such preservation is consistent with reasonable use for wholesome outdoor recreation.