

Oct 1934



# AROUND THE STATES

WITH  
THE AMERICAN FORESTRY ASSOCIATION



## Shelterbelt Project Hits Snag

The shelterbelt project to gird the plains states with a hundred mile belt of trees in order that farmers may better cope with future droughts has come to grips with a drought on its own account. Funds with which to start the huge undertaking and to carry forward the work during the first year have not been forthcoming. Cause of the sudden drying-up of funds after announcement from the White House that President Roosevelt had allocated \$15,000,000 under the Drought Relief Act has not been revealed by the Department of Agriculture. Upon inquiry, however, the Forest Service admits that there is a temporary hold-up and a cessation of action first started to set up an organization and begin work on the ground. An atmosphere of uncertainty has prevailed for the past several weeks. Fred W. Morrell, administrative director, and Raphael Zon, technical director of the project, were suddenly recalled to Washington late in August after they had taken the field to get the project under way.

From other sources it has been learned that the undertaking has been rendered more or less prostrate, temporarily at least, by a ruling by Comptroller McCarl that the expenditure of funds as contemplated by the shelterbelt project are not authorized by the Drought Relief Act passed by Congress June 19th last. This act made available \$525,000,000 to provide immediate relief in the drought stricken states, and it was from this fund that President Roosevelt allocated \$15,000,000 for initial financing of the shelterbelt work. The legal basis of the Comptroller's refusal to approve the expenditure is not definitely known but it is believed to be on the grounds that much of the expenditure of funds will not contribute to immediate relief and that completion of the project sometime in the future commits the Government to future expenditures not contemplated by the act.

On September 23, it was reported that the Comptroller had approved of an allocation of \$1,000,000 to be spent in shelterbelt work in so far as it will contribute to immediate relief. With this amount, the Forest Service is proceeding with the preliminary work of seed collecting, preparation of needed nurseries and planting of seed for nursery stock.

### McArdle Named Dean of Idaho Forest School

Dr. Richard E. McArdle has been named dean of the school of forestry at the University of Idaho to succeed the late Francis Garner Miller.

Dr. McArdle was formerly Chief Silviculturist at the Pacific Northwest Forest Experi-

ment Station at Portland, Oregon. He graduated in forestry from the University of Michigan in 1923 and was granted his Doctor's Degree from the same university in 1930. Associated with the Northwest Forest Experiment Station since 1924, he assumed charge of forest fire research in 1930 and later became head of the section of forest management.

Dr. McArdle was born in Lexington, Kentucky, February 25, 1899, saw service in France during the World War, has traveled extensively in the forest regions of this coun-



Richard E. McArdle

try and is author of numerous technical articles and reports on forestry. His latest work describes a complete set of inexpensive instruments for estimating and forecasting fire danger. In the field of detection for fire control his notable contributions have been made possible through his ability to enlist the cooperation of physicists and other specialists.

### South Carolina Develops Subsistence Fire Lookouts

Subsistence farming and the protection of forest lands from fire have been combined in the State of South Carolina as a means of providing fire protection to timberlands located

in the thirteen coastal counties in the eastern section of the State. One-hundred-foot fire towers are being erected on small ten-acre tracts of land located at strategic points in the timbered areas along the coast. Under the program followed, the farms are turned over to men who agree to act as fire lookouts during the fire season in return for a nominal salary and the privilege of farming the small tracts of land.

The program calls for the completion of approximately fifty of the subsistence farm-fire towers. The work is being done by the men of the Civilian Conservation Corps under the supervision of the United States Forest Service and the State Forestry Commission. The necessary lands have been donated in most cases by land owners in the areas to be protected. The State Forestry Commission will hold title to the property.

"The State Forestry Commission solicited and secured without difficulty ten-acre tracts of land," State Forester Smith said in outlining the details of the new program. "These areas are being fitted up as small farms. The areas are fenced and some ten acres prepared for cultivation. A neat four-room house with a large front porch and screened back porch has been built or is being built on each tract for the towerman. Good water is being provided, as well as a barn and suitable outbuildings. Today, we can obtain mighty capable towermen for fifteen to twenty dollars a month in addition to a house and the privilege of farming the land.

"Each towerman must be a dirt farmer with at least five years' farming experience. He must be married and have children. He must have a cow, a mule, pigs and chickens and necessary farm implements. All fertilizers produced on the place must be returned to the soil. He can raise only what he needs for his family and his stock. His 'cash crop' is the 100-foot fire tower which stands in the park area a short distance from his house and which will yield him from \$180 to \$240 a year."

### Kaibab and Tusayan National Forests are Consolidated

President Roosevelt by executive order has consolidated the Kaibab and Tusayan National Forests, located in northern Arizona, into one unit to be administered from Williams, Arizona. The name of the enlarged unit will be the Kaibab National Forest. Supervisor Walter G. Mann of the old Kaibab unit, with offices formerly at Kanab, Utah, has been designated supervisor of the enlarged forest and has assumed administrative direction. Former supervisor G. W. Kimball of the Tusayan has been transferred to the district office at Albuquerque.

RICHARD E. MCARDLE  
5110 RIVER HILL ROAD  
WASHINGTON, D. C. 20016

October 6, 1976

Chief  
Forest Service  
U. S. Dept. of Agriculture  
Washington, D. C. 20250

Dear John:

During our recent telephone conversation I mentioned the desirability of recording the repeated attempts of stockmen to gain control of grazing privileges on National Forest ranges. So far as I know this history has never been written except in bits and pieces. The records are widely scattered and some may already have been lost.

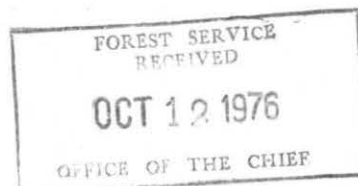
The subject/<sup>arose</sup>when I happened to find a copy of Bernard DeVoto's "The Easy Chair". The last 100 or so pages of this book are on the efforts to capture NF ranges. An account of Frank Barrett's "wild west show" is on page 274. No Chief of the Forest Service should undergo the humiliation that Lyle Watts did. Barrett tried to repeat it with me but failed.

I am sending you my copy of DeVoto's book for inclusion in your History Unit's collection if you so want it. I once tried to get Walt Dutton to write this history but he said it was too much trouble. Perhaps you can think of someone.

Sincerely,



As you can see, I still  
have trouble in constructing  
sentences. But if I live to 100  
I have 22 years to learn!



Remarks of Former Chief Richard E. McArdle, Forest Service, USDA

(Telephone conversation August 14, 1978 with Frank Harmon, History Section):

RE: *The Pine Tree Shield* by Elizabeth Flint

He said he knew Howard Flint, former fire and timber chief of Region One. He said Flint was another "Osborne" (inventor of the fire finder), who was inventive, had many original ideas, wanted to go his own way, and had difficulty merging with the overall programs of the Service. As a result he had many sharp conflicts with others in the Service. (See his wife's book, The Pine Tree Shield.)

McArdle said Flint hired him at one time, then forgot about it, and was very surprised to see him arrive for work. McArdle formed a party with Carl Gustafson, later chief of fire in Region 1, under Howard Flint, in a ranger district on the middle fork of the Clearwater River in central Idaho, on this project.

McArdle noted that Mrs. Flint used the book to sharply criticize the Forest Service, and added that her accounts of happenings should be considered in the light of her probable bias. He considered her accounts to be often exaggerated and unreliable.

(Telephone conversation August 24, 1978, McArdle and Harmon):

McArdle also said he knew Evan Kelley, Regional Forester in Region One, and later in Region Five, very well, and "never had any trouble with him". (Flint, Fickes, and others have recorded sharp differences and criticism with and of Kelley.)

McArdle said Clyde Fickes, who was in charge of Operations in Region One at the time, was the first Forest Service man to hire him, in 1924.

~~(Both the R-1 jobs, as they may have been the same one, must have been summer jobs, as McArdle graduated from University of Michigan in 1923 and went to work in research at the PNW Station in 1924, so he must have worked his first year after graduation in R-1.~~

McArdle file  
copy 2.  
approved by McArdle  
by phone, March 3, 1981.  
- F.J. Harmon

Biographical Sketch of Dr. Richard E. McArdle

By Frank J. Harmon  
History Section, Forest Service

Richard E. McArdle was the eighth Chief of the Forest Service, U.S. Department of Agriculture, serving from July 1, 1952 to March 17, 1962. During the previous eight years he was Assistant Chief for State and private forestry cooperative programs. His earlier work was in research.

McArdle was born February 25, 1899 in Lexington, Kentucky, and earned his B.S., M.S., and Ph.D degrees in forestry in 1923, 1924, and 1930, respectively, at the University of Michigan. He entered the Forest Service in 1924 as a silviculturist working out of the Pacific Northwest Forest Experiment Station's new headquarters in Portland, Oregon. In 1927 he took a three-year leave of absence for graduate study and teaching to earn his Ph.D., returning to Portland to become a leader in fire research. He left again in 1934 to serve for a year as Dean of the School of Forestry, University of Idaho, then resigned to become Director of the new Rocky Mountain Experiment Station at Ft. Collins, Colorado. After three years there he took the same post at the Appalachian (now Southeastern) Station at Asheville, North Carolina. In 1944 he became Assistant Chief in Washington.

During his regime, McArdle pressed for a congressional mandate for balanced management and long-range plans for the National Forests and for research. He also pushed for accelerated recreation development, intensified timber management with adequate reforestation, curbing of mining and grazing abuses, more aid for State and private forestry, and increased professionalization and upgrading of personnel. Some results were the Multiple-Use Mining Law of 1955, the Multiple Use-Sustained Yield Act of 1960, substantial increases and better balance in funds for the agency, continued improvement in conditions of its grazing lands, the new responsibility for seven million acres of Great

Plains grasslands, and higher grades for rangers and other field personnel in crucial positions.

McArdle abandoned as impractical and self-defeating a long intermittent attempt to get Federal regulation of timber harvesting practices on private lands, thereby improving relations with the timber industry, and was able to prevent the granting of vested grazing rights to livestock men in National Forests.

He was active in international forestry, was a founder of the North American Forestry Commission, and helped organize and served as president of the Fifth World Forestry Congress in Seattle, Washington, in 1960. After retirement he was executive director of the National Institute of Public Affairs, lectured at various colleges, and was an official of a forest industry group. He has served on the boards of various forestry organizations, and has received numerous awards, from the President, the Department of Agriculture, National Civil Service League, Public Personnel Association, the governments of Mexico, West Germany, and Sweden, Society of American Foresters, American Forestry Association, and New York State College of Forestry, as well as an honorary D.Sc. degree from his alma mater, and honorary LL.D. degrees from Syracuse University and the University of Maine.

References:

Who's Who in America, Vol. 35, 1968-69; American Men of Science, 10th Ed., 1960; Journal of Forestry, 50: 7, July 1952, p. 578; Biographical file, History Section, Forest Service.

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American  
FORESTS  
No. 4  
APRIL 1953

# Meet the Chief

By JAMES B. CRAIG

**A man of experience and stature, Richard E. McArdle directs the U. S. Forest Service with an efficiency that stamps him as a potentially outstanding chief**



THE man who holds the key forestry job in the United States had cancelled his other appointments and, using his desk as a diagram board, was explaining why a chief of the U. S. Forest Service must have a "broad-gauge" outlook, can't be "hidebound" in terms of the past, and has got to "see the whole sweep of events in terms of the whole forestry picture."

"Now, over here we have the U. S. Forest Service and the other federal agencies engaged in forestry," Chief Richard E. McArdle remarked, drawing an imaginary line on his desk. "For many years federal forestry was the only forestry. If there had been a forestry parade 50 years ago there would have been only a handful of marchers, nearly all federal.

"Federal forestry activities have grown as they properly should but today this is no longer the sole area of forestry activity," Chief McArdle continued, drawing a second line parallel to the first. "State forestry is fast coming of age—in fact the state division of today's forestry parade is now bigger than the federal division. And if there is one thing I am proud of it was the opportunity I had to work with these various state groups for eight years as assistant chief.

"Finally, we have another rapidly-developing area of endeavor, especially in the last five or 10 years," the Chief continued, drawing a third parallel line. "That's private forestry. Right now, there are more foresters engaged in private forestry than in the federal and state setups

combined. They are increasing all the time. And incidentally, nothing pleases us more than when one of our men goes into private work to help open up new fields of activity. That spells progress.

"Then, of course, there's the resource itself. Forestry progress isn't measured just in terms of number of foresters employed—although that's one good yardstick. After all, it's the land itself that we should be most concerned with. As might be expected, in half a century there have been tremendous changes in the forest resource. We have less big timber now. We have more different uses for timber and use sizes and species that were not used only a few years ago. We have much better utilization in the woods, too, as well as in the mill.

"I don't have recent figures to prove it, but I think we have more land under good forest management than we had, say, ten or 15 years ago. I know this is true for the larger forest ownerships. I think it is gradually becoming true for small forest holdings too, but there we have a long way to go, and it's going to take time to get that job done. I guess I'm more impatient than anybody I know in wanting to get on with this part of the job. Anyway, despite the fact that we've still got much to do, it's a big satisfaction to look back on the progress made during the past five or ten years. A chief of the Forest Service has to try always to keep his eyes on both sides of the ledger. The decisions he makes must be made in terms of the

whole picture, not just one part."

In addition to working with these various areas of forestry endeavor, the chief of the U. S. Forest Service must administer 153 national forests on 181 million acres in 39 states and in Alaska and Puerto Rico. He does this with the help of a permanent staff of 9,000 people representing 25 different professions. Last year, receipts from timber sales, forage and other uses topped 71 million dollars.

If this big job could be run like any other business it would probably be a lot easier for the chief. But the national forests were not established to make money. Under the Service's multiple-use program, upwards of 30 million recreationists thronged to national forests last year. Water is the product of good watershed management on the forests. Last year, water for 13 million irrigated acres and for domestic use (more than 1800 communities) and hydroelectric power (most of the major power developments in the West) came directly from national forest watersheds. And water supply becomes increasingly important with every passing year.

There are three ladders of advancement in the Forest Service, namely, national forest administration, research (in the middle because it services the other two), and state and private forestry. Chief McArdle's predecessor, Lyle F. Watts, came up the national forest administration and research ladders. Chief McArdle came up the research and

(Turn to page 28)

## Meet the Chief

(From page 23)

private routes. His outstanding success in working with people in the latter field is one reason many people believe he will prove a successful chief in an era of vigorous forestry expansion.

McArdle has a gift for diplomacy. He also has tact and patience. But perhaps his outstanding characteristic is his ability to put himself in the other fellow's position. Thinking out loud, he will start with the other fellow's premise—it may be a grazer, a lumberman, a wildlife devotee or a member of his own department. Then, in a series of deft circumlocutions in which he keeps spreading out in an ever-widening radius, he examines the problem from the standpoint of other interested groups and finally from the standpoint of the people of the United States.

In arriving at a conclusion, McArdle quite often has to say no. The callers—who are invariably zealots in their own particular area of activity—may differ with the chief's conclusion but unless they happen to be unusually bull-headed individuals can scarcely say they haven't had a fair shake. In describing a McArdle interview with friends, it is not uncommon to hear individuals report, "Well, he said 'no,' but Mac has a lot of angles to consider."

This sincere desire of McArdle's to examine all questions from all sides occasionally results in the charge that he appears to be in favor of both sides of a question at once. Sometimes, this is due to the inability of the caller to follow the unique McArdle system of thinking out loud and going around and around a problem until the parts of the puzzle fit together. Sometimes it is due to the fact that what McArdle, the forester, would like to do is entirely different from what McArdle, the chief of the Forest Service, has to do—plus a tendency to take all manner of people into his confidence.

It's no easy job looking after the interests of all the people of the United States. A Forest Service chief has to be a tough man. He has to be able to say no to a lot of very persuasive people. McArdle can do that and once he has made up his mind he can be solid as granite.

What was his formula in working with state and private groups as assistant chief?

"I can't give you any formula for

that," McArdle said. "Certainly one factor has been that there are no prima donnas in this business. Long-time business like forestry has to depend on good work by a lot of people—on good team work—with no one trying to take all the credit. Perhaps the most important thing in working with state groups is to feel as responsible as they do for getting a successful job done but to recognize clearly that the state officials are the ones held accountable by their legislatures for program in their own states. Which means that federal participation must be indirect.

In commenting on his management philosophy, McArdle said, "Personally, I have always been a firm believer in the individual doing for himself in forestry. Basically, it's a job for individual landowners. And that is especially true for the smaller forest owners. They have three-fourths of the privately-owned forest land, you know. It's their responsibility, not ours or the state's. But you've got to remember that most small landowners don't make their living by growing trees. More than that, many of them have to start out with a forest that may have been pretty badly culled over. Initially, they may have to get rid of a lot of junk, and they aren't likely to do it unless they can do so at a profit. Their interest has to be aroused, and it's a job for the public forester, as I see it, to help these people get started in the right direction, providing they aren't in a position to hire a consulting forester."

Fire control, on the other hand, is a public job in McArdle's opinion since fire is no respecter of boundaries and consequently is everybody's business. Moreover, the general public starts most of the fires. However, the public should not provide the maximum help needed, he thinks. It should provide aid up to a certain level—a level high enough to prevent substantial losses. Personally, it pleases him when landowners protest about the level of protection and demand more—even when it can't be provided. It shows increased interest in forestry, means they will not be so reluctant to begin supplementing public efforts.

That Chief McArdle has a firm faith in the forestry future of the nation is perhaps best evinced by the fact that the oldest of his three sons is a forestry graduate. A second son is now a junior in forestry at the

University of Michigan. A third, Michael, 16, hasn't made up his mind whether he wants to be a forester too. If he does, it's entirely okay with his father.

"I haven't urged them to become foresters," McArdle commented, "but I certainly haven't stood in their way. When the nine men in my class at Ann Arbor were worried about getting jobs, Professor Roth told us not to worry—that we would create jobs for foresters. And we did. I'm not worried about Dick, Jack, and Michael having to make their own jobs. The future looks good for foresters, and there is a powerful lot of satisfaction in being a forester.

"And the future looks good for forestry generally," the chief continued. "We are now extending the curve of what has been happening in the last five years or so. The curve of public interest in forestry is up. The impatience of landowners with the level of fire protection is a healthy sign. Stumpage is worth more. There are more and more foresters with more and more work. More lands are under better management. Certainly, there are still many areas where cutting practices are bad. No one will deny that we still have quite a way to go. But the over-all picture is a lot more encouraging than many had deemed possible years ago. I'm glad the job isn't finished—that we still have much to do. We still need forests and foresters. Another encouraging thing is the fact that so many conservation-minded groups are pushing forestry along. This momentum isn't going to fall off in my judgment, barring an economic collapse, which is unlikely."

A career government forester for 28 years, McArdle became chief last July 1. With the arrival of a new administration, there were rumors that he might be replaced. They were unfounded. In general, federal, state and private forestry is solidly behind him. They know his ability to work with people, his emphasis on cooperation. In addition to that, they like him. As Secretary Benson commented recently in referring to McArdle, "He's a man who grows on you."

With a broad background of experience and endowed with plenty of horse sense, there appear to be no reasons why Chief McArdle won't make a good chief and possibly a great one.

V. 67 No 2

FEB 1961



At White House ceremony, former President Dwight D. Eisenhower and Forest Service Chief Richard E. McArdle (c.) hear citation read by former Sec. of Agriculture Benson.

Photos by Vincent Finn

Forest Service Chief Richard E. McArdle on Jan. 11 received from former President Eisenhower the nation's top civilian career service award—the coveted President's Gold Medal Award for distinguished federal civilian service. This is probably the highest accolade ever bestowed by a grateful government on the young profession of forestry, and every forester in the nation, federal, state, and private, in a large sense shares in this award.

In a ceremony at the White House, Chief McArdle was publicly commended by former Secretary of Agriculture Ezra Taft Benson, under whom the chief served for eight years. Prior to that Dr. McArdle served as chief under the previous Truman Administration and Former Secretary of Agriculture Brannan.

The citation for Dr. McArdle said that his "imagination, vision and inspiring leadership have brought exceptional progress in the development and protection of vital forest resources for the American people now and for generations to follow."

Accomplishments cited as the basis for the award were: "His dynamic leadership and vision in the development of the nation's forest resources; his wise and effective action in meeting the rapidly-rising public use of the national forests; building and strengthening working relations of the federal government with state governments and private forest industry; for an increasingly effective forest research program nationwide; for leadership in world forestry and the conservation of natural resources which has promoted international co-operation and friendship and reflected credit on the United States; and for typifying the best in civilian career service—integrity, dedication to the public interest, and devotion to the highest ideals of American citizenship."

This award represents the highest commendation a federal career man can receive, and is in turn a tremendous accolade to the 10,000-man career service that Dr. McArdle heads.

## Mac Gets A Medal



Chief McArdle wears Gold Medal Award as he stands with Sec. Ezra Taft Benson display McArdle's citation.

It was indeed a proud and happy occasion for Mrs. Richard E. McArdle too. Here she reads list of accomplishments that were basis for the award received by her husband.



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## OBITUARIES

## R.E. McArdle, Chief of Forest Service, Dies

By Joseph D. Whitaker  
Washington Post Staff Writer

Richard E. McArdle, 84, a retired chief of the U.S. Forest Service and a longtime national leader in forestry and conservation, died of a heart attack Oct. 4 at George Washington University Hospital. He lived in Bethesda.

Mr. McArdle's career in forestry began with the Forest Service in 1924 in Portland, Ore. As a junior forester, he was assigned to the Pacific Northwest Forest and Range Experiment Station. He left the Forest Service for a year to become dean of the School of Forestry at the University of Idaho.

When he returned to the agency in 1935, he was named director of the Rocky Mountain Forest and Range Experiment Station. He was later director of the Appalachian Forest Experiment Station in North Carolina.

He came to Washington in 1944 and became assistant chief of cooperative program in the Forest Service. He was appointed chief of the agency in 1952, a post he held until retiring in 1962.



RICHARD E. McARDLE

After that, he spent two years as executive director of the National Institute of Public Affairs.

Mr. McArdle was a member of the Royal Commission of Forestry in Newfoundland and served as president of the Fifth World Forestry Congress in Seattle in 1960. He also was a member of the Royal Swedish Academy of Agriculture and Forestry, the Soil Conservation Society of America, and the board of the American Forest Association.

He was a recipient of the Agriculture Department's Distinguished Service Award, the Presidential Gold

Medal for federal civilian service and the Order of Merit for Forestry awarded by the government of Mexico.

Mr. McArdle was born in Lexington, Ky. He served in the Army in Europe during World War I. He earned a bachelor's, master's, and doctor's degrees in forestry at the University of Michigan.

His wife, the former Dorothy Leelen Coppage, died in 1982. Survivors include three sons, Richard C., of Chevy Chase, John, of Annandale, and Michael, of Madison, Washington. He has eight grandchildren, and a great-grandchild.

Ag

# Reporter

BY and FOR  
AGRICULTURE DEPARTMENT EMPLOYEES

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## THIS NEWSPAPER

is published each month by the USDA Welfare and Recreation Association. Please share this copy with your office and family.

## McArdle Gets Presidential Citation for Stellar Service

HONORED



Richard E. McArdle, Forest Service Chief, has been named to receive the President's Gold Medal Award for distinguished Federal Service. —USDA Photo

Richard E. McArdle, Chief of the Forest Service, was one of five Government officials named by President Eisenhower to receive the President's Gold Medal Award for distinguished Federal civilian service. The awards were presented at the White House January 11.

Dr. McArdle's citation declared that his "imagination, vision and inspiring leadership have brought exceptional progress in the development and protection of vital Forest resources for the American people now and for generations to follow."

### In Forest Service 36 Years

Dr. McArdle has been a member of the Forest Service for 36 years and Chief since July 1, 1952.

The full citation reads:

"For distinguished, imaginative service to the Nation and to his fellow Americans — the generations living today and generations yet to come —

Through dynamic leadership and vision in furthering the management, protection, and development of the Nation's forest resources;

Through wise and effective action in meeting the rapidly rising public use of the national forests; and Through unusual understanding in building and strengthening the working relations of the Federal Government with the State governments and with private forest industry, in keeping with the finest traditions of American enterprise;

For developing and stimulating an increasingly effective forest research program nationwide;

For leadership in world forestry and the conservation of natural resources which has promoted in-

See McCARDLE, page 2

## McArdle

From Page 1

ternational cooperation and friendship and reflected credit to the United States:

For welding the 15,000 people under his guidance into a unified action force with unexcelled esprit de corps;

For typifying, in every respect, the best in civilian career service — integrity, dedication to service in the public interest, devotion to the highest ideals of American citizenship."

### Others Honored

Others receiving the awards are:

Bert B. Barnes, Assistant Postmaster General, Bureau of Operations. Wilbur S. Hinman Jr., Technical Director, Diamond Ordnance Fuse Laboratories, Army.

Frederick J. Lawton, Commissioner, U.S. Civil Service Commission.

William R. McCauley, Director, Bureau of Employees' Compensation. Labor Department.

## Gets Annual Meet

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"A Sense of Service"

(Parts of the following interviews with former Chiefs of the Forest Service were shown on 16mm film and videotape cassette to a 75th anniversary gathering of employees and retirees June 17, 1980 in the Jefferson Auditorium, South Agriculture Building, Washington, D.C., and distributed to all Regions, Stations, and Areas for showing to all field personnel. The interviewer was Wallace Shiverdecker, Office of Information, Washington Office, Forest Service. The interviews were conducted in the homes of the Chiefs during January 1980.)

Transcript of Interview With Former Chief Richard E. McArdle

I'm Richard McArdle. I was Chief of the Forest Service from 1952 to 1962.

I suppose every prospective Chief of the Forest Service devotes a great deal of time in thinking about his aspirations for what he hopes to accomplish when he gets to be Chief. I know that I spent about three weeks doing this just before I moved across the corridor to my "hot seat". I made I don't know how many lists of jobs that I wanted to do--- things that I hoped would raise the standard of accomplishment in the Forest Service. I realized that it would take years to do some of <sup>these</sup> things, but at least I would have made a start. I didn't want to be the kind of a Chief who would just keep his nose clean and wait for a time when he could retire on a pension. I also had to think about several jobs that my former Chief, Lyle Watts, didn't succeed to get done before he had to retire. I have one such list here. I don't know how I've managed to hang on to one of these lists; I had a dozen of them. I'm not sure that this is the first one or the last one. But at any rate there

are seven jobs in this list that I designated as jobs hanging fire that Watts couldn't finish before he retired. I don't know which of the seven is most important because they all had to be done and done rather promptly, before I could even get to the jobs that I thought would make the Forest Service more efficient and successful. Before I could do that, I had to finish these jobs that were hanging fire. Seven months later, before I could get very far, the Administration of the Federal Government changed. It was the first time the Administration had changed in 20 years. And I mean changed completely, in Congress as well as in the Executive Branch. That made a lot of difficulties for me.

But to return to the unfinished jobs, this list says, "Settle the O&C Controversial Lands Issue." Those were 465,000 acres of land in Oregon that had reverted to the Federal Government in a court case. We didn't know whether these lands were National Forest or Interior Department lands or "Oregon and California" lands. If the lands were in a National Forest the counties in Oregon would get only 25 percent of receipts. If they were actually O&C lands the counties would get 75 percent. So this made quite a lot of difference because the lands were heavily timbered. I think Lyle Watts was acting under instructions from the lawyers in the Department of Agriculture; they wanted a court decision. People in Oregon and Congress, for example Guy Condon, Senator Condon of Oregon, wanted a legislative decision, and the two men, Watts and Condon, were at logger heads, and I don't think the two men were talking to each other; I've heard that. I went to see Condon very soon after I became Chief and he said, "I don't want any part of it, I don't trust you". I started from there but we wound up with a solution that

would please both Condon and the Forest Service, and more than that, it blocked up the formerly checkerboard holdings of O&C and National Forests, and that made for better administration.

Another unfinished job was to do something about the abuses of the mining laws. Lyle Watts had started to do something on this but never actually did much to complete the job. These mining laws of 1872 had never been changed, never been amended at all. Just as I became Chief there was a big boom in staking claims for uranium. And more than that, claims were being staked for summer homes, which is illegal, and yet they were being sold. When I tried to talk to mining people they didn't want any change of the 1872-year laws at all. We had to start from there, but in 1955 we did succeed in getting what's known as the Multiple Use Mining Act. We had thought there were only about 65,000 unpatented claims but we found more than a million. When we finished, only about 2,000 of the million were legal, but we had the authority then to sell timber and work on the surface of the claims.

One of the unfinished jobs was one of the most difficult I've ever tackled. The grazing industry was determined to change (by law) the privilege of grazing (on National Forest land) to legal rights so that they could sell the rights or borrow on them, just as they pleased. That doesn't sound like very much of a job, but we would have lost control of more than half of the National Forests if this law that they were seeking had come to pass. When I first moved over to the "hot seat" I found that the grazing people had already drafted a new law, and just about 3 or 4 days after a new Secretary of Agriculture (Ezra Benson) took office they showed up about 75 or 80 strong to

convince him that they should have that law. That Secretary didn't know the situation and agreed that it would be all right. I had to spend a lot of time countering the grazing industry's efforts to convert the grazing permittees' <sup>privileges</sup> ~~rights~~ to grazing rights. But we succeeded. There was no law passed but it took about 6 or 7 months after the new Administration came in to accomplish that.

I had another unfinished job. The National Advertising Council had been very helpful with us in promoting (without charge) the Smokey Bear forest fire prevention campaign. The Council decided that 20 years of this was enough. They were pulling out. The value of the free advertising we were getting was far beyond any we could <sup>afford to</sup> replace, and so we talked to the Advertising Council individually and together. The upshot was that they decided to continue their help with the Smokey Bear campaign and it's still going right now. I don't think they would drop it now.

Another job that I had to do personally right away was to improve the relationships between the Forest Service and the organized forest industries. My predecessor (Lyle Watts) was being damned by individuals from the industry. As a matter of fact, only three days after the new Secretary of Agriculture took office, a delegation from forest industry visited him and asked that I be replaced. But I had already talked to the Secretary and he decided that he wouldn't do that. We had to get better relations anyway, so I spent a lot of time in the next 8 or 10 years trying to improve these relationships. And I think we did.

I had another unfinished job that I had to do personally. I had to take a stand on "regulation." Foresters today don't know what I'm talking about when I say taking a stand on regulation. I'm talking about a legal way to control cutting of timber on private lands, by Federal action, and this was a hot issue I would say for about 30 years. It started with Gifford Pinchot and four previous Chiefs of the Forest Service: Pinchot, Silcox, Clapp, and Watts had been taking very strong stands for this. I had to decide whether I could go with this previous stand of these previous Chiefs or do something else. I finally decided that there were too many other things that I needed to get done, than to get involved in a hassle over this issue. Anyway the need of the legislation was much much less then than it was 30 years before, so I just let it wither on the vine.

What I wanted to do, and had to delay, was to do something to improve the administration in the Forest Service, and to improve the service that we rendered to the public. That really was the big job that I had faced as Chief. I needed the help of the forest industry and many other organizations for this, and if I spent all of my time on regulation I would have no time left to do what I wanted to do, to accomplish some of the things that ought to be done to make the Forest Service a more effective organization.

It was hard to know which jobs I should do first, but we wanted to get balanced use on the National Forests, what we call now multiple use, and that finally resulted, in 1960, in the Multiple Use-Sustained Yield Act. The Forest Service considers this as one of the landmark pieces of forest legislation. I think it was. We also needed to put recently enacted laws

into effect, such as the Cooperative Forest Management Act and the Forest Pest Control Act.

Another thing that I personally wanted very much was to get all of our district rangers up into the GS-9 level. They were all in GS-7---two were only in GS-5. I am happy to say that before I retired all the district rangers were GS-9. When I first started in the Forest Service in Portland, Oregon, my salary was \$1,800 and I remember that Earle Clapp, who was in charge of Research, went to Bill Greeley, then the Chief of the Forest Service, and asked if he couldn't increase the salaries of people in research. Greeley said, "I don't think there is any chance in the world to do it. Anyway if you did it you would have to get the whole Forest Service up." Earle Clapp said, "That's what I'll do then," and he did. District rangers were as I say earning about \$1,800 or something like that. Supervisors were getting \$2,400 a year. As a matter of fact last week I had occasion to look up the appropriation act of 1905, the first time the Forest Service was mentioned anywhere as the Forest Service. It interested me because the pay of the Chief of the Forest Service, then called the Forester, was \$3,500. The total appropriation of the Forest Service for fiscal year 1905 was, as I recall, \$875,140. It is now about 2 billion. But coming back to the district rangers, there were 804 of them and it was a real chore to get all of these up to a pay standard that I thought they ought to have. I think they are now higher than that.

Another job I wanted to do very much was to do something about the one third of the National Forests that was in immature stands -- if we were going to get



some timber from those stands in 50 or 60 or 100 years. I said we've got to do something about this one-third of the National Forest area that needed stand improvement. I also very much wanted to do something about the 5 million acres that were not productive in the National Forests. It wasn't easy to get the money to plant up 5 million acres of land.

I wanted also to do something about improving housing for Forest Service people on the National Forests. Lots of our men and their families were living in tents or tar-paper shacks, and we needed to do something to improve the lot of these people. They were not complaining. I visited many forestry wives and they weren't complaining. They should have been beating on me but they didn't. We did get quite a lot of new housing done. This became the National Forest development program that was finished just about three years before I retired. We made programs for long range planning and development in the National Forests, and short range programs for roads, housing, planting, the whole thing. At that time we were content with this much, in fact we couldn't even accomplish this but we were aiming for higher places. That I think is one of the things that has impressed me over the years. The Forest Service has always aimed high. We've not always hit the high mark but we aimed high.

Another thing that had to be done was the National Forest recreation job which was increasing by leaps and bounds. I thought we'd prepare for this. That led into what became "Operation Outdoors" in which we planned for recreation use all through the National Forest system. One of the other things that I wanted to do was to step up research. This and other goals eventually led up to the Resources Planning Act of 1976.

One of the other things that I see in my list of hopes and aspirations, was to raise the standards of work in the Forest Service -- for all Forest Service units. I don't know how I can say this without offending anyone. When the Forest Service was created we were the experts, there were no others. By the time I got to be Chief there were other organizations that had foresters and we were no longer the only experts. There were people who were challenging some of our statements, and much of our work that was previously first class was no longer first class. We had to raise the standards of performance throughout the Forest Service. I found that to be one of the most difficult jobs that I undertook. If the Forest Service had not done that I think the prestige of the Forest Service would have declined.

Then because I was not well known in the Forest Service when I became Chief (and people are always wary about the new top man; they wonder if he is going to do the job) I decided I'd better circulate around the Forest Service. There was another reason for doing that. When we were small and I first started in the Forest Service, each of us knew everyone else in the Forest Service. The Service was now much larger and we didn't know each other. So I thought one of the jobs that I might do for the Forest Service would be to move around through it like a needle and thread, and sort of stitch it together. One way to do that was to have all the people in each National Forest or research unit come to a hotel and have a dinner together. Well at that time it would cost about \$2.00 for a dinner and these young people would have to arrange for babysitters and maybe travel 150 miles or something like that. I didn't think it was worth \$2.00 just to meet me , and so what we did was to arrange picnics on Forest Service campgrounds. Picnics are horrible

things; I gained 12 pounds on one trip in Region 1. The ladies would heap up the tables with fried chicken and pies and other goodies. Then they all looked out of the corner of their eyes to see what I would eat and I tried to take something of everybody's contribution. But I couldn't do that and I tried using a local committee to fill my plate and that didn't work either. But I do think that these picnics accomplished quite a lot of good. I had to work every minute because my aim was to call everybody by name when we left. That takes a bit of doing but I never resented it. I was glad to do it because the people that you are working with, it seemed to me, are the most important resource that you have. I still get letters from people who refer to these picnics. I got one yesterday from a former supervisor in Region 4. He remembers a picnic in Utah. I get letters from other people who remembered these picnics. It gave me a chance also to get acquainted with the wives. Forest Service wives are a most important factor in Forest Service activities, because if it wasn't for their tolerance, patience and good humor and the way that the wives could put up with us -- irregular hours, interruptions for fire, and all of the other things -- I doubt if the Forest Service could have ever accomplished anything worthwhile. Of all of the awards and honors that have come to me I think the one that I cherish the most is being an "honorary forestry wife." I do value that award more than anything that came to me, and I'm including now the award from the President of the United States and a lot of other awards.

I'm trying to think now of some of the picnics, but there were so many of them that even if one might be unusual it is hard to recall. Sometimes I had three of them in a day, and if you have 150 or 200 people in each one you are moving

right along. Most of the memories that I have of picnics are not tables loaded with food. The things that I remember are the people, and for many years I had a long list of the people that I met in the Forest Service at these picnics and I would review that list. I couldn't do it all in one night. It would take about a week to do the whole thing, but the purpose was, where I saw a name, I could see a face. I learned to look directly at the people, and not at how their hair was fixed, or what their clothing was, or anything else.

I think before I stop I ought to talk about the Forest Service as I knew it when I first started in it. I've been retired 18 years now which probably accounts for my faulty memory in part. The Forest Service was already 20 years old when I started. I had the good fortune to meet and to know all the Chiefs and almost all of the people who started the Forest Service. I was fortunate to know Gifford Pinchot. "GP," as we all called him, was a dominant figure in any society. I think one of things that impressed me the most when I think of Gifford Pinchot was his determination to accomplish what he set out to do. Henry Graves was the second Chief, and the thing I remember most about Henry Graves was his beady black eyes; they just would go right through you. The third Chief was Bill Greeley and I owe a lot to Greeley. I don't know why he took any interest in me, but whenever he visited where I was he found time to visit with me. When I was in Washington, as I was in 1925 for a 9-month detail, Greeley invited me to sit in on staff meetings. In other ways he took an interest in my career and I tried to do that later on with other people who were working with me. The next Chiefs were Bob Stuart and Ferdinand Silcox and of course Earle Clapp. Clapp was called Acting Chief, but he was actually

Chief in every respect except payroll title. He accomplished a great deal for the Forest Service. He did more, especially for research, than any other Chief that I can think of. He was responsible for starting the forest survey, for the increased activities of the Forest Products Laboratory in Madison, and the McSweeney-McNary Act for research.

I think Pinchot stands out in my memory more than some of the others, but I think also of the other old timers in the Forest Service, the people who started the Forest Service -- people like E.T. Allen who became the Western Forestry and Conservation Association executive secretary. I think of Herbert Smith and Smith Riley and Allen Peck and Andy Frothingham and Paul Redington and Albert Potter and Will Barnes. I knew all of these people. There was one I knew when he was the supervisor of the Roosevelt National Forest in Colorado, Bill Kreutzer. He was the first ranger transferred over from the Department of Interior. And Leon Kneipp, and other people who started as rangers and made the Forest Service what it is. I was, I suppose, in the second wave of people, and my service rather overlapped with the first wave and succeeding waves. What else do you want to know? My earliest experiences?

Well, today many of us have cars -- something that we now think indispensable. But then we moved on horseback or with the horse and buggy, even in 1924. I walked most of the time. My first job was a summer temporary employee about 1922 on the Nezperce National Forest in Idaho. I remember that job because Howard Flint of Region 1 hired me and then forgot that he had done it. I borrowed money to get to Missoula and I still remember the Old Florence Hotel, getting there at 2 o'clock in the morning. At the time the office

opened I went to Flint's office and asked what job he wanted me to do. He'd forgotten it so he had to rattle up a crew, and it wound up with a man named Day as the chief of party. He died much later at the Central Forest Experiment Station in Columbus, Ohio. And a man called Carl Gustafson who became chief of National Forest fire control here in Washington. We were making a fire hazard study for fire control, I remember that Clyde Fickes, who was the assistant forest supervisor, raised my pay from \$75 a month to \$85 because I was the only one in the crew who could use a botanical key for range plants.

My first permanent job was in research at Portland, Oregon in 1924. If I have any good qualities you can attribute them to Thornton Munger who was director of that station, and to June Wertz who was our chief clerk. I had to raise myself to standards that I didn't think I could ever achieve but Munger insisted on them. As for other qualities, June Wertz would beat on me because she thought I was still immature. I stayed at that research job for 10 years. I was offered other jobs in private industry but I wanted to stay with the Forest Service, but then along came a chance to be Dean at the forestry school at the University of Idaho. We only stayed there one year because I thought either I had to stay there 10 or 15 years to really accomplish anything, or take an offer to be the Director of the newly organized Rocky Mountain Forest Experiment Station at Fort Collins, Colorado. I went on later to the Southeastern Forest Experiment Station in Asheville, North Carolina, and then to Washington, D.C., as the Assistant Chief for State and Private Forestry, and then to the Chief's job.

If I had any words of wisdom to leave with the Forest Service, the present Forest Service, I think I would concentrate on telling them never to lose their sense of service. That seems to me something that has always exemplified the Forest Service and I hope always will be typical of the Forest Service of the years to come. I could enlarge on that point but I think you know what I'm talking about. A lot of people outside the Forest Service have complained to me that the Forest Service is no longer what it used to be but has changed. Sure it has changed; I'd be upset if it hadn't changed. But when I ask these people, what do you mean by change, I find that what most of them think about change is that we no longer have time to visit with them. We ride along in the green car, and they say we used to be able to sit on the corral fence and visit with them. Well the truth is these people don't have time to visit either anymore. The Forest Service of today is trying to do about 10 or 20 times the work it used to do with no more people than it had when I was Chief. Of course they don't have any time to visit with people. But that's as far as the change has gone in the Forest Service. There is not any change with respect to the ideals of public service, in trying to do a honest job; there has been no change of integrity in personnel.

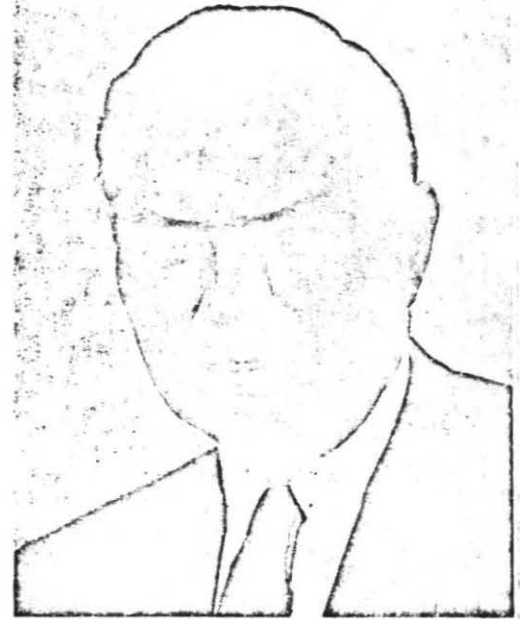
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AMERICAN  
FORESTERS  
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# Meet the Chief

By JAMES B. CRAIG

A man of experience and stature, Richard E. McArdle directs the U. S. Forest Service with an efficiency that stamps him as a potentially outstanding chief



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THE man who holds the key forestry job in the United States had cancelled his other appointments and, using his desk as a diagram board, was explaining why a chief of the U. S. Forest Service must have a "broad-gauge" outlook, can't be "hidebound" in terms of the past, and has got to "see the whole sweep of events in terms of the whole forestry picture."

"Now, over here we have the U. S. Forest Service and the other federal agencies engaged in forestry," Chief Richard E. McArdle remarked, drawing an imaginary line on his desk. "For many years federal forestry was the only forestry. If there had been a forestry parade 50 years ago there would have been only a handful of marchers, nearly all federal.

"Federal forestry activities have grown as they properly should but today this is no longer the sole area of forestry activity," Chief McArdle continued, drawing a second line parallel to the first. "State forestry is fast coming of age—in fact the state division of today's forestry parade is now bigger than the federal division. And if there is one thing I am proud of it was the opportunity I had to work with these various state groups for eight years as assistant chief.

"Finally, we have another rapidly-developing area of endeavor, especially in the last five or 10 years," the Chief continued, drawing a third parallel line. "That's private forestry. Right now, there are more foresters engaged in private forestry than in the federal and state setups

combined. They are increasing all the time. And incidentally, nothing pleases us more than when one of our men goes into private work to help open up new fields of activity. That spells progress.

"Then, of course, there's the resource itself. Forestry progress isn't measured just in terms of number of foresters employed—although that's one good yardstick. After all, it's the land itself that we should be most concerned with. As might be expected, in half a century there have been tremendous changes in the forest resource. We have less big timber now. We have more different uses for timber and use sizes and species that were not used only a few years ago. We have much better utilization in the woods, too, as well as in the mill.

"I don't have recent figures to prove it, but I think we have more land under good forest management than we had, say, ten or 15 years ago. I know this is true for the larger forest ownerships. I think it is gradually becoming true for small forest holdings too, but there we have a long way to go, and it's going to take time to get that job done. I guess I'm more impatient than anybody I know in wanting to get on with this part of the job. Anyway, despite the fact that we've still got much to do, it's a big satisfaction to look back on the progress made during the past five or ten years. A chief of the Forest Service has to try always to keep his eyes on both sides of the ledger. The decisions he makes must be made in terms of the

whole picture, not just one part."

In addition to working with these various areas of forestry endeavor, the chief of the U. S. Forest Service must administer 153 national forests on 181 million acres in 39 states and in Alaska and Puerto Rico. He does this with the help of a permanent staff of 9,000 people representing 25 different professions. Last year, receipts from timber sales, forage and other uses topped 71 million dollars.

If this big job could be run like any other business it would probably be a lot easier for the chief. But the national forests were not established to make money. Under the Service's multiple-use program, upwards of 30 million recreationists thronged to national forests last year. Water is the product of good watershed management on the forests. Last year, water for 13 million irrigated acres and for domestic use (more than 1800 communities) and hydroelectric power (most of the major power developments in the West) came directly from national forest watersheds. And water supply becomes increasingly important with every passing year.

There are three ladders of advancement in the Forest Service, namely, national forest administration, research (in the middle because it services the other two), and state and private forestry. Chief McArdle's predecessor, Lyle F. Watts, came up the national forest administration and research ladders. Chief McArdle came up the research and

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## Meet the Chief

(From page 23)

private routes. His outstanding success in working with people in the latter field is one reason many people believe he will prove a successful chief in an era of vigorous forestry expansion.

McArdle has a gift for diplomacy. He also has tact and patience. But perhaps his outstanding characteristic is his ability to put himself in the other fellow's position. Thinking out loud, he will start with the other fellow's premise—it may be a grazer, a lumberman, a wildlife devotee or a member of his own department. Then, in a series of deft circumlocutions in which he keeps spreading out in an ever-widening radius, he examines the problem from the standpoint of other interested groups and finally from the standpoint of the people of the United States.

In arriving at a conclusion, McArdle quite often has to say no. The callers—who are invariably zealots in their own particular area of activity—may differ with the chief's conclusion but unless they happen to be unusually bull-headed individuals can scarcely say they haven't had a fair shake. In describing a McArdle interview with friends, it is not uncommon to hear individuals report, "Well, he said 'no,' but Mac has a lot of angles to consider."

This sincere desire of McArdle's to examine all questions from all sides occasionally results in the charge that he appears to be in favor of both sides of a question at once. Sometimes, this is due to the inability of the caller to follow the unique McArdle system of thinking out loud and going around and around a problem until the parts of the puzzle fit together. Sometimes it is due to the fact that what McArdle, the forester, would like to do is entirely different from what McArdle, the chief of the Forest Service, has to do—plus a tendency to take all manner of people into his confidence.

It's no easy job looking after the interests of *all* the people of the United States. A Forest Service chief has to be a tough man. He has to be able to say no to a lot of very persuasive people. McArdle can do that and once he has made up his mind he can be solid as granite.

What was his formula in working with state and private groups as assistant chief?

"I can't give you any formula for

that," McArdle said. "Certainly one factor has been that there are no prima donnas in this business. Long-time business like forestry has to depend on good work by a lot of people—on good team work—with no one trying to take all the credit. Perhaps the most important thing in working with state groups is to feel as responsible as they do for getting a successful job done but to recognize clearly that the state officials are the ones held accountable by their legislatures for program in their own states. Which means that federal participation must be indirect.

In commenting on his management philosophy, McArdle said, "Personally, I have always been a firm believer in the individual doing for himself in forestry. Basically, it's a job for individual landowners. And that is especially true for the smaller forest owners. They have three-fourths of the privately-owned forest land, you know. It's their responsibility, not ours or the state's. But you've got to remember that most small landowners don't make their living by growing trees. More than that, many of them have to start out with a forest that may have been pretty badly culled over. Initially, they may have to get rid of a lot of junk, and they aren't likely to do it unless they can do so at a profit. Their interest has to be aroused, and it's a job for the public forester, as I see it, to help these people get started in the right direction, providing they aren't in a position to hire a consulting forester."

Fire control, on the other hand, is a public job in McArdle's opinion since fire is no respecter of boundaries and consequently is everybody's business. Moreover, the general public starts most of the fires. However, the public should not provide the maximum help needed, he thinks. It should provide aid up to a certain level—a level high enough to prevent substantial losses. Personally, it pleases him when landowners protest about the level of protection and demand more—even when it can't be provided. It shows increased interest in forestry, means they will not be so reluctant to begin supplementing public efforts.

That Chief McArdle has a firm faith in the forestry future of the nation is perhaps best evinced by the fact that the oldest of his three sons is a forestry graduate. A second son is now a junior in forestry at the

University of Michigan. A third, Michael, 16, hasn't made up his mind whether he wants to be a forester too. If he does, it's entirely okay with his father.

"I haven't urged them to become foresters," McArdle commented, "but I certainly haven't stood in their way. When the nine men in my class at Ann Arbor were worried about getting jobs, Professor Roth told us not to worry—that we would create jobs for foresters. And we did. I'm not worried about Dick, Jack, and Michael having to make their own jobs. The future looks good for foresters, and there is a powerful lot of satisfaction in being a forester.

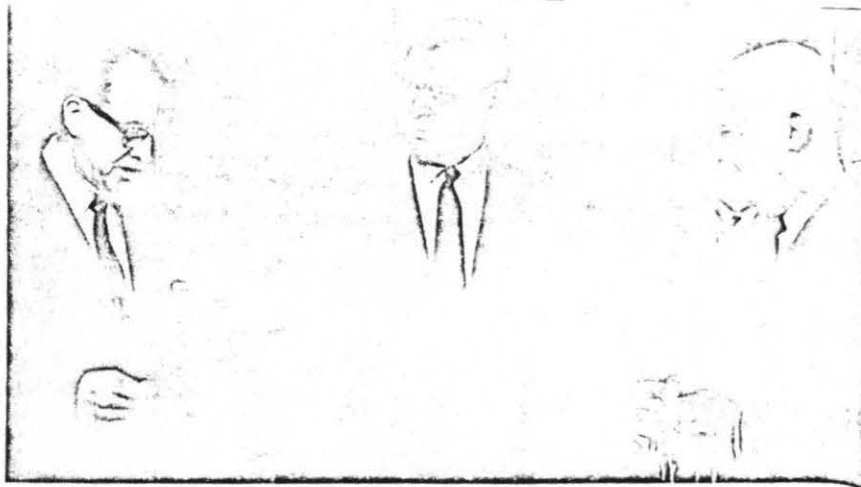
"And the future looks good for forestry generally," the chief continued. "We are now extending the curve of what has been happening in the last five years or so. The curve of public interest in forestry is up. The impatience of landowners with the level of fire protection is a healthy sign. Stumpage is worth more. There are more and more foresters with more and more work. More lands are under better management. Certainly, there are still many areas where cutting practices are bad. No one will deny that we still have quite a way to go. But the over-all picture is a lot more encouraging than many had deemed possible years ago. I'm glad the job isn't finished—that we still have much to do. We still need forests and foresters. Another encouraging thing is the fact that so many conservation-minded groups are pushing forestry along. This momentum isn't going to fall off in my judgment, barring an economic collapse, which is unlikely."

A career government forester for 28 years, McArdle became chief last July 1. With the arrival of a new administration, there were rumors that he might be replaced. They were unfounded. In general, federal, state and private forestry is solidly behind him. They know his ability to work with people, his emphasis on cooperation. In addition to that, they like him. As Secretary Benson commented recently in referring to McArdle, "He's a man who grows on you."

With a broad background of experience and endowed with plenty of horse sense, there appear to be no reasons why Chief McArdle won't make a good chief and possibly a great one.

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FEB 1961



At White House ceremony, former President Dwight D. Eisenhower and Forest Service Chief Richard E. McArdle (c.) hear citation read by former Sec. of Agriculture Benson.

Photos by Vincent Finn

FOREST Service Chief Richard E. McArdle on Jan. 11 received from former President Eisenhower the nation's top civilian career service award—the coveted President's Gold Medal Award for distinguished federal civilian service. This is probably the highest accolade ever bestowed by a grateful government on the young profession of forestry, and every forester in the nation, federal, state, and private, in a large sense shares in this award.

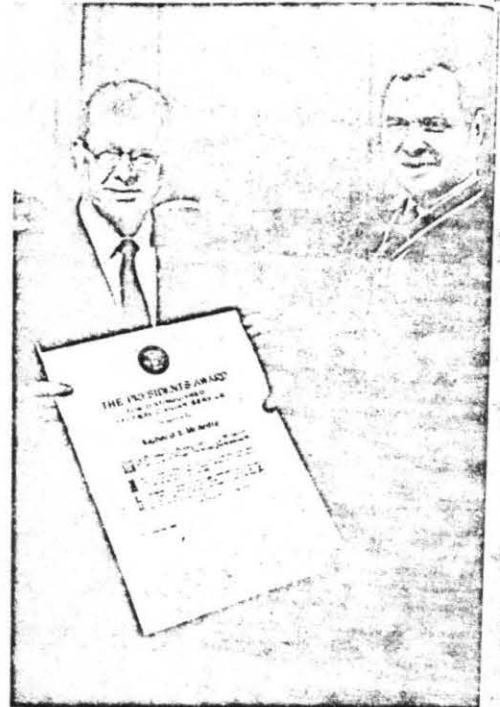
In a ceremony at the White House, Chief McArdle was publicly commended by former Secretary of Agriculture Ezra Taft Benson, under whom the chief served for eight years. Prior to that Dr. McArdle served as chief under the previous Truman Administration and Former Secretary of Agriculture Brannan.

The citation for Dr. McArdle said that his "imagination, vision and inspiring leadership have brought exceptional progress in the development and protection of vital forest resources for the American people now and for generations to follow."

Accomplishments cited as the basis for the award were: "His dynamic leadership and vision in the development of the nation's forest resources; his wise and effective action in meeting the rapidly-rising public use of the national forests; building and strengthening working relations of the federal government with state governments and private forest industry; for an increasingly effective forest research program nationwide; for leadership in world forestry and the conservation of natural resources which has promoted international co-operation and friendship and reflected credit on the United States; and for typifying the best in civilian career service—integrity, dedication to the public interest, and devotion to the highest ideals of American citizenship."

This award represents the highest commendation a federal career man can receive, and is in turn a tremendous accolade to the 10,000-man career service that Dr. McArdle heads.

## McArdle Gets A Gold Medal



Chief McArdle wears Gold Medal Award as he and Sec. Ezra Taft Benson display McArdle's citation.

It was indeed a proud and happy occasion for Mrs. Richard E. McArdle too. Here she reads list of accomplishments that were basis for the award received by her husband.



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## THE SIXTIES--DECADE OF DECISION

By Richard E. McArdle, Chief, Forest Service, U.S. Department of Agriculture, at the 83d Annual Convention of the American Paper and Pulp Association, The Waldorf-Astoria, New York, N. Y., February 25, 1960

I am honored to address this distinguished group of industrial leaders. When your Executive Secretary, and my good friend, Bob O'Connor, asked me to talk to you today, I knew at once that this was one invitation I would not want to turn down.

In Paper Week this year your general theme is "Searching the Sixties." I think it proper to limit whatever searching I shall be able to do in these few remarks to the raw material base--your timber supply.

At the beginning of any decade it is common practice to indulge in some crystal-ball gazing. I have seen a rash of articles and editorials under such intriguing titles as "You Haven't Seen Anything Yet" or "What The U.S. Will Be Like 10 Years From Now." These paint enticing pictures about medical breakthroughs, outer space, electronics, atomic power, population explosions, automation, new homes, the promises of research, and so on. But I have yet to see in any of these articles very much about the raw materials needed by industry. And I have seen nothing about timber.

So what I want to talk about may seem pretty prosaic when lined up alongside outer space. Timber may not be glamorous, but it's your bread and butter. Without it your industry would not survive. The key to your continued success is the old-fashioned plain, simple pulpwood tree.

Let me make it clear here and now that I think you are going to have enough timber in the sixties. You may have to pay a little more, look a little farther, compete a little harder, but you will find the timber you need.

The point I want to hammer home over and over again--is that what you do in the sixties is going to be of utmost importance in deciding your raw material base after the sixties. That is why I call the sixties the decade of decision for the timber industry.

Moreover, the things we don't do--whether through purposeful inaction or just plain indifference--can be just as controlling on future timber supply as affirmative actions. Whether by negative default or positive action, decisions will be made. That much is absolutely certain. Time marches on, and a tree can grow only so fast.

I want to give you first, and very briefly, the setting as I see it for some of the important factors in the sixties which will affect timber supplies in the future. The purpose of this is to have a common point of reference to consider some of the key decisions that lie ahead. Secondly, I want to discuss four of these key decisions. Taken together, these alone are sufficient in my mind to make the sixties' a decade of decision.

Feb. 25, 1960  
Re: Resource Penalties

## The Framework

Markets. This is always a popular subject to a group of producers. It is one that you know much more about than I do.

Nevertheless, the Forest Service took a look at long-range markets a few years ago in connection with our Timber Resource Review study. More recent estimates have been in the same general direction.

My experts tell me that by 1975 United States consumption of paper and board is likely to reach 60 million tons a year. This is 55 percent more than last year. Furthermore, use may rise to 100 million tons by the end of the century.

Your need for wood will rise in the same general proportion. You used nearly 40 million cords of pulpwood in 1959. You will need about 60 million cords by 1975. Where are you going to get it?

Competition. You compete for wood now. You will have to compete even harder in the future. The same forces that are increasing your markets also are pushing up the markets of other users of wood. Perhaps not to the same degree, but still up, and substantially up.

Population is the basic force. We have 179 million people now. We are adding one person--net--every 11 seconds. The Census Bureau estimates 30 million more people by the end of the sixties, a 17-percent increase. This means need for more lumber, plywood, and wood products of almost every kind.

Your industry now uses one-fifth of United States wood consumption. Your proportional take will probably be greater in the future; but as your part of the total gets bigger, the competition will get stiffer--I think a whole lot stiffer.

Growth. Will we grow enough timber to meet our future needs? The answer is no, unless we stage a tremendous push. Considering the cut for all purposes, we are still relying heavily on the inventory on our shelves--God's bounty of old-growth timber.

About one-third of the current cut still is coming from old growth. By the end of the sixties it will be much less; by the end of the century it will be just about gone. Then we will have to grow what we cut. There will be no other choice.

Can we do it? We now grow 14 billion cubic feet of timber a year. This will need to be maintained and increased one-half by the year 2000. Saw-timber growth should more than double. A 40-year-old tree to be cut at that time has to start growing this year.

We have made a lot of progress in forestry in recent years. Your industry rightfully can take solid satisfaction in what you have done to help achieve these good results.

I do not depreciate current progress when I suggest that you need to appraise the rate of current progress not by comparing it with past progress but in terms of future raw-material needs. You do this for other aspects of your business. Do it now for timber supply.

I think you will find, as we have, that mere continuation of present upward trends--encouraging as this is--will not be good enough to get the timber growth needed. I am not predicting a timber famine--I never have--I am talking about having adequate timber for future needs.

I am saying also that although it will take a lot of doing, we can have a reasonably adequate supply if we want to work for it. But this means conscious effort, not decision by default. So far as the year 2000 is concerned the die will be cast--irretrievably cast--in the sixties. Again I say: the decade of decision.

Foreign Trade. Will imports lessen the need to grow our own wood? The answer is definitely no, provided, of course, my crystal gazing is at all clear. About one-fourth of our pulp, paper, and board products now come from Canada, as does 10 percent of our total wood consumption.

The Canadians think they can double their output of timber products. Even if they do think so, the key question is whether they will. If they do, then how much will come to the United States and how much of a dent will that make in our future domestic needs? These are some mighty big "ifs." Furthermore, the estimate I mentioned a moment ago of the need to double domestic timber growth is predicated on the assumption that United States imports will increase by more than 50 percent.

With the Soviet Union probably out of the picture, and with Latin America and Africa offering mainly tropical hardwood, the only conclusion I can derive is that we must prepare now to grow most of the timber we will need in the future.

### The Key Decisions Ahead

With markets up, competition stiffer, adequate growth uncertain, and imports offering no solution, the sixties shape up as a decade of decision for our timber supplies. Even with substantial technical advances, which I have not mentioned but which are sure to come, I think this conclusion still holds.

I believe some crucial turning points will be reached in the next decade. These will have their payoff in determining the timber supply for many years ahead. Always, of course, there will be crucial decisions, but never before have we had quite the combination of circumstances that make the sixties unique.

Within the framework that I have described, what are the four areas in which decisions must be made? They are: (1) The growing competition for land; (2) what happens on our small woodlands; (3) what happens on industrial lands; and (4) multiple use of public lands with all that the term conveys.

Again I emphasize that these things will be decided even if we do nothing. Inaction will be fully as decisive as action. The great danger we all face is that decisions will be made by inertia or default.

Fortunately for this country, the paper and pulp industry is forward-looking. It plans years ahead. It is progressive. These are not idle compliments. I mean what I say. If I did not believe this I would not say it. In this matter your interests and those in Government are one. We have complete compatibility and that really is why I am talking to you about these things today.

Competition for Land. There isn't going to be enough land to go around. Up to a few years ago we in the Forest Service thought there was ample land in trees to grow our timber needs if efficiently managed. Even in the Timber Resource Review study completed in 1958, we only raised a mild caution on this point. We suggested then that further significant reductions in commercial forest land should be made only "with full realization that such withdrawals may adversely affect future timber supply." In the light of present circumstances we think this was too conservative. We are now genuinely concerned.

All around us we see a great urban expansion. Everywhere one travels he sees whole new communities and suburban areas springing up. This has been taking, and will continue to take, forest land, mostly in small ownerships, which has been counted in our estimates as commercially available.

Only 2 or so years ago, a huge 10-year highway program was started. New and large airports are being built. Transmission lines are multiplying. Again forest land is being taken.

The Nation's water needs are mounting by leaps and bounds. Shortages have appeared not only in the West, but also in the East. One of the solutions to water problems is construction of dams and reservoirs. Numerous ones have already been constructed and many more are in the planning stages. Nearly 2 million acres of national-forest lands have been withdrawn for flood control and reclamation purposes. We do not know the acreage of private forest land which has been or will be used for this purpose.

Competition for land will be felt from other uses. Land probably will continue to be taken for national defense, atomic energy, and similar purposes.

There are tremendous pressures developing to set aside timberlands for parks or for other specialized recreational use. The land used as parks and wildlife refuges is expected to increase from about 27 to 47 million acres by the end of the century.

I have no intention of condemning single use or primary use, or such use by any other name. Some of these uses are just as essential for our country as any other use. For some of these purposes--such as superhighways--obviously the land will have to be devoted to such use exclusively. There isn't anything we can do about it.

Nevertheless, these diversions of forest lands for urban and industrial development, highways, airports, reservoirs, power lines, parks, and other special uses may total more than 50 million acres by the year 2000, with an annual loss of timber growth of 12 billion board feet.

There is still another kind of competition for land that I venture to say not many of you have thought about. This is the land that will be needed in the future to grow food crops. It sounds ironic to be talking about needing more land for food when we have today such large agricultural surpluses. But as our experts in the Department of Agriculture try to look ahead and appraise food demands and output in the light of our growing population and improved technology, they conclude that substantially more forest land--possibly 73 million acres--will be needed to produce food and forage by the year 2000.

Where will the additional land for food crops come from? Some of the most productive timberlands--the bottom lands and coastal plains of the South where your industry is heavily engaged--have been suggested for conversion to this purpose.

The potential conversion of forest lands estimated as possibly necessary to meet food requirements could have serious impacts on the Nation's wood supply. Conversion of some 73 million acres of commercial forest land to crop and pasture use would remove from timber production lands that might otherwise be producing about 26 billion board feet annually by the year 2000. This would amount to about one-fourth of our timber-growing capacity.

Combining the possible diversion of forest lands for urban development, parks, and other purposes with the potential conversion to grow food, it appears that more than one-third of our timber-growing capacity and one-fourth of our commercial forest land may seriously be sought for other purposes within the next few decades.

The issue with respect to conversion for food purposes probably will not come to a head in the sixties, but the amount of forest lands to be converted to parks, reservoirs, highways, and so on is already coming to a head. National policy on these matters may very likely be determined in the next decade. The outcome of these battles--and they will be battles--cannot fail to have a significant and long-range effect on your raw-material base. This is one of the destiny decisions of the sixties.

Small Woodlands. Foresters have been talking for years about the small-woodlot problem, but not too much seems to get done about them--at least in relation to what is needed.

The facts are well known. They have been recited so many times it sounds as though the record were stuck. Over one-half of this country's forest land is in 4-1/2 million small forest ownerships. The average size is 60 acres. In the East, where most of you operate, two-thirds of the commercial forest land is still in small ownerships despite some recent industrial acquisitions. One-half of our future timber will have to come from small forest properties.

We know what is needed. Forty-three million acres should be planted, yet only 1 percent of this is being done each year. Timber-stand improvement needs to be stepped up 20 times. Only 14 percent of these small holdings are getting adequate fire protection. And so on.

How do you get through to these 4-1/2 million people, many of whom do not live on the land and either frankly don't care about timber or, if interested at all, look on timber growing as purely a secondary matter? Your industry is doing a lot, but it is only a drop in the bucket compared to what is needed. The same may be said of Federal and State efforts.

Basically the physical forestry measures essential to put these lands in shape can only be bought, ordered, persuaded, or obtained by some combination of these three. One thing appears to be clear. Persuasion alone is not getting the job done fast enough.

Personal philosophies of government, psychology, budgets, and political science all get involved, and as a result the lands tend to stay in poor shape. What these lands will yield 40 years from now will largely be decided in the sixties--again the decade of decision.

The small woodlands are a good example of what I meant earlier in referring to decision by default. The grave danger is that differing philosophies will clash so strongly that too little will get done on the ground, or it will get done too late. As a consequence, the lands won't grow the timber you will need so urgently.

The fateful decision here is whether men of policy and power will have the foresight and, if I may say so, the "guts," to partially compromise deep-set philosophical convictions in order that these lands may contribute their essential share to our raw-material base.

Industrial Lands. I need say little here. I am talking to a group of leaders in industry. You are doing a great deal with your lands, and I firmly believe you will do a great deal more. You are faced with difficult decisions: How much land should be acquired, should you grow pulpwood only or also saw logs and other products, what backlog of timber inventories should you maintain, how far should you go in developing and making your lands available for recreation, hunting, or other public uses, and many others. This is the third area where decisions of the sixties will control the future for a good many years.

This is one area where you have complete or nearly complete control of the destiny of these lands. I think you realize this and will do what is needed. Because you are far better posted on this subject than I am, I shall devote no more time to it.

Multiple Use of Public Lands. The fourth and last issue that I want to say something about today, and which like the others will be largely decided in the sixties, is whether public forest lands should be managed for the multiple use of their resources and services, or devoted largely to a primary, or essentially single, use.



You may say to yourself, how does this concern me, or is this really much of an issue?

It concerns you because to the extent forest lands are removed from multiple-use management, your potential timber supply is cut down. This is true even if you do not yourself buy timber directly from the public lands. Your competition for private timber is made stiffer whenever public timber is removed from the market.

This question of multiple use is developing into one of the major public-land issues of the sixties. Multiple use of public lands is being challenged both as a concept and as a practice of management. It is being vigorously defended, but even more vigorously criticized.

The Forest Service was, I think, the pioneer in applying multiple use to land management. Its genesis goes back to instructions of the Secretary of Agriculture to the Chief of the Forest Service in 1905 when the national forests were placed in the Department of Agriculture. For many years thereafter multiple use was more of a theory than a practice because pressures had not built up to the point where there was severe competition for national-forest resources.

In the last decade this has drastically altered. Our skills as land managers are being sorely tried even as multiple use is being put to the test.

There is much confusion as to what is meant by multiple use. Nearly everyone has his own definition and they are all different. To the Forest Service it means that over substantial areas, undefined as to size because this varies, the timber, grass, water, wildlife, fish, and recreational and scenic values will be utilized in the best combination of management to meet the needs of the American people that our judgment as land managers leads us to believe the people need and desire.

It does not mean using each and every acre of land for all these numerous uses. Nor does it necessarily mean the combination of uses that will give optimum dollar returns or optimum unit output. It does mean harmonious and coordinated management of the various uses of various resources each with the other.

This is basic policy and, along with a high level of sustained yield, forms the guiding concept under which we as public servants endeavor to do the best possible job for America in administering the national forests.

I do not mean to indicate that all public forest land should be managed for multiple-purpose use. Certain lands are devoted to highways, rights-of-way for pipelines and electric-power transmission lines, to park purposes by congressional statute, to military reservations, to reservoir impoundment, and so on. But I do believe that the great bulk of the public forest lands should be managed under multiple-use principles and should continue to be managed under such principles in order to offer their greatest total service to our people.

Lest there be any misunderstanding, I want to make it clear that I believe the designation of a reasonable amount of forest land for wilderness, as we have done on the national forests, is part of multiple-use management. These lands are open to grazing, hunting, fishing, and certain types of recreation. Timber utilization is excluded, but their resources are not entirely locked up. All people, including, I expect, some of you, do not necessarily agree with this. However, I personally believe in special management for substantial areas of primitive America. I have no apologies to make for Forest Service designation of wilderness areas.

The multiple-use concept is being bitterly attacked. It has been referred to as a shibboleth, as a hoax, as an "old tom-tom," as evidence that more land is available than needed, and as an endeavor to be all things to all people.

Naturally, we who believe in multiple use resent this; but if we can adequately explain our concepts and adequately practice multiple use on the ground, I believe that such affirmative and constructive actions on our part will take care of the name-calling, will convince the policy makers, and will persuade the great bulk of the American public. I do caution you now, as a user group partially dependent on one national-forest resource and as a user group managing lands of your own, that multiple use of public lands is being vigorously attacked.

How did the present situation arise? Basically, it is a question of competition for land in the face of rapidly rising populations, increasing leisure time, improved accessibility, and a great upsurge in the demand for outdoor recreation.

A considerable number of hiking, climbing, camping, and other outdoor recreation organizations are vigorously and in all sincerity advocating a large number of new national or State parks, monuments, or recreation areas. Earnest, fervent, and dedicated individuals are leading this movement. Currently we know of more than three dozen such proposals that would transfer national-forest lands to other administrative jurisdictions. Specific acreages are not spelled out, but presumably some 10 to 15 million acres of national-forest lands would be involved. Some of these and other proposals also would involve private lands. There will be additional proposals of this kind.

The National Park Service has as yet taken no official position on most of these proposals. But the directive in Secretary Seaton's public letter of last November 21 to Mr. Wirth urging that the Park Service "strive for the establishment of new national parks, monuments, recreation areas, and historic sites..." appears to have lent impetus to these efforts.

The Forest Service has felt acutely, and will continue to feel, the greatly increased demands for outdoor recreation in the administration of the national forests. Recreation is one of our high-priority activities.

We are responding to these needs through our Operation Outdoors, through the recreational and fish and wildlife phases of our "Program for the National Forests," through increased appropriations for recreational use, through a recreation survey for the national forests which is now under way,

through our cooperation with the Outdoor Recreation Resources Review Commission established by Congress, and through stepped-up research in recreation.

Since about 1900 some 5 million acres of national-forest lands have been transferred to National Park Service jurisdiction, whereas about 500 thousand acres have gone the other way. The ratio has been about 10 to 1. These figures do not support the allegation that Forest Service policy is conducted on an "I got it, you can't have it" basis.

I am a strong supporter of the national and State park systems of this country. I believe there will be need for more parks and seashore areas, but I also believe there should be no cheapening of standards. There is at least equal need to fully develop our present park systems in such ways as are proposed in the Mission 66 program of the National Park Service. I further believe those individuals and groups whose interest in the use of managed forest lands is primarily recreation tend to overlook the fact that there is equally growing an urgent need for all the other resources that these lands provide.

A last point involving multiple use of public forest lands is the degree to which the long-range national-forest program will be implemented. As many of you know, a year ago there was completed and sent to the Congress by the Secretary of Agriculture a long-range program of development and management of the national forests. We are calling it "Operation Multiple Use." This program set long-range objectives for 40 years ahead. It enumerated short-term specific needs in both physical and financial terms for the next 10 to 15 years--that is to say, a short-term program geared largely to the sixties. It included a program of development and management for timber, for water, for recreation, wildlife, and for all of the renewable national-forest resources. It was the outgrowth of years of stock-taking and study.

Its timber goals were related to national timber needs as we foresaw them in the Timber Resource Review and to the necessity for the national forests to grow a fair share of those needs. Roughly, we set our national-forest timber goals at an annual yield of 21 billion board feet by the end of the century. We have more than doubled our national-forest timber cut in the last 7 years and this year expect to cut nearly 10 billion board feet.

The problem is not only one of increasing harvest cuttings. Of even greater importance is being sure that both old and recent cutover lands and burns get back into production to grow new products. We are not doing this now to my satisfaction.

The national-forest program to be fully implemented means tripling our present level of management. For example, attainment of a goal of 21 billion board feet of timber cut is predicated on rapidly planting up the accumulated backlog of areas that must be reforested, of doing the necessary timber-stand improvement work on immature stands, and remedying other deficiencies. We are far behind schedule.

Our Program for the National Forests was designed to overcome such deficiencies. It will cost money to put the plan into operation. Although in later years revenues will exceed expenses, dollar income will not fully equal expenditures in the first decade of operation. Consequently, there will be objections to putting the plan into full effect. But a decision will have to be made and made soon.

What happens after the sixties, what timber we grow, what timber will be available for you to purchase, what recreation we supply, what wildlife is available to sportsmen, and how much and what kind of water comes off the national forests depend in large measure on the degree to which Operation Multiple Use is implemented during the sixties.

That is what I mean when I say these are the fateful sixties for the national forests. You have a double stake in this. You have a stake as individual citizens, and you have a stake as a user of raw materials which the public lands supply.

And so I come to the end of these remarks. I have spoken to you with candor and with great earnestness. We are entering into a decade of decision with respect to long-range timber supplies. The paper and pulp industry will make those decisions largely by itself for the lands which it controls. You will also have an important voice in the decisions that are made by the Congress and others for the national forests, and for the small private holdings. You have a key role to play across the board.

Do not underrate the seriousness of the cautions I have given about competition for land, the need to get small woodlands into full production, and the attack on multiple use of the national forests. Of the four decisions that I have mentioned, I have given most attention to these three. I have done this because I believe you may be less well informed on these three subjects than on the industrial lands that are under your direct control.

The arena where these decisions will be fought out needs stout-hearted men. Do not let these decisions be made for you through inertia, inaction, or default on your part.

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# FORESTS

The Magazine of Forests, Soil, Water, Wildlife, and Outdoor Recreation

FEBRUARY 1961

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*"Ike" Presents Gold Medal Award to Dr. McArdele*

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SEE PAGE 4



another user testimonial

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**F**OREST Service Chief Richard E. McArdle on Jan. 11 received from former President Eisenhower the nation's top civilian career service award—the coveted President's Gold Medal Award for distinguished federal civilian service. This is probably the highest accolade ever bestowed by a grateful government on the young profession of forestry, and every forester in the nation, federal, state, and private, in a large sense shares in this award.

In a ceremony at the White House, Chief McArdle was publicly commended by former Secretary of Agriculture Ezra Taft Benson, under whom the chief served for eight years. Prior to that Dr. McArdle served as chief under the previous Truman Administration and Former Secretary of Agriculture Brannan.

The citation for Dr. McArdle said that his "imagination, vision and inspiring leadership have brought exceptional progress in the development and protection of vital forest resources for the American people now and for generations to follow."

Accomplishments cited as the basis for the award were: "His dynamic leadership and vision in the development of the nation's forest resources; his wise and effective action in meeting the rapidly-rising public use of the national forests; building and strengthening working relations of the federal government with state governments and private forest industry; for an increasingly effective forest research program nationwide; for leadership in world forestry and the conservation of natural resources which has promoted international co-operation and friendship and reflected credit on the United States; and for typifying the best in civilian career service—integrity, dedication to the public interest, and devotion to the highest ideals of American citizenship."

This award represents the highest commendation a federal career man can receive, and is in turn a tremendous accolade to the 10,000-man career service that Dr. McArdle heads.



At White House ceremony, former President Dwight D. Eisenhower and Forest Service Chief Richard E. McArdle (c.) hear citation read by former Sec. of Agriculture Benson

Photos by Vincent Finnigan

# Mac Gets A Medal



Chief McArdle wears Gold Medal Award as he and Sec. Ezra Taft Benson display McArdle's citation

It was indeed a proud and happy occasion for Mrs. Richard E. McArdle too. Here she reads list of accomplishments that were basis for the award received by her husband



## EDITOR:

Please accept my congratulations and thanks for your very fine editorial "And Now, Aluminum Christmas Trees!" The encouragement given by such articles does much to help us keep the merchandising program sold.

Thanks also for your illustration of the problems with which the industry is faced. This also helps to keep the program sold by making all members of the industry aware of the magnitude of the problem.

Arthur Temple  
Southern Pine Lumber Co.  
Diboll, Texas.

## EDITOR:

I would like to compliment you on your article in the December issue of AMERICAN FORESTS entitled "And Now, ALUMINUM Christmas Trees!" It was excellent and a very fine tribute to the sponsors and contributors to the National Wood Promotion Program now being carried on by the NLMA.

W. R. Garrett  
St. Paul & Tacoma Lumber Co.  
1220 St. Paul Avenue  
Tacoma 1, Washington.

## EDITOR:

I just want you to know that I thoroughly enjoyed your editorial in the December issue of AMERICAN FORESTS. I, too, don't go along with aluminum Christmas trees.

William E. Cooper  
Executive Director  
Virginia Forests Inc.  
301 East Franklin St.  
Richmond 19, Virginia

## "Multiple-use-it-up?"

## EDITOR:

"Growing poorer while we are supposed to be getting richer" is the gem in the letter written by Mr. J. Louis Head in the November issue of AMERICAN FORESTS.

Might we say that this is the basic, haunting melody that unnoticed echoes through the halls of the Forest Service but is obscured by the whistling in the dark that serves to pace "conservation in reverse" according to the "multiple-use-it-up" program. "Multiple use" is the all-enveloping cloak that conceals the "wise manipulations" of local administrators, now subject only to their small individual consciences. "Multiple use" is used by the Forest Service like a drunk uses a lamp post for support rather than for illumination.

Hereabouts, local deer shooters (Izaak Walton League) demand the opening of explosive fire closures, in the driest year in history, that are priceless watersheds, in the face of almost unanimous objection of those whose homes and property are endangered thereby, and the Forest Service opens the fire closure!

The pine beetle manifests itself in trees that grow on land from which unnumbered crops of lumber and grazing grasses have been removed over the years, and the Forest Service sprays poison that further reduces the natural enemies of pine beetles, instead of replacing the exhausted minerals in the land!

Ten per cent of the forests of California burned last year. . . Progress, it is wonderful—how about another tranquillizer pill for that hangover?

H. M. Weber, M.D.  
Indio, California

(Turn to page 75)

## In Forest Land Management...

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# Forest Forum

## "Live and Let Live"

EDITOR:

"And Now, ALUMINUM Christmas Trees!" in your December issue was just read. The part about the lumber industry working together to promote the use of wood was *excellent*—as long as you are realistic and keep it to legitimate efforts—and face facts from all sides and angles.

But the aluminum Christmas tree bit was too much—and TOO typical of many of you. It is time you—foresters and especially The American Forestry Association—squarely and solidly face up to the fact that this is a 20th Century World. A world of steel, glass, aluminum, etc. . . . and *also* wood. (I really don't mind if you put the word first as long as you also remember the others. This is also a world of forests, wood production, grass lands and recreation. A world of specialization, where the Jack-of-all-trades does none too well.)

Aluminum Christmas trees? Yes! They sparkle and glisten in a very festive way, as no wood tree ever would unless sprayed. And if sprayed, why wood? The branches of aluminum trees can be crowded or scattered to suit the fancy and ingenuity of each "artist." And there are no gaping holes or imperfections as in the shabby wood trees of today. Their branches are covered with tinsel and leaves, even though artificial. Many of today's real trees are needless by the time they are brought home, let alone set up and trimmed. . . .

Aluminum Christmas trees have the individuality and personality each "creator" gives to them, as do the wood trees. True it is a modern personality but are you so old fashioned and senile that you use the outhouse for its odor and adjust to the cold, heat, flies, hornets, and misshaped

"holes" because you insist on wood rather than modern conveniences?

Furthermore, aluminum Christmas trees are acquired in a legitimate manner. In no way do they result in a barren wasteland that has been cut over by thieves . . . trespassers, and despoilers of the natural areas. AND, for from six to 18 or 20 dollars you acquire something which will last for years, and can even be handed down for generations, as many of us prize our old ornaments. . . .

I too remember with nostalgia the odor, the fresh greenness and beauty of the old fir tree which we went out and cut for ourselves. Cut for size, shape, color, and fancy of our own creative thoughts. But it is a nostalgia for one of those things no longer obtainable. (If I am wrong, then explain why you *people* are the very ones that will not open your forests for all of us to come in and cut according to our fancy.)

And on this modern vein—why not get out of the old smelly outhouse, out of the horse and buggy, and stop playing the old but serious game of Indians on a lot of other subjects such as the recreation battle. Lets play the diplomatic game of give and take—the honorable game of building governments—rather than the selfish game of bureaucrats and political "havers."

Constructively criticize the National Park Service, or any other recreational organization, for their mis-administration. Help them to build the best of their kind—and you will get reciprocal help in building the best of your kind. Be just as ready to give, to advance others, as you are to hold or take for your own advance. Be sure you are doing the best possible job before you are so ready to say that you are God and can do the best in everything.

And please remember that I am a mem-

ber of your organization. I am so much behind you and believe so strongly in your "purpose" in life that I am saving my pennies so I can become a Life Member so as not to miss your magazine. . . .

I say, "Live and let live." Let's be modern—and that includes change and advance, as well as custom and tradition.

Leroy S. Augden  
6147 Sun Court  
29 Palms, California

## Forestry Does Not Stop At Forest's Edge

EDITOR:

Saying thanks to you seems to be quite a habit but truly a nice one and one that I relish, but I don't know when I have been more pleased with anything in my nearly four years in this industry than I was to read your article regarding the lumber industry in the December issue. I think you can understand my statement much better by reading the copy of the attached release I am sending to our Board of Directors and members of the National Wood Promotion Committee which is a highly specialized list of 200 of the top leaders in the lumber industry.

Your beautiful treatment of the lumber industry's efforts to pull itself up by its own boot straps doesn't go unnoticed and I think it reflects tremendous credit on The American Forestry Association, the magazine, Fred (Mr. Hornaday), Ken (Mr. Pomeroy) and all the others concerned with this type of reporting.

As more and more foresters get interested in the marketing of the raw material they deal with, more and more people will see and understand exactly what you are driving at. I salute you, the lumber industry salutes you, and the forests of America salute you.

Mortimer B. Doyle  
Executive Vice President  
National Lumber Manufacturers Assn.  
1319 Eighteenth St. N.W.  
Washington 6, D. C.

EDITOR:

Your editorial "And Now, ALUMINUM Christmas Trees!" is a delightful comment, good reading, and certainly hits the nail on the head.

I am sure that most lumbermen subscribe to your thinking, and the reminder to look at ourselves is indeed good. Beyond that is our second big problem—telling the story of wood.

The industry's attempt to get its head above water through the advertising promotion of the NWPP is one way; and the untiring efforts of men in your category is proving to be another. I, for one, enjoy and appreciate your efforts.

Leonard K. Floan  
Vice President, Lumber Division  
Potlatch Forests, Inc.  
Lewiston, Idaho.

AN ARTICLE IN THE *Wall Street Journal* recently told of the phenomenal growth of the aluminum Christmas tree industry. From almost nothing in 1958 sales surged to a million or so in 1959 and several million in 1960, with plans for making and selling increasingly many millions more in the years ahead. The organized purveyors of the old-fashioned Natural Christmas trees, it is stated, are alarmed over this metallic competition and are making plans to combat it; but the manufacturers of the aluminum trees are confidently predicting that they will soon dominate this attractive seasonal market.

Lumbermen in recent years have grown accustomed to having aluminum and steel vigorously promoted as substitutes for wood in various lines; but this seems to be carrying the substitution idea a little too far. Christmas trees, to be sure, are not a part of the lumber industry's production and

it would have no injurious effect on the lumber business if in the future all the Christmas trees were made of aluminum. We are not actuated by any selfish business interest, therefore, when we express the fervent hope that a gaudy, man-made contraption may never replace the traditional fragrant tree from the woods that so many of us knew in our childhood.

The aluminum product may possess all the qualities claimed for it, but we have a feeling that the American public still retains sufficient sentiment and good taste to continue its preference for the kind of Christmas trees that grow in the woods. The metallurgists can take aluminum foil and shape it into a coldly glittering gimmick which they can label "Christmas tree," but that can't make it a tree. Remember, Joyce Kilmer said: "Only God can make a tree."—From January 1 issue of *Southern Lumberman*.

# American FORESTS

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James B. Craig  
EDITOR

Betty Kindleberger  
ASSISTANT EDITOR

James J. Fisher  
ART DIRECTOR

Vol. 67, No. 2, February, 1961

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**COVER** • President Dwight D. Eisenhower presents the President's Gold Medal Award for distinguished federal service to Chief Richard E. McArdle, U. S. Forest Service. (See article "Mac Gets A Medal," page 4.) Cover photograph by Vincent Finnigan.

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Improved  
Revised Version  
for Chief R M Peterson  
Feb. - March 1983

Richard Edwin McArdle (1899 -1983)

Eighth Chief of the Forest Service (1952-1962)

Richard E. McArdle was born February 25, 1899, in Lexington, Kentucky. He earned B.S. and M.S. degrees in forestry at the University of Michigan in 1923 and 1924, then entered the Forest Service as a silviculturist at the Pacific Northwest Forest and Range Experiment Station's new headquarters in Portland, Oregon. In 1927 he left for graduate study and teaching to earn his Ph.D., returning in 1930 to become a leader in fire research. In 1934-35 he was forestry dean at the University of Idaho, then resigned to head the new Rocky Mountain Forest and Range Experiment Station at Fort Collins, Colorado. After three years there he took the same post at the Appalachian (now Southeastern) Station at Asheville, North Carolina. From 1944 to 1952 he was Assistant Chief of the Forest Service in charge of State and Private Forestry cooperative programs. He served as Chief from July 1, 1952 to March 17, 1962.

As Chief, McArdle pressed for a congressional mandate for balanced management and long-range plans for the National Forests and for research. He also pushed for accelerated recreation development, intensified timber management with adequate reforestation, curbing of mining and grazing abuses, more aid for State and Private Forestry, and increased professionalization and upgrading of personnel. Some results were the Multiple-Use Mining Law of 1955, the Multiple Use-Sustained Yield Act of 1960, substantial increases and better balance in funds for the agency, continued improvement in conditions of its grazing lands, new responsibility for 7 million acres of Great Plains grasslands, and higher service grades for rangers and other field personnel in crucial positions.

McArdle abandoned as impractical and self-defeating the long intermittent attempt to get Federal regulation of timber-harvesting practices on private lands, thereby improving strained relations with the timber industry. He had nearly resigned over this issue late in Clapp's regime. As Chief he also was able to prevent the granting of vested grazing rights long demanded by livestock men holding grazing permits in National Forests.

McArdle was active in international forestry and was a founder of the North American Forestry Commission of the United Nations' Food and Agriculture Organization. He helped organize, and served as president of, the Fifth World Forestry Congress held in Seattle, Washington, in 1960. After retirement he set up a University training program for Federal executives, as executive director of the National Institute of Public Affairs, lectured on forestry under a Rockefeller grant at various colleges, served on special curriculum boards, and was director of Olincraft, Inc., a forest product firm. He served on the boards of various forestry organizations and received numerous awards, including the USDA Distinguished Service Award, 1957; the President's Gold Medal, 1961; the Society of American Foresters' Sir William Schlich Memorial Medal, 1962; and the American Forestry Association's John Aston Warder Medal, 1978. In addition, he received the Knight Commander Order of Merit from the government of Mexico, 1961. He has honorary degrees from the Universities of Michigan, Maine, and Syracuse.

References: News releases, articles, and other data in Forest Service History Section biographical files. Dr. Richard E. McArdle: An Interview with the Former Chief, U. S. Forest Service, 1952-1962, conducted by Elwood R. Maunder, Forest History Society (1975).

--Frank J. Harmon

Mr. Davis says these "originals" for the Information Digest should go in the historical files.

That's your baby, right?

blm

Clint

I think a special edition of the Info Digest is justified for these 2 messages.

Obviously, to be effective, time is (as they say) of the essence.

Ma 3/12

ALL MEMBERS OF THE FOREST SERVICE:

This is my last message to you as Chief. My decision to retire at this time was made some two years ago. I still think it was a wise decision. I leave this final assignment with no regrets except that I might somehow have done a better job. I did my best and that's all anyone can do. I leave it with the happy feeling that I've had your full support. I can't seem to find the words to tell you how much that has meant to me these past ten years and how much it means to me now. Thank you.

We should all be happy that Secretary Freeman's selection of Ed Cliff keeps the Chief's position in the career service as it always has been. Support him as you have me.

The Forest Service is in pretty good shape. We've never had so many top-flight, competent people. We've never been better organized. We've never had more clear-cut objectives. Nor so much substantial progress to our credit. This is not my doing but yours, everybody. I say it because still rougher times lie ahead and I want you to believe that you can meet these challenges and these opportunities successfully. The way to success is to stick together. Divided, you will fall. United, you will win. This is the message I want most of all to leave with you.

Our trails are going to cross often. I'll be seeing you. Adios.

*A. G. McCully*

*Follow with Cliff's statement*

# The Washington Post

WSPAPER

SUNDAY, MARCH 11, 1962

## Career Foresters

Richard E. McArdle is stepping down as chief of the Forest Service with a long record of achievements. Though only 63, he has spent 39 years with the Federal Government and was assistant chief of the Forest Service for eight years before he stepped up to the top position a decade ago. Under his leadership the "multiple use" idea has been given special emphasis. The national forests have been administered with the object not only of conservation but also of maximum use of their vast resources, consistent with long-range preservation. He has given the country a new awareness of recreational values in the national forests and of their great potential for water, timber, forage and wildlife.

Continuity in the development of the country's forest resources seems to be assured by the naming of Edward P. Cliff as Mr. McArdle's successor. Mr. Cliff is a professional forester with 32 years service in the organization and has recently functioned as assistant chief in charge of National Forest Resource Management. He will have a special opportunity to carry out the development program for the national forests sponsored by the Kennedy Administration.

Wash. Star 3/19/62

## Protector of Forests

Retiring voluntarily from his post as chief of the United States Forest Service, Richard E. McArdle leaves a record of distinguished service as a protector of America's remaining forests. Few men have won such wide recognition, nationally and internationally, for their work in the field of conservation of our natural resources.

Dr. McArdle, in his ten years as Chief Forester, gave energetic leadership to the causes of improved forest management, forest research, wildlife development, outdoor recreation and related activities. He represented the United States in world conferences on conservation and was a founder of the North American Forestry Commission. He will be sorely missed at the Forest Service. Fortunately, however, he will be succeeded by Edward P. Cliff, a colleague who also has distinguished himself in forest conservation. Chief Forester Cliff, a veteran of 32 years in the Forest Service, is well fitted by training and experience to carry on the work so ably done by Dr. McArdle.



*To the Forest Service Organization*

First I want to pay tribute to our Chief of the past ten years. He has devoted himself unselfishly to the Forest Service. He has led us through some perilous times and over some pretty rough going. Under his leadership the Service has made solid progress. We have grown in strength and stature. Today we are better financed, better manned, have more built-in competence, and are producing more good work than ever before. We are in good condition to face the future. Mac has been a great Chief--a grand guy--and we will miss him.

The future promises to be even more interesting than the years we have just been through. The pressures on resources and competition for use of land are increasing every year and so are the opportunities for Public Service. Within the goals we have set for ourselves in the Development Program for the National Forests and the Research Program, our Research work will triple in the next decade. Our work on National Forests and Grasslands will be more than doubled. If we face up to the small forest land ownership problems, as we must, our State and Private Forestry activities will be many times greater and more challenging than they are today. Our total job will not only be bigger, it will be more complex, and our management of resources and of people in our organization must be more intensive.

The years ahead will not be easy but they will be as exciting, satisfying and productive as we want to make them.

As I told the Regional Foresters and Directors last week, I face my new responsibilities with humility but without fear. I welcome the challenge and the opportunities that go with it. I have great faith in the Forest Service. Working together as a team we can accomplish about anything we set our minds on. I will need your support and am confident that I shall have it. I promise all of you that I will do my very best to give you the kind of leadership that the Forest Service deserves.

*Edward P. Cliff*

## NATIONAL FOREST TIMBER MANAGEMENT AND THE LOGGING INDUSTRY

By Richard E. McArdle, Chief, Forest Service, U. S. Department  
of Agriculture, at the 49th Pacific Logging Congress,  
Portland, Oregon, November 12, 1958.

Mr. Chairman and members of the Pacific Logging Congress, I am glad to have this chance to talk with you about national-forest timber management policies.

It is like coming home to return to Portland and to rub elbows again with people who make their living harvesting timber. Things have changed considerably since my early years in the Forest Service when I lived out here and worked in the tall timber. That was a time of rapid exploitation of old growth in the Puget Sound area and the lower Columbia. Logging in the western pine territory was confined to the best pine timber. The vast stands of timber in southwestern Oregon and northwestern California were virtually untapped. Except in a few communities, national-forest timber was not a very large factor in the timber economy. It was regarded mainly as a reserve for the future. Well, the future we were looking toward then is here. *cut*

The center of gravity of the Pacific Coast timber industry has shifted southward. The pulp industry has expanded greatly, mostly on the basis of using material formerly wasted, and there has been strong movement toward integrated utilization. Industrial forests are being organized and managed for permanent production. Utilization in the woods has improved. The true firs and the so-called mixed species are being used more widely and lodgepole pine is coming into its own.

Logging has moved into the back country. National-forest timber is in strong demand. Only 25 years ago the industry asked that national-forest timber be withheld from sale so that it would not compete with private timber on a depressed market. Now, we are being criticized for not selling it fast enough. A substantial segment of the industry on the West Coast is now dependent for survival on purchase of public timber, principally national-forest timber. For many companies owning little or no timberland, there is virtually no place else to turn for stumpage. Even some of the larger land-owning companies are purchasing national-forest timber to round out their operations until their second-growth comes into production. Opportunities for purchasing privately owned stumpage are becoming scarcer each year.

Other changes have occurred which affect your industry and your relationships with the Forest Service. The Nation's population has increased 33 percent since 1940. The population of the West is up 77 percent, and for the three Pacific Coast States it is 87 percent greater than in 1940. New industries--aluminum, iron, and steel, airplane manufacturing, electronics--have risen to share the industrial base with timber production. Water is a key to population and industrial growth, and in places it has become the No. 1 problem. There is no longer much talk about surplus water. Instead, we hear about water rationing, power shortages for growing industries and cities, and the need to develop and control our rivers. This surge of river developments has had, and will continue to have, a heavy impact on the national forests.

When I lived in the Northwest, only a few people used the national forests for recreation. Last year there were 6,750,000 recreation visits on the national forests in Oregon and Washington, and 11,265,000 in California. This is an increase of 182 percent in the three States since 1940. Last year the increase in use was 16 percent over

allowable cut for subregions, States, or the entire national-forest system. This is helpful as a way to summarize and characterize the general situation. But since each working circle is an individual accounting unit, an overcut in one working circle cannot be offset by an undercut in another. The real on-the-ground working goals apply to individual working circles, which, for example, number 34 in Oregon. This should be understood as a footnote applicable to any summary discussion of allowable cuts.

Discrepancies between allowable cut and the rate of cutting actually achieved have been a favorite topic of discussion out here. Failure to attain full allowable cutting rates for every year in the last decade has sometimes been characterized virtually as robbery of the local economy by the Federal Government. I don't see much point to a second guessing might-have-been accounting contest. The allowable cut wasn't attained during the last 10 years either because the market for it hadn't yet developed or because we didn't have the roads, rights-of-way, or other necessary requirements to make sound sales up to these goals. It was not a physical loss of merchantable timber. Such loss as occurred was a loss of opportunity. It was a delay in creating the maximum amount of a regenerated new age class which would put on an increment every year until harvested 100 years or more hence.

The allowable cut for each national-forest working circle is revised at approximately 10-year intervals. When the revision is made the Forest Service makes a round-up of all the data then available on old-growth inventories and rates of growth and loss. If the volume of timber harvested or otherwise eliminated during a decade exceeds the allowable cut, a downward adjustment in the allowable cut for the next decade will be required unless there are other compensating factors tending to increase the timber inventory. This downward adjustment would be made in the same manner and degree regardless of whether the excess depletion were due to overcutting or to extraordinary loss, such as from fire or insects. Corresponding upward adjustments would be made if the volume of timber harvested or otherwise eliminated is less than the allowable cut. The upward adjustment would be made in the same way regardless of whether the inventory increment came from an accumulation of undercuts or from less than normal losses to fire, insects, and disease.

The Forest Service recognizes that the Pacific Coast and Inland Empire forest-products industries now need the full allowable cut from practically every working circle. We want to have a sales program which will produce this cut, but we will not make sales or cut volume an overriding objective. The objective is to make a series of soundly planned, soundly logged sales up to the allowable cut limitations. Poorly handled sales which result in excessive erosion, unstocked cutover, or comparable unsatisfactory conditions are worse than an overcut.

Sales standards. There has been a great deal of clamor recently about making the allowable cut regardless of whether it is yet feasible to do so under good management. Evidently there is need for better understanding of the necessity for making only sound sales and the problems involved on producing them in sufficient quantities to attain allowable cutting goals.

Timber sales must be located right, roaded right, marked right, logged right, and regenerated right. The proper location for any sale in any working circle is that area having the stand of timber most in need of cutting. Factors other than thrift may control cutting priorities. Every logger knows he should not keep working on the face of a watershed. Hauling distances should be balanced and the lower-elevation timber held back for winter logging.

A good job of logging requires an intelligent, progressive industry. On our part it requires a well-trained timbersale force. On the part of both parties it requires cooperative understanding of contract terms and their performance on the ground. The Forest Service must understand what is practical and feasible. The logging industry must be continually willing to push ahead to make advances in what it is practical to utilize, where it is practical to log, and how it is practical to reduce logging damage. You need a lot of things from us and the Forest Service needs a lot from the logging industry. There is a long way to go in improving erosion-control practices, in reducing

damage to residual stands and advance reproduction, in reducing breakage, in improving woods utilization, and in bettering performance in hazard and slash clean-up.

Except for intermediate and salvage cuts which are merely preparatory or supplemental to harvest cuts, regeneration of a new stand is the ultimate objective of our timber cutting. The way timber is marked and logged is the principal means of getting natural regeneration. Artificial regeneration measures make it possible to make harvest cuts every year despite lengthy periods between seed years for many of our important commercial species. For a few special problem cases, provision for replanting makes it possible to use practical logging methods where the type of marking and logging required to obtain natural regeneration is not economically feasible.

Fortunately in the Knutson-Vandenburg Act the Forest Service has a means to obtain the measures necessary to stimulate natural regeneration or to apply artificial regeneration. Such provisions are an indispensable part of a sound sale program for the national forests. Without the authority of the K-V Act, our sale program would be smaller and some of the sales would have performance requirements which would make them less attractive to purchasers. This is why it surprises me to now and then get implications that segments of the logging industry favor curtailing or eliminating sale-area betterment work authorized by the K-V Act.

The industry has a vital interest in seeing to it that the national-forest timber-management program moves forward in a sound, orderly way. In turn, the Forest Service needs your acceptance and cooperative performance of essential logging requirements and your restraint in making demands for sales up to the allowable cut regardless of whether sound sales are feasible. We solicit your intelligent interest to help get the measures taken which will break the bottlenecks in the working circles where special difficulties are holding up a full schedule of sound sales. Industry support along these lines will make it possible for the Forest Service to get cuts up to allowable rates and to get them there sooner.

Timber sale scheduling. Your industry evidently wants to have the full allowable cut offered in each working circle each year and wants a schedule of sales to attain this objective with approximate dates for advertising announced early in each operating season. This is a higher standard of performance than the Forest Service has heretofore been organized to provide.

Allowable cut is often an inappropriate measure of the volume of timber which should be offered for sale in a given working circle in a given year. An annual program of new sale offerings should sometimes be higher and sometimes be less than the allowable cut. Some salvage and other special type sales may appear in the sales program but are not chargeable against the allowable cutting budget limitation. In some working circles allowable cut has little significance because of lack of markets. In addition to the allowable cut, the annual sales objective in each working circle should take into account such factors as (1) the amount of uncut timber under contract, (2) marketing opportunities, (3) current and prospective rates of logging by local operators, (4) backlog of overcuts or undercuts within 5-year regulatory periods, and (5) needs and opportunities for salvage or other sales not chargeable to allowable cutting budgets.

We propose to start a system for determination of an annual sales volume objective in each working circle. These determinations will be announced shortly before the beginning of each fiscal year. We want to get into a position where it is possible for forest supervisors to make firm annual announcements of the schedule of sale advertisements early in each operating year. It is not possible to attain this objective yet because most forests do not have sale-preparation work far enough ahead to make a firm announcement of a full schedule of sales a year in advance. In order to avoid further misunderstanding, we will announce only those planned sales which are sufficiently advanced so that the quarter in which advertisement will be made can be stated with reasonable certainty. Should there be unforeseen developments which force re-scheduling of announced sales, correction announcements will be made as soon as the

situation is uncovered. We of course will continue to furnish information to interested persons on sales under preparation but not yet ready for announcement.

Until we can get further ahead on sale preparation it will be necessary on many forests to announce forthcoming sales at less than yearly intervals. Every effort will be made to give those interested in bidding as much firm advance notice as possible of the sales to be made in each logging season. We want, as do you, to avoid a reduction in the volume of timber advertised as we strive to get further ahead on advance sale-preparation work.

Timber appraisals. The Forest Service will continue to set appraised values at which timber is advertised at levels to provide both a fair return to the Government in comparison to prices bid for other comparable timber and a fair profit opportunity to the purchaser. In these comparisons, prices bid or otherwise fixed must be adjusted to eliminate effects from extraneous factors not related to intrinsic timber value. Even after such adjustments there may at times be overlaps from opposite directions, making it difficult to set a price which clearly meets both objectives. Forest Service appraised prices have been maintained on middle ground when the two objectives have proved to be irreconcilable. We believe that both viewpoints must always be kept in mind.

We have not adopted the single criterion of high bid rates suggested in reports of the General Accounting Office and by Congressional Subcommittees. Neither have we completely disregarded bid rates as has been advocated by some industry groups. The Forest Service will continue to work with your industry on developing the facts on logging costs, on lumber and plywood sales returns, and on sound methods of applying basic appraisal information.

Contract provisions. Timber-sale contracts unavoidably must contain many detailed provisions. These provisions should be expressed as simply and clearly as possible. They should be reasonable and equitable. As conditions change, the question of just what is equitable and reasonable can best be worked out by a continuing exchange of views between representatives of the two parties involved. The present form of timber-sale contract was put into use in 1954 after very thorough discussions with industry groups. Several new provisions, such as payment bonds, accelerated road amortization, and a revision in road depreciation accounting, have been added since then. Contract wording is under continuous review for improvement of its clarity and for its adequacy to meet new problems as they arise. The Forest Service is always glad to discuss contract-wording problems with industry representatives. If you have complaints or recommendations about contract working, please make them specific. It is difficult to deal with general criticism of contract terms.

Road needs and construction standards. All of us recognize that roads are the key to a full and sound timber-management program. An adequate timber access road system for the national forests requires a lot of money each year over many years. We have made good progress on access-road construction in the last five years, but a big job remains to be done. We still have many working circles in the West where it is not yet feasible to make the full allowable cut because of inaccessibility.

The Forest Service will continue to work for construction standards on logging roads which give the lowest long-run service cost. All roads must meet reasonable requirements for control of erosion and of unnecessary movement of soil or debris into drainage channels. The same standards of location and construction will be applied to single-purpose logging roads built from appropriated funds and to purchaser-built roads. We are making good progress towards strengthening our road-engineering organization but recognize that we have to improve engineering services still further to get adequate coverage of location, design, and construction supervision of all timber-access roads. We want our engineers to work with your engineers on specific

details and problems of logging road design and construction. I am glad to note your Congress has scheduled a discussion of this sort for today.

Right-of-way policy. In 1953 Ed Cliff stated to this Congress that the Forest Service policy was to have permanent easements over an economically feasible route before timber is advertised for sale. We have worked hard on right-of-way negotiations in the last five years. In some areas progress has been good. In others it has not been satisfactory. Opportunities to substitute other timber offerings for those tied up in lengthy right-of-way negotiations are now seldom available. In some areas right-of-way procurement is the principal bottleneck to getting the cut up to the full allowable rate. The Forest Service has been urged through some means or other, including new legislation, to deny rights of crossing national-forest lands to concerns who will not give reciprocal rights for crossing their lands. In situations where there is a mutual need for access to and across national-forest and other intermingled lands, rights to cross and conditions and charges for hauling rights should be granted or exchanged between the national forest and intermingled private lands on the basis of equitable reciprocity. We are determined to get the permanent access required for permanent management of the national forests for all uses. In the past we have been reluctant to resort to condemnation. Changed conditions require that we reconsider this policy. In the future condemnation procedures will be used wherever these needed rights-of-way cannot be obtained with reasonable promptness through negotiation.

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The recently raised issues over timber-sale programs are primarily an expression of the need of industry for an opportunity to purchase the maximum amount of timber which can properly be offered under sustained-yield management. Even though this basic thought has been expressed in different ways, I would like to assure everyone concerned that the Forest Service has got your message, agrees with it, and wants to go about meeting these demands for timber in an orderly manner. I believe the other agencies in both the legislative and executive branches of the Federal Government which must approve our programs have also gotten the message and want to be helpful.

I am not suggesting that your industry should curtail its interest in national-forest timber management. I am suggesting that you shift your emphasis from a general plea for more sales to an understanding of the fundamentals on which a full-scale timber-sale program must be based. I emphasize again here at the end what I said at the start: The national forests serve more than one use and more than one group of users. These are public lands. They do not belong to any one group but to all the people. Excessive claims of any one group of users is bound to lead to restrictions, whereas support from all the public makes for faster programs all around. It is for this reason that I suggest that your particular interests in these public forests can best be served by advocating the measures necessary to attain full cutting objectives under sustained-yield, multiple-use management.

I have had the privilege of visiting many of you in your offices and the pleasure of talking with others in my own office in Washington. Those of you who have come to see me know that my door is kept open. I shall always be glad to discuss our mutual interests and problems.

Statement of Richard E. McArdle, Chief, Forest Service, U. S. Department  
of Agriculture, on the "Program for the National Forests" Before the  
Sub-Committee on Forests of the Committee on Agriculture,  
House of Representatives, 86th Congress,  
1st Session, May 14, 1959

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am glad to pick up where Mr. Peterson concluded in explaining the national-forest program recommended to the Congress by Secretary Benson.

Mr. Peterson briefly explained the need for the program, recalled progress in recent years and the good to the country from putting the program into effect.

I shall try to summarize the specific program proposals, tell you something about the acceleration that would be involved in relation to our present activities, and give you an estimate of what the program would cost.

The national-forest program is no "quickie" affair. The Forest Service for many years has maintained an inventory of needed works. This project work inventory is roughly equivalent to Dr. Elliott's famed five-foot bookshelf. It is our shelf of needed jobs.

The Forest Service also has completed recently an exhaustive study of our present and prospective timber situation. Conclusions of that study as to future timber needs were instrumental in establishing long-range national-forest timber goals. The findings of a Departmental Committee on Research Evaluation contributed to the research program.

The point I am trying to make is that the program sent to the Congress by the Secretary has been developed carefully over the years, is soundly based, and has been thoroughly considered.

In the first instance, the estimates were developed in our national forest and regional offices in accord with certain basic assumptions. The field estimates have necessarily been screened and coordinated, both functionally and geographically, in order to mold the integrated program which you have before you. I hope you will bear these points in mind when I later describe the costs of the program and the step-up that would be involved over present operational levels.

### The National-Forest Program

The program consists basically of two parts. First, we developed a series of long-range objectives for each of the main renewable resources of the national forests such as water, timber, range, recreation, and wildlife. These are geared to what we believe should be achieved in resource management by

# NATIONAL FORESTS AND ASSOCIATED LAND-UTILIZATION PROJECTS



Chart 1

January 1, 1959  
U. S. Department of Agriculture, Forest Service



the year 2000. Second, we outlined a series of some 65 major actions and numerous subitems organized into 6 groups of activities. All of these should be accomplished within the next 10 to 15 years in order both to meet current needs during that time and to prepare adequately to meet the longer range objectives.

The long-range objectives are geared to the basic assumptions that by the year 2000, population will reach 332 million people, an 88 percent increase over now, and that gross national product by that time will reach \$1,800 billion, or about 4 times the present (chart 2). Higher assumptions could have been used. We believe those chosen to be reasonable.

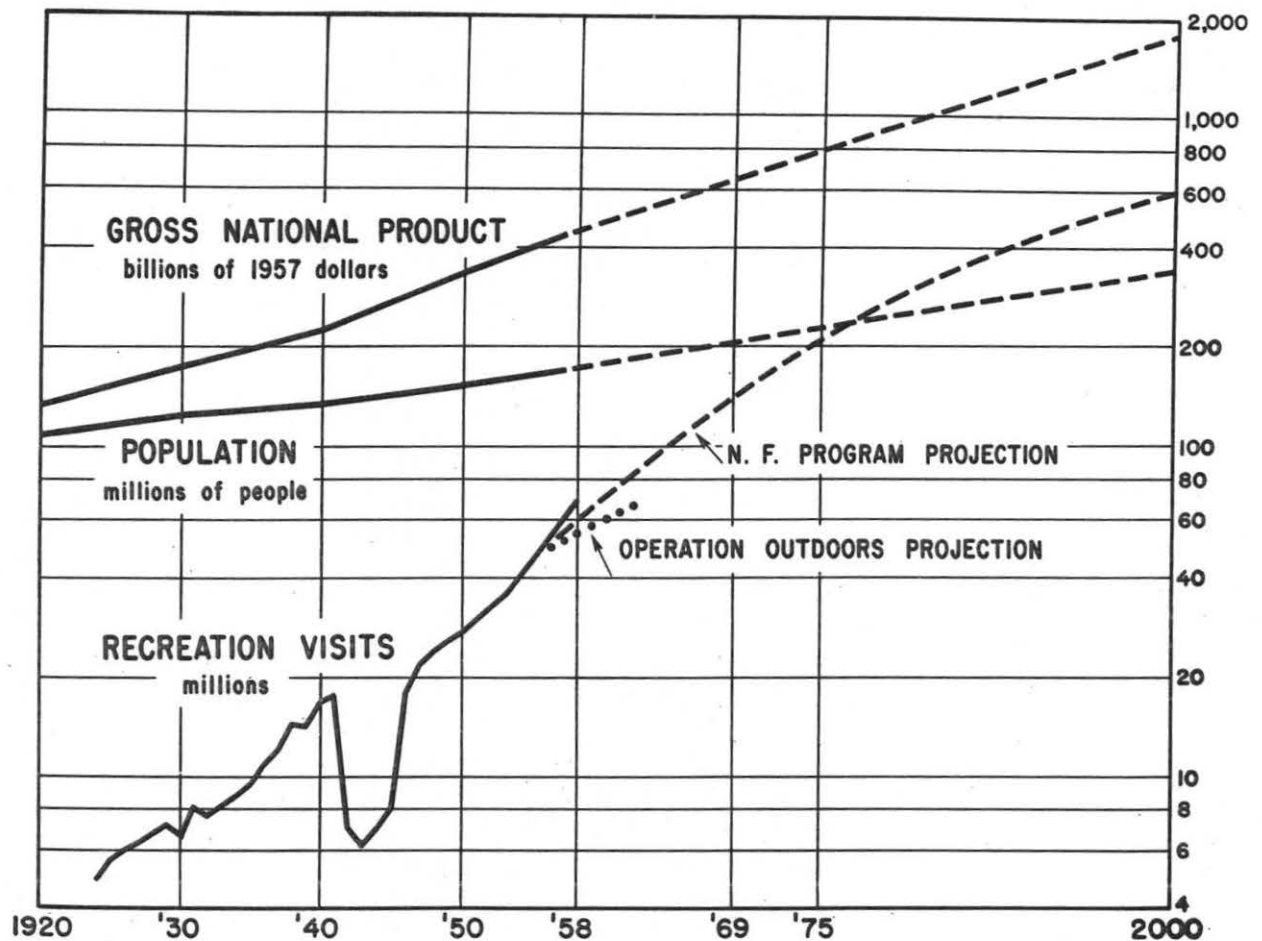


Chart 2

The action proposals for the next 10 to 15 years are called the "short-term" or "interim" program. Today I want to talk primarily about this short-term program. Furthermore, the cost estimates and comparisons with present levels of activity relate only to the short term.

The program consists of six groups of activities: Resource development and management, protection, roads and trails, land adjustments and uses, administrative structures and equipment, and research. In the resource

development and management group, I would like to comment specifically on timber, water, range, and recreation and wildlife.

**Timber:** The long-range timber goal for the national-forest system is an annual harvest on a sustained-yield basis of about 21 billion board feet of sawtimber by the year 2000. This goal is about 3 times the 1957 timber cut and is that portion of the national need which the national forests could reasonably be expected to produce under intensified management.

By the end of the short-term program, annual cut should reach 11 billion board feet (chart 3), in contrast to 6.4 billion board feet in 1958 and 8 billion in 1959. The increase in annual timber cut by the end of the short-term program will be enough to build 400,000 5-room frame houses or enough to house twice the population of the District of Columbia.

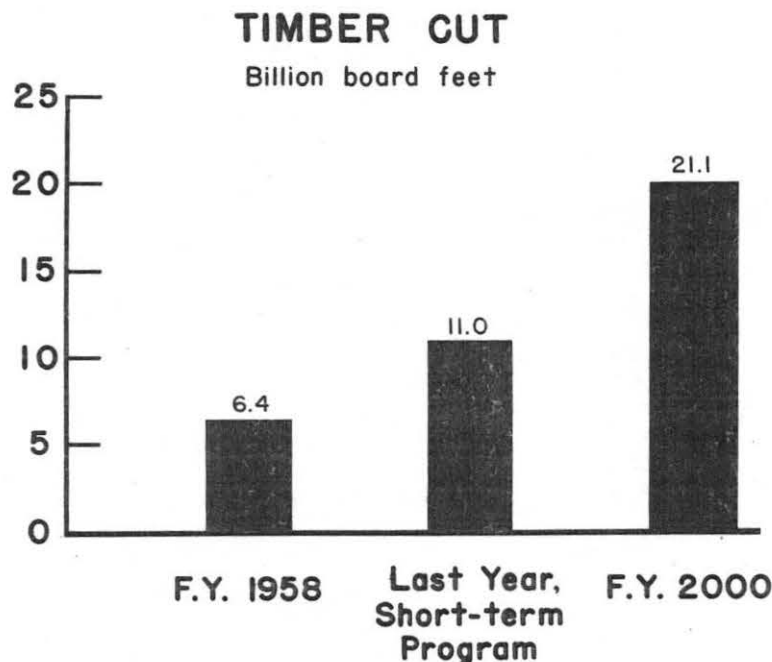


Chart 3

Better standards of regeneration, hazard reduction, salvage, and erosion control will be applied, and inventories and timber management plans will be completed and brought up-to-date.

Three-fourths of the needed planting job on the national forests will be completed during the short-term program. This will mean planting an area larger than Connecticut. An area twice the size of Massachusetts, or over 17,000 square miles, will be treated with various stand improvement measures such as pruning, weeding, thinning, and release cutting.

**Water:** Water resource management of the national forests has two principal long-range objectives: (a) Protection of the watershed by stabilizing the soil and thereby preserving and improving water quality, and (b) managing the area to increase water yield. Both objectives will continue to receive major consideration in the long-range multiple-use management of these lands.

The national forests cover one-fifth of the West, receive one-third of the precipitation because of their high elevation and mountainous character, and furnish over half the waterflow.

Much of our water-resource management depends upon how we manipulate the timber, the range, and the wildlife habitat, how successful we are in protection against fire, how efficient we are in building roads, and in minimizing erosion hazards.

But in addition to those impacts on water-resource management caused as a result of other national-forest activities, there are numerous specific things that need doing to improve the quality and increase the quantity of water.

These include such things as completing soil surveys on an area larger than the State of Alabama, or about one-fifth of the total national-forest area needing such surveys; controlling erosion on 14,000 miles of roads and trails, or over  $4\frac{1}{2}$  times the distance between New York and San Francisco; stabilizing 10,000 miles of gullies and channels; and numerous other items such as control of sheet erosion and stream pollution, construction of upstream flood control structures, inventories of water yields, and watershed management plans.

Range: A long-range objective for management of 68 million acres of rangeland in the national-forest system is to improve the range resource in order to achieve a sustained high level of forage production, and better watershed conditions. This objective can be attained through intensified management, better range practices, and more balanced use.

Range analyses and management plans are to be completed on each of the nearly 8,800 range allotments on the national forests. Undesirable or poisonous range plants will be controlled or revegetation will be undertaken on nearly 7,000 square miles. Enough fence will be built to enclose 115 ranches the size of the King Ranch in Texas--some 18,000 miles. Nearly 10,000 water facilities are to be built. And finally, where stocking adjustments are necessary to balance utilization and available forage, these will be carried out as rapidly as practicable bearing in mind the needs of both the range and other factors.

✓ Recreation and Wildlife: Probably the most phenomenal increase in any use of the national forests in the next few years will be in recreation. Recreational visits have multiplied about 7 times since World War II. We expect them to nearly double again in the next decade and to be 9 times more than present levels by the end of the century (chart 4). /

Briefly, our long-range recreation objective is to prepare to accommodate this tremendous number of people adequately but modestly, and with due safeguards for their health. Likewise, our goal is to develop the wildlife habitat to yield a fish and game population adequate to meet the needs of an equally phenomenal increase in hunters and fishermen.

Some 13 major action proposals are listed for recreation and wildlife habitat development on page 15 of the printed program. I can only mention a

## RECREATION VISITS

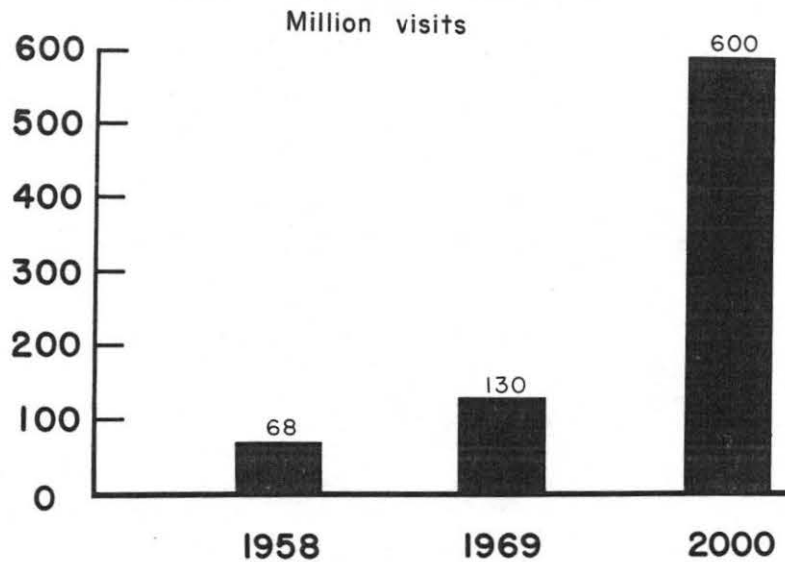


Chart 4

few. First of all, "Operation Outdoors" is to be completed. We are finding that our sights were not high enough when "Operation Outdoors" was prepared and already actual use for 1958 exceeded the forecast in "Operation Outdoors" for 1962 (chart 2).

We propose to build enough additional family units for campers and picnickers to accommodate the entire city of Denver at one time--over 100,000 new family units. One and a half million acres of key wildlife areas are to be approved, as are 7,000 miles of fishing streams.

Protection: The importance of adequate protection of the national forests from disease, insects, fire, and other destructive agencies can scarcely be overemphasized. They adversely affect all of the renewable natural resources, but we know more about their quantitative effect on timber than on other resources. In 1952 net sawtimber growth would have been about double if it had not been for the effect of these agencies. Causes were 45 percent due to disease, 20 percent to insects, 17 percent to fire and 18 percent to all other destructive forces. The long-range objective is to minimize these damages to the maximum extent practicable.

About a 50-percent increase over present levels of protection against insects and disease is needed during the short-term program. An additional 100 million acres of national-forest timberlands and critical watersheds, should receive fire protection adequate to meet the fire situation in the worst years. To achieve this fire protection means nearly doubling present preventive effort, detection, skilled firefighting crews, training, supervision, and equipment. It means better techniques for suppressing fires when small and for stopping large fires from running. It means reducing hazardous fuel conditions by such things as burning 300,000 acres of concentrated debris,

felling snags on over 300,000 acres, prescribed burning on  $3\frac{1}{2}$  million acres, removing roadside fuel on 37,000 acres, and maintaining some 12,000 miles of firebreaks.

Roads and Trails: Adequate access to national-forest lands continues to be a problem and a deterrent to intensive management, utilization, and protection. Right now there are about 150,000 miles of forest development roads which eventually should increase to 542,000 miles (chart 5). There are about 112,000 miles of trails which may eventually decrease to about 80,000 miles.

## FOREST DEVELOPMENT ROAD SYSTEM

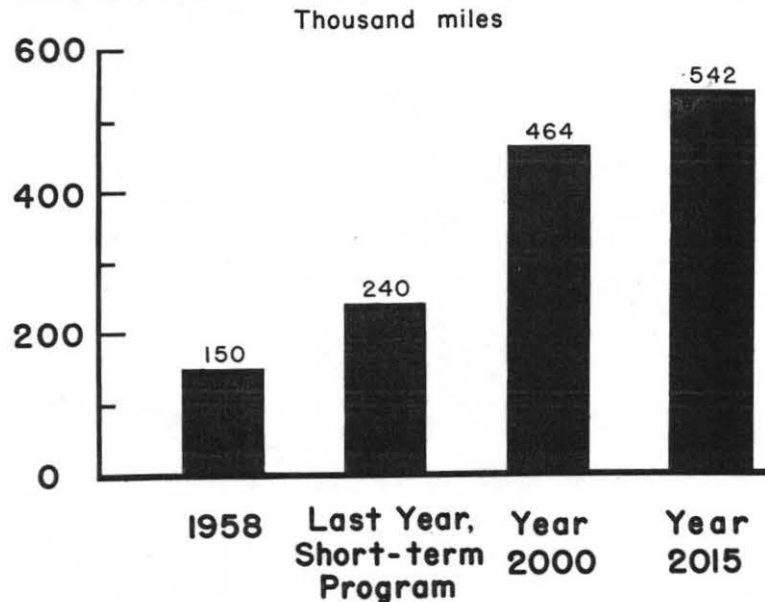


Chart 5

During the short-term program, the plan is to build 90,000 miles of development roads and 8,000 miles of trails. About half the forest development roads to be built in this period will be constructed by timber purchasers but paid for by the public through adjustment of stumpage prices.

Construction of forest development roads scheduled for the short-term program will be equivalent to building 30 such roads extending all the way between New York and San Francisco. By the year 2000, the development road system should have increased to about 464,000 miles. It will be another 15 years before the entire system of 542,000 miles is completed.

Although not part of the national-forest program as such, because the responsibility does not rest with the Department of Agriculture, it should be mentioned that in addition to the forest development roads, there are also over 24,000 miles of forest highways that aid development of the national forests. When fully installed, there will be about 70,000 miles of these highways under a program administered by the Bureau of Public Roads in the Department of Commerce.

Land Adjustments and Uses: Effective management of the national forests requires reasonable consolidation of ownership where there is intermixed public and private land. Although such consolidation is a continuing function, the proposal for the interim period is to exchange about 1.4 million acres of scattered or checkerboard national-forest land for other areas. By doing this, some 11 million acres of private and State land can be excluded from national-forest boundaries. Special attention will be given to completing the consolidation of national-forest lands in the Boundary Waters Canoe Area in Minnesota and in certain key watersheds in the Cache National Forest in Utah.

It is also proposed to survey, post, and establish corner markers on 100,000 miles of national-forest property lines. This is equivalent to going around the State of Pennsylvania a hundred times.

The determination of surface rights of mineral claimants on national-forest lands underway since the approval of the Act of July 23, 1955, will be completed. This determination will have been made on 120 million acres of national-forest lands.

Administrative Structures and Uses: Certain administrative structures and equipment for fire protection, housing, communications, and transportation are absolutely necessary. We plan to build in the short-term program some 2,700 dwellings, another 2,700 service buildings, and over 500 lookouts; replace 9,000 radios; build 3,000 miles of telephone lines; build 25 new aircraft landing fields; and reconstruct 37 existing fields.

Research: Forest research is the handmaiden of progress. It must keep ahead of practical application. The research program proposed for the short-term period is needed to yield not only quick results for applicability during that period, but also information of value in attaining long-range objectives. Only that portion of the total forest research program of the Department of Agriculture that has a direct impact on national-forest management is included. This is estimated at about two-thirds of the total.

Research must have adequate laboratories, greenhouses, scientific equipment, and other facilities. The short-term program includes the construction of 17 specialized laboratories and related greenhouse and service facilities for research in pests, tree genetics, physiology, forest soils and hydrology, forest fires, and forest products; 30 office-laboratory buildings; and stream gages, fencing, and other minor research installations on about 100 experimental forests and ranges.

Some 14 specific fields of research are outlined in the short-term program covering each of the basic renewable resources of the national forests and ranging all the way from research in tree genetics to the preferences of recreational users.

### Step-Up Proposed in Short-Term Program

We must not develop one resource and lag behind in another. During the past years, some unbalance has crept into national-forest resource management. The recommended program would restore desirable balance and

coordination. Variable rates of speedup are proposed for different activities. Comparisons are derived by relating what is proposed for the short-term program to what has actually been done in the past 10 years.

The step-ups range all the way from a 50-percent increase or less in some activities to a hundredfold increase in gully and channel stabilization. For example, annual timber cut should increase 1-3/4 times, but reforestation and stand improvement over 19 times (chart 6). This is essential in order that timber harvesting does not get further out of balance with regeneration and cultural measures. Likewise, whereas recreation visits are expected to double, new family campground and picnic units will increase 19 times. This also is essential to bring these facilities into balance with numbers of visitors. Over 3 times as much road mileage is proposed for construction in the short-term program as was built in the past 10 years.

## STEP UP IN SHORT-TERM PROGRAM

( Selected comparisons )

Activity	Unit	Past 10-Year Period	Short-term Program	Step Up ( Times past level )
Annual Timber Cut	Billion bd. ft.	6.4 *	11.0 *	1-3/4
Reforestation And Stand Improvement	Thous. acres	762	14,750	19
Soil Surveys	Thous. acres	1,750	33,000	19
Erosion Control - Road, Gully, & Channel	Miles	250	24,000	96
Range Analyses And Management Plans	Number	3,126	5,664	2
Reseeding And Noxious Plant Control	Thous. acres	750	4,400	6
Recreation Visits	Million visits	68.5 *	130.0 *	2
New Family Campground And Picnic Units	Number	5,398	102,000	19
Road Construction	Miles	24,788	90,000	3-2/3
New Dwellings And Service Buildings	Number	796	5,440	6-3/4

\* Last year of period.

Chart 6

## Estimated Costs

Now as to costs. The Chairman's letter of April 27 to Secretary Benson requested that Department witnesses be prepared to discuss the "cost of the proposed program and the various parts thereof."

The figures I am about to give you are our best estimate of what the short-term program would cost in terms of 1958 dollars. What may be recommended in subsequent budget requests to the Congress will necessarily depend upon overall budgetary needs and financial resources of the Federal Government. However, the Secretary of Agriculture has recommended to the Congress a program of needed action on the national forests. You who must evaluate this recommendation are entitled to know how much the Department of Agriculture believes it would cost.

Basically there are two kinds of expenditures--recurrent and nonrecurrent. The former includes such things as timber sales, administration and management, maintenance of recreational areas, preparation and maintenance of management plans, inventories, and range analyses, and the continuing aspects of research. Nonrecurrent costs include such things as timber stand improvement, channel and gully stabilization, tree planting, range reseeding, construction of facilities, road buildings, and wildlife habitat improvement. The total cost of the program divides roughly 50-50 between recurring and nonrecurring items.

Due to the recurring nature of some activities, total costs will be greater the longer the short-term activities are strung out. In the estimates given below, the assumption is that the interim program will be completed in 12 years.

Costs are explained in 3 ways: (1) Total and annual costs, (2) costs by functions, and (3) costs in relation to revenues.

Total and Annual Costs: Total gross costs are estimated at \$3.4 billion. This is about \$2 billion more than national-forest activities would cost in the next 12 years if they continued at the 1959 level without change (table 1).

**TABLE 1. --Comparison of estimated costs if program accomplished in 12 years with estimated F. Y. 1959 level of expenditures**

(All figures in thousand dollars)

Type of expenditure	Costs to accomplish program in 12 years		Costs if F.Y. 1959 level of expenditure continued for 12 years		Difference between F.Y. 1959 and needed level	
	Total	Average annual	Total	Average annual	Total	Average annual
Recurrent.....	1,719,000	143,200	912,000	76,000	807,000	67,200
Nonrecurrent....	1,675,000	139,600	520,800	43,400	1,154,200	96,200
Total.....	3,394,000	282,800	1,432,800	119,400	1,961,200	163,400



If program costs were compared to a continuation of recent trends in expenditures related to national forests rather than to 1959 costs, the step-up would be much less. National-forest expenditures have increased very rapidly in the past 10 years--from \$54 million in 1950 to \$119 million in 1959 or more than double. Continuing this trend for the next 12 years, total costs would be about \$2 billion or \$1.4 billion less than estimated program costs.

The average annual cost of the program would be about \$283 million, or \$164 million more than the 1959 level of \$119 million.

The program has been so planned that costs should increase at approximately equal amounts for each of the first 5 years, then level off for the next 6 years at a maximum annual cost of \$321 million, and decline somewhat the last year of the short-term program because of completion of certain non-recurrent items (chart 7).

### TRENDS IN NATIONAL FOREST COSTS

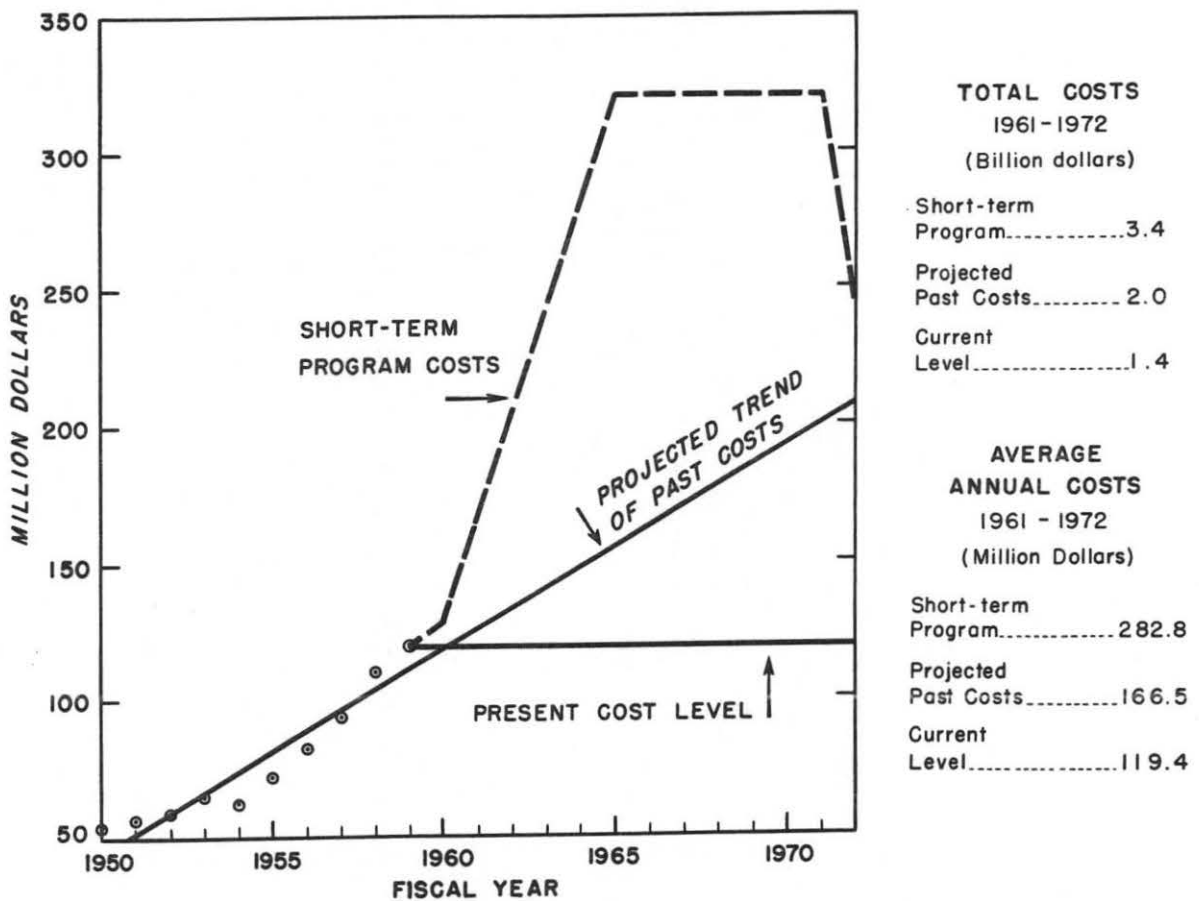


Chart 7

Assuming that the program gets underway in 1961, the increased costs would be \$38 million annually for each of the first 5 years. This means that for each of the first 5 years the annual step-up in cost would be \$38 million more than the preceding year.

In round figures and in oversimplified terms, it can be said that the program would require increased costs of about \$40 million for each of the first 5 years, then leveling off at about \$321 million for most of the remaining short-term period.

Of all the costs I am mentioning, I would like to impress upon you these two estimates.

Costs by Function: Table 2 shows the estimated annual program costs for each of the 6 principal functions and for several subitems.

**TABLE 2. --Estimated costs by functions**

Function	Fiscal year 1959	Short-term program	
		Average annual	Maximum annual
	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>
Resource Development and Management:			
Timber.....	19.1	59.2	68.6
Soil and Water.....	1.8	10.0	11.3
Range.....	6.2	13.1	15.2
Recreation and Wildlife Habitat.....	12.6	33.8	39.4
Protection:			
Insects and Disease.....	6.6	8.4	9.5
Fire.....	14.2	25.7	29.1
Roads and Trails <sup>1</sup> .....	<sup>2</sup> 35.8	<sup>3</sup> 77.2	<sup>4 5</sup> 85.0
Land Adjustments and Uses.....	4.3	10.4	11.6
Structural Improvements.....	10.6	15.4	17.6
Research.....	8.2	29.6	33.3
Total.....	<sup>2</sup> 119.4	<sup>3</sup> 282.8	<sup>4 5</sup> 320.6

<sup>1</sup> Roads & Trails do not include roads constructed and maintained by timber purchasers. Cost for F.Y. 1959 estimated to be \$40.8 million; average annual cost for short-term program is estimated at \$51 million; and maximum annual cost for short-term program is estimated at \$56 million.

<sup>2</sup> Includes road and trail 10 percent fund, or \$8.9 million.

<sup>3</sup> Includes road and trail 10 percent fund, or \$15.0 million av. annual.

<sup>4</sup> Includes road and trail 10 percent fund, which varies from \$14 million in 5th year to \$19 million in 12th year.

<sup>5</sup> This level should be reached in 5th year of program and continue at about this level thereafter except for roads and trails which reach \$85 million in 5th year and increase to \$89 million at end of short-term program due to increase in road and trail 10 percent fund.

Construction and maintenance of forest development roads and trails would continue to be the most costly item with a maximum annual direct expenditure of Government funds during the short-term program of about \$85 to \$89 million. In addition to the direct Government expenditures for forest development roads, there would continue to be a substantial portion of the total road program constructed and maintained by timber purchasers and financed through reductions in amounts paid by the purchasers for national-forest timber. This amount would average \$51 million annually during the short-term program.

Expenditures for timber resource development and management would be the second largest item and those for recreation and wildlife habitat would be the third. These would be followed closely by the estimated costs for research and fire protection.

Based on average annual costs, following are the percentages that the major items would make of the total:

Roads-----	27	Recreation and wildlife habitat --	12
Timber-----	21	Research -----	11
Fire protection-----	9		

All resource development and management items together would be 41 percent of the total program.

Costs and Revenues: Near the conclusion of his statement, Mr. Peterson mentioned the expected benefits to the Nation from this program. The major benefits probably are those that are not measurable in monetary terms.

### NATIONAL FOREST RECEIPTS

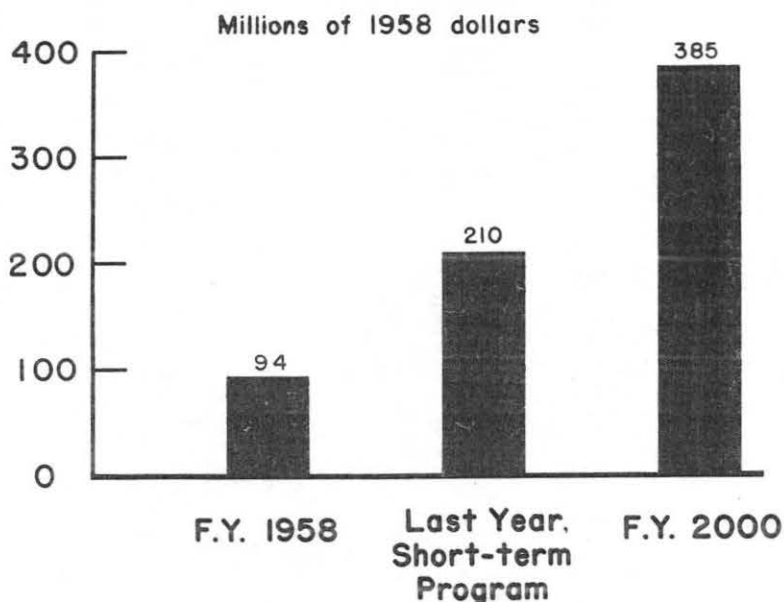


Chart 8

But purely from the dollar standpoint, it is worth noting that revenues from the sale of timber and other national-forest products and services are expected to increase from \$94 million in F.Y. 1958, and an estimated \$110 million this year, to \$210 million at the end of the short-term program and \$385 million annually by the year 2000 (chart 8).

This increase in national-forest receipts would substantially lessen the impact of the proposed program on the Treasury. For example, in F.Y. 1959, expenditures will exceed receipts by about \$9 million. Near the end of the short-term program, it is estimated that costs might exceed annual revenues by about \$100 million. But thereafter the reverse trend becomes evident. Costs will gradually stabilize and even if they should reach \$350 million annually by the year 2000, receipts by that time will be in excess of costs to the extent of about \$35 million annually.

Although the national forests were not established for the purpose of making a profit it is nevertheless satisfying to anticipate that once the program has become implemented, these properties can be expected to yield a net financial return in addition to their many other benefits.

-----

Up to this point, Mr. Chairman, Secretary Peterson and I have explained this program wholly from a national point of view. I know that a great many members of Congress and others throughout the country will want to know what this program means with respect to the national forests in individual States.

The physical work to be accomplished during the short-term program and the estimated costs of doing this have been developed for each State. There is not time to go into the detailed State figures this morning, but I would like to offer to the Committee a series of State tabulations which summarize the program for the national forests in each State.

It is my hope that these tabulations may be incorporated in the printed record of these hearings because of the very great interest that I know will attach to them.

That completes my statement, Mr. Chairman. May I say again that we in the Department of Agriculture are grateful for the Committee's interest in the program and for the opportunity to explain it to you this morning. We shall be glad to try to answer any questions.

Tel. Call from Dr. R. E. McArdle -- Oct. 4, 1982 (to History Section)

McArdle said he saw the letter Earle H. Clapp, Acting Chief, Forest Service, had written to Forest Service leaders, criticizing Interior Secretary Harold Ickes' attempts to take over the Forest Service. This copy of Clapp's letter was the one someone had sent to Ickes and that Ickes had sent to President Franklin D. Roosevelt, complaining about Clapp's tactics.

The letter had notes in pen written on it by both Roosevelt and Secretary of Agriculture Henry A. Wallace. Roosevelt's note said, "I want this man fired." Wallace's note said, "You'll have to fire me first."

McArdle said that Roosevelt then told Wallace that Clapp must apologize in writing, which Clapp did. However, McArdle said, that Clapp's apology was very mild, not what Roosevelt or Ickes had in mind.

This material must be in Clapp's papers in the National Archives, with restricted access.

(Frank J. Harmon)

A handwritten signature in cursive script, appearing to read "Frank J. Harmon". The signature is written in dark ink and is positioned below the typed name.

Ret. to History Sec

11-29-81

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On Friday, November 27, 1981, at 9:45  
at Ft. Myer Chapel, Inter-  
Arlington National Cemetery  
full military honors. Memo-  
ria; contributions may be made to  
the Hospice of Northern Virginia,  
Inc., 4715 N. 15th st., Arlington,  
Va. 22205.

**McARDLE, DOROTHY COPPAGE**  
On Friday, November 27, 1981,  
**DOROTHY COPPAGE** Mc-  
**ARDLE**, beloved wife of Richard  
E. McArdle; mother of Richard C.  
McArdle and wife, Nancy, John  
P. McArdle and wife, Judith, and  
Michael R. McArdle and wife,  
Clare, sister of Richard C. Gear-  
hart of Portland, Ore. She also is  
survived by eight grandchildren  
and one great-grandchild. Memo-  
rial services will be held at Joseph  
Gawler's Sons, 5130 Wisconsin  
ave. at Harrison st. nw. (parking  
on premises); on Wednesday, De-  
cember 2, at 8 p.m. The family  
wishes that expressions of sympa-  
thy be given to your favorite  
charity.

**MCCLOSKEY, GEORGE A.**  
On Friday, November 27, 1981, at  
Bowman's Care Center, Ormond  
Beach, Fla., of Ormond Beach,  
formerly of Washington, D.C., fa-  
ther of Mrs. Chaimus D. Bennett  
of Ormond Beach, Mrs. James  
of Brentwood, Md.

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**PONGER, L**  
At D.C. Gr  
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Ark. last fall (Oct. '78)  
for service to the Assn.

stem by Mcardle on  
Tillamook Fire  
in Oregon

in Service Bulletin  
Oct. 9, 1933  
Vol. 17, no. 21



FOREST SERVICE  
DAILY NEWS DIGEST

*Tues* • May 18, 1982

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Chief McArdle on Wilderness.--Former Chief Richard McArdle referred to the book, The Quiet Revolution by Donald Baldwin, in a recent letter to the History Office. His comments as a participant in the move for the Wilderness Preservation System are valuable and are presented here:

"Thanks for calling my attention to this book, which I read with much interest. I regret that Mr. Baldwin did not more fully use his opportunities to describe the early development of Forest Service recreational policy. I think his preoccupation with defending Art Carhart's work record while in the FS led Baldwin astray."

"Carhart has never gotten the credit he deserves for his all too brief service (3½ years) as our first "recreational engineer". I've sometimes wondered how much more would have been done and how much faster recreational policy in the FS might have developed if Carhart had curbed his impatience and stuck with the job. I can understand his frustration in the days when we had no appropriations for recreational development and no specific legislative authority for recreational use of the national forests. After being in topside FS jobs for thirty years I can understand (better of course, than Carhart could then) why an administrator can't always do what he may want as quickly as he might like."

"I think Baldwin wanders away from the objectives he sets for himself on pages 1 and 2. Despite protestations of no bias I am afraid he started out with the preconceived idea that Carhart's record needs defending. This results in a somewhat lopsided and incomplete story. Maybe other people weren't as smart as Carhart in saving copies of letters but there is more to development of FS recreational policy and to the development of the wilderness concept than can be gleaned from so much dependence on this particular correspondence. There is other material that should have been sought.

"The author's faith in the Chief's annual reports is touching but naive. I would expect examination of these reports to be made but failure to find much about recreation in early reports does not mean that no one ever thought of NF recreational use. Nor does it appear that Baldwin fully understood the difference between broad recreational plans for a national forest and specific proposals for formal establishment of wilderness areas.

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Tel. Call from Dr. R. E. McArdle -- Oct. 4, 1982 (to History Section)

McArdle said he saw the letter Earle H. Clapp, Acting Chief, Forest Service, had written to Forest Service leaders, criticizing Interior Secretary Harold Ickes' attempts to take over the Forest Service. This copy of Clapp's letter was the one someone had sent to Ickes and that Ickes had sent to President Franklin D. Roosevelt, complaining about Clapp's tactics.

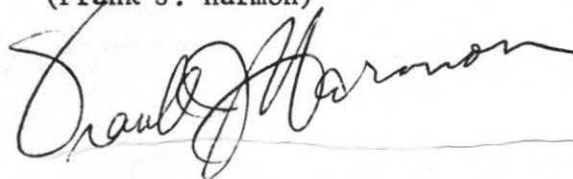
The letter had notes in pen written on it by both Roosevelt and Secretary of Agriculture Henry A. Wallace. Roosevelt's note said, "I want this man fired."

Wallace's note said, "You'll have to fire me first."

McArdle said that Roosevelt then told Wallace that Clapp must apologize in writing, which Clapp did. However, McArdle said, that Clapp's apology was very mild, not what Roosevelt or Ickes had in mind.

This material must be in Clapp's papers in the National Archives, with restricted access.

(Frank J. Harmon)

A handwritten signature in cursive script, appearing to read "Frank J. Harmon". The signature is written in dark ink and is positioned below the typed name. The ink is slightly faded and the signature has a fluid, somewhat stylized appearance.

Ret. to History Sec

11-29-81

(Wash-Post)

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 at Ft. Myer Chapel Inter-  
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**PIPER, I**  
 On Fri-  
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 At D.C. Gr-  
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stem by Mcardle on  
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in Service Bulletin

Oct 9, 1933

Vol 17, no. 21

Richard E. McArdle

March 5, 1974

Mr. Frank Harmon  
History Branch  
Forest Service  
U. S. Dept. of Agriculture  
Washington, D. C. 20250

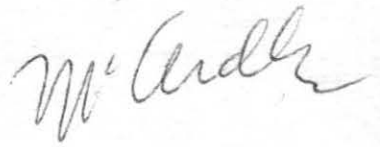
Dear Frank:

I found another speech, copy of which I enclose. I did not give this one in person. At the last minute I was called for a Congressional hearing. Luckily, I had sent a copy to Connaughton, who was then RF in San Francisco. He read it. Speech got a good deal of publicity.

I was asked to speak to this group on "What Makes the Forest Service Click" or some such title. FS management people took on job of preparing a talk of less than 10 minutes length. They wound up with organization charts and usual standard kind of stuff. Night before our deadline I sat down with paper and pencil and wrote this. I forget what title I gave it-- not what is on it now. That was put on by folks I sent it to in San Francisco.

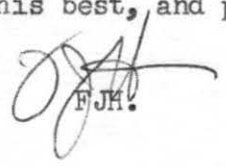
You can see why -- over and above the 10 cents per sheet -- I don't do too much copying on public library machines. I did not trim because don't know size you want. Original on Govt. paper.

Sincerely,



Do not trouble to acknowledge

NOTE: Dr. McArdle told Cliff Owsley and Frank Harmon when he visited the office the previous week that he considered this one of his best, and perhaps his best speech during his term as Chief.



## PERSONNEL ADMINISTRATION AS A MANAGEMENT

### CREDO.

The Forest Service is not patterns of organization, or carefully prepared regulations, or physical things such as national forests, trucks, airplanes, test tubes, desks and ranger station buildings. The Forest Service is people. If the Forest Service gets the right kind of people, helps them to develop their potential abilities, gives them opportunities to use these abilities, and so far as possible sees to it that they get a square deal, then the Forest Service will get its job done, and done well. In saying this, I do not intend to ignore organizational patterns or standard rules of procedure. These are essential working tools. I am simply trying to put the emphasis on the craftsman and not on his tools.

I should make it clear that in emphasizing people I am not talking exclusively about the bigger wheels of the Forest Service. Our year-long organization is some 13,000 men and women. Each of the 13,000 is important to effective achievement of Forest Service objectives. In a chain of gears some of the big wheels won't turn if a smaller one isn't operating. One reason for the closely knit character of the Forest Service, the way the organization can operate as individuals and yet pull together as a unit, is the unwritten but widespread understanding by Forest Service people of the essentiality of each member of the organization no matter what his title or wage scale. We think it important to recognize the dignity of the individual.

---

Statement by Richard E. McArdle, Chief, Forest Service, U.S. Department of Agriculture, at 1959 International Conference on Public Personnel Administration in San Francisco, California, October 7, 1959.

The attitude of the agency toward the individual probably has much to do with the attitude of the individual toward his job and his agency. People who work only for wages and with one eye on the clock, who are not genuinely enthused about the work of their organization and the part that they themselves have in it, are not likely to create an organization of distinctive character. The relationship between agency and individual is a two-way street, and any agency is largely a reflection of the people in it. The Forest Service is fortunate in the kind of people who have chosen to work in it.

I think it is also true that the kind of work we do and the kind of surroundings most of us work in are additional contributing factors of some significance. It is not easy to describe these influences adequately in a few words. The inspiration that comes from working with Nature, with doing work that will benefit generations yet to come, from the knowledge that what we do is important to our fellow citizens -- any normal person is going to be influenced by such considerations. Similarly, most of us in the Forest Service work alone or in small groups. We are obliged to be self-reliant and to have confidence in ourselves. We must have confidence and faith in our fellow workers because there are times when our own lives depend on what someone else does or doesn't do. One result is that Forest Service people develop closer personal ties than may perhaps be true of some other organizations. We like each other. All such considerations have something to do with the kind of organization people collectively create.

Every federal agency such as ours needs some philosophy of management that goes beyond the legal charter established by Congress. For more than half a century the Forest Service has had such a philosophy. Many aspects of it are as alive and vital today as at the beginning. To name one example: nearly every decision we make is consciously or unconsciously influenced by a desire to obtain "the greatest good of the greatest number in the long run." This means that we must always think of the permanent good of the whole people and not of temporary benefit to individuals or companies. This is simply one way to define "public interest." These philosophies aren't things we talk about very much, yet they do shape our agency's attitudes and character. I think some of them are more responsible for what the Forest Service is than the policies and procedures spelled out in administrative manuals.

I am less concerned with what the Forest Service has been than I am with what it may become. We are a big organization, larger now than even five years ago. We must avoid as we would the plague the evils that often come with bigness -- arbitrary actions, complacency, indifference, less personal contact, more tendency toward centralization with fewer decisions at the place where decisions take effect. To handle a greatly increased workload and a wider variety of obligations, the Forest Service is also a more complex organization today than it was a few years ago. In another 10 or 20 years it must meet still more complex and difficult responsibilities.

We must develop leaders capable of meeting these expanding responsibilities. Even the environment in which we operate is changing and increasingly we meet conditions beyond our control that our predecessors never had to deal with. These circumstances can have an appreciable effect on many new people given larger and more difficult responsibilities at earlier stages in their careers. One result could be that men out at the end of the line will play it safe, make their decisions "by the book," and become more interested in the clock and the calendar than in the people they serve. I do not say that these evils will befall us but they could. We must guard against them.

I am sure that I reflect the feeling of the Forest Service when I say that we want to preserve our basic character as an organization -- our determination to shoot always for a high mark, our individual self-reliance coupled with ability to work as a part of a team, our acceptance of responsibility, our desire to excel in technical competence, a conviction that our individual jobs and our agency's job are the most worthwhile of any anywhere, and all the other "peculiarities" that we folks in the Forest Service always have had. None of us think it will be easy to do this. We do think it's worth working for.

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The attitude of the agency toward the individual probably has much to do with the attitude of the individual toward his job and his agency. People who work only for wages and with one eye on the clock, who are not genuinely enthused about the work of their organization and the part that they themselves have in it, are not likely to create an organization of distinctive character. The relationship between agency and individual is a two-way street, and any agency is largely a reflection of the people in it. The Forest Service is fortunate in the kind of people who have chosen to work in it.

I think it is also true that the kind of work we do and the kind of surroundings most of us work in are additional contributing factors of some significance. It is not easy to describe these influences adequately in a few words. The inspiration that comes from working with Nature, with doing work that will benefit generations yet to come, from the knowledge that what we do is important to our fellow citizens -- any normal person is going to be influenced by such considerations. Similarly, most of us in the Forest Service work alone or in small groups. We are obliged to be self-reliant and to have confidence in ourselves. We must have confidence and faith in our fellow workers because there are times when our own lives depend on what someone else does or doesn't do. One result is that Forest Service people develop closer personal ties than may perhaps be true of some other organizations. We like each other. All such considerations have something to do with the kind of organization people collectively create.

Every federal agency such as ours needs some philosophy of management that goes beyond the legal charter established by Congress. For more than half a century the Forest Service has had such a philosophy. Many aspects of it are as alive and vital today as at the beginning. To name one example: nearly every decision we make is consciously or unconsciously influenced by a desire to obtain "the greatest good of the greatest number in the long run." This means that we must always think of the permanent good of the whole people and not of temporary benefit to individuals or companies. This is simply one way to define "public interest." These philosophies aren't things we talk about very much, yet they do shape our agency's attitudes and character. I think some of them are more responsible for what the Forest Service is than the policies and procedures spelled out in administrative manuals.

I am less concerned with what the Forest Service has been than I am with what it may become. We are a big organization, larger now than even five years ago. We must avoid as we would the plague the evils that often come with bigness -- arbitrary actions, complacency, indifference, less personal contact, more tendency toward centralization with fewer decisions at the place where decisions take effect. To handle a greatly increased workload and a wider variety of obligations, the Forest Service is also a more complex organization today than it was a few years ago. In another 10 or 20 years it must meet still more complex and difficult responsibilities.

We must develop leaders capable of meeting these expanding responsibilities. Even the environment in which we operate is changing and increasingly we meet conditions beyond our control that our predecessors never had to deal with. These circumstances can have an appreciable effect on many new people given larger and more difficult responsibilities at earlier stages in their careers. One result could be that men out at the end of the line will play it safe, make their decisions "by the book," and become more interested in the clock and the calendar than in the people they serve. I do not say that these evils will befall us but they could. We must guard against them.

I am sure that I reflect the feeling of the Forest Service when I say that we want to preserve our basic character as an organization -- our determination to shoot always for a high mark, our individual self-reliance coupled with ability to work as a part of a team, our acceptance of responsibility, our desire to excel in technical competence, a conviction that our individual jobs and our agency's job are the most worthwhile of any anywhere, and all the other "peculiarities" that we folks in the Forest Service always have had. None of us think it will be easy to do this. We do think it's worth working for.

## USE OF PUBLIC LANDS--THE NATIONAL FORESTS AND GRASSLANDS

By Richard E. McArdle, Chief, Forest Service, U.S. Department of Agriculture, at Forest Land Use Conference, American Forest Products Industries, Inc., Washington, D.C., September 21, 1961.

The subject assigned to me is "Use of Public Lands". With a time limit of 15 minutes, I obviously must restrict my remarks to the National Forests and to brief comments. Although these may seem somewhat disjointed, they do tie together as being among the current major policy issues for public lands.

As background, I remind you that nearly all the necessities of life come from the land and that our population will double in less than 40 years. Consequently, we shall need more and more of everything the land produces. Our productive land base is not increasing; it is shrinking. This means that in the future we will have to get twice as much or more of everything we need from a smaller area of productive land.

On the National Forests we already are feeling the pinch of competition for land use. All of the problems I'm going to talk about are the result of more and more people wanting more and more products and services from these public lands. We will not solve these land-use problems to the complete satisfaction of every group of people wanting to use the National Forests. Yet we must try to solve them in the best possible way, for the National Forests should do their full share in meeting the needs of the American people.

Those of you here today are largely representatives of industrial forest land owners. You have your own forest properties, but you also are users of National Forest timber. I shall direct my comments toward situations with which you--as one major National Forest user group--are currently concerned.

One of your concerns is fear that the top leadership of the Forest Service is forgetting, or at least neglecting, timber management and has gone overboard in favor of recreation. In recent years recreational use of the National Forests has increased more rapidly than any other use. We are moving aggressively to catch up with our recreation load, and we intend to move still more aggressively in this direction. None of this means that we have any intention of neglecting timber production as a major objective of National Forest administration. Every part of our timber management job also has been stepped up and will continue to be stepped up.

Similarly, you--and other user groups--are concerned about the increasing pressures to transfer or divert National Forest lands to administrative status under which timber production and utilization, and other commodity use of these forest lands, will be much less prominent

or prohibited. What you fear most, in my opinion, isn't what has happened but what you think may happen. You recognize that you are competing with other groups for use of public land.

We are aware, for example, of your concern about dedication of National Forest land to wilderness-type use. In general, commodity-user groups are not basically opposed to preservation of some areas in wilderness-type condition. You and other groups are opposed to taking too much land for this purpose. But no one has been able to define "too much" in terms satisfactory to all user groups.

The Forest Service pioneered in wilderness preservation. We are the only Federal agency that has formally set aside large areas definitely committed to be kept in true wilderness status. We make no apologies for our wilderness preservation policies--either to groups who feel we have gone too far or to groups equally certain that we haven't gone far enough. We are proud of what we have done to preserve some of the wilderness heritage of America.

As to the future, I am going out on a limb this morning and say that in my opinion formal designation of additional very large areas of National Forest for wilderness-type preservation is not likely. My guess is that the present total acreage of wilderness, wild, and primitive areas on the National Forests is likely to remain relatively stable. Neither the timber industry nor any other commodity-user group will be the prime force in preventing more large areas being set aside to be kept inaccessible. What I think will happen, what I see beginning to happen now, is insistence by the great mass of recreational users of public forest land on readily accessible areas where they may go with their families to camp, picnic, hunt, or fish. These people favor preservation of wild conditions, but they also want accessibility. This influx of people will tend to prevent establishment of many more large wilderness areas in the National Forests.

Related to this is a concern I've heard you and other groups express about possible transfers of National Forest lands to National Park status. I think there may be some transfers of this kind--and also some transfers from Interior to Agriculture. How much acreage will be involved in such transfers, I don't know. I hope that standards for selection of National Parks will be kept as high as the founders of that fine system of public land use intended. I see no reason to transfer normal multiple-use type of National Forest land to Park status simply to have a park. I would not favor action of that kind.

I have heard references to a "feud" that is alleged to exist between the Forest Service and the National Park Service. There is no feud. There is considerable feuding going on among the folks who have strongly conflicting opinions about whether certain lands should be in National Park or National Forest status. The National Park Service and the Forest Service have had some policy disagreements just as both have had with other agencies. I suggest you keep in mind that the National Park Service and the Forest Service are agencies of long

standing and good repute, that both are in the recreation business and are going to be in this business for a long time to come.

These comments illustrate what I think is a basic point: We are not dealing so much with actual conflicts in public land use as we are with conflicts in the desire, the personal interests, of individual user groups. This conflict in desires of user groups is one of the more difficult problems of the Forest Service in administering the National Forests. We can and we are managing these public lands for multiple uses. The conflict comes when one user group insists that its desires be given priority over those of all other user groups.

We have been directed by Congress to manage the National Forests for multiple use and sustained yield--for those combinations of uses that will best serve the interests of the American people. We must get better public understanding of this directive. This is why we have started a new series of publications on each of the major resources and uses of the National Forests. One has been issued and others are in preparation. If you want to know more about this problem to promote better public understanding of National Forest uses, I suggest you see the July 1961 issue of American Forests.

Now to mention briefly some other resources besides timber and recreation.

The public forest lands will become increasingly more valuable for the water which originates on them. Although the National Forests comprise only one-fifth of the total area, more than half of the water of the West originates on them. This will continue to be true simply because these lands are at the higher elevations where most of the rain and snow falls.

There is much talk these days about watershed protection. Protection is necessary to insure quality of water supply. Protection alone, however, will not increase quantity of water. To obtain an increase in quantity requires manipulation of the vegetative cover. Timber harvesting is one way to accomplish this purpose. Management of the National Forests for water production therefore is closely tied to management for timber and forage production.

In only a few years the people of this country will need twice as much water as they use today. Conversion of saline waters may become a practical reality and, when it does, may absorb some of the pressure on public forest lands, especially near coastal areas. It is not likely to substantially relieve increasing pressures for water yield from forest areas far inland.

Looking to the future, then, I anticipate that in some places a controlling factor in administration of National Forests will be management for maximum yield of usable water. Timber and forage harvesting undoubtedly will be used as valuable tools of watershed management.

I think this may require some modifications in present timber and grazing management procedures when water production is given priority.

Another National Forest management problem, and one that is of particular interest to you, is roads--the need for accessibility. This is a subject on which you are so well informed that I shall merely call your attention to a couple of aspects which merit more thought than we perhaps have given them.

Roads take land out of production. When we complete the National Forest road system we will have almost 600,000 miles of roads of all kinds. Make no mistake: this will be a substantial diversion of productive forest land. Road construction is also a factor in soil erosion and water yield, and we must devote more attention than we do now to road location and to standards of construction. Accessibility is essential for resource management. I do not argue that point. I do emphasize the growing need to be more careful in planning road systems. I think my comment applies also to privately-owned forest lands.

Finally, I want to tell you that the Forest Service is determined to fully redeem its responsibilities for National Forest use and management. All of you know that two years ago we prepared a comprehensive, detailed program for development of these public properties. We are almost on schedule in carrying out this program. In response to a directive in the President's recent message on agriculture we have revised and brought this plan up to date. What has happened since we first formulated the program has caused us to strengthen the emphasis on some items, notably recreation use and road construction and maintenance. We have added an item on land acquisition, chiefly exchanges and purchases to block up existing units in eastern National Forests. All public land-managing agencies should have specific plans for development and use of the properties for which they have stewardship.

In this brief time I have been able only to skip around among some of the problems confronting one public land-managing agency. There are significant aspects of our resource management job--grazing and wildlife, for example--that I have not discussed. I hope, however, that I've said enough to indicate something of the variety and complexity of these resource-use problems as they affect the National Forests. My purpose has been to illustrate the ever-growing difficulty of administering these lands in the public interest.

## HORIZONS UNLIMITED

By Richard E. McArdle, Chief, Forest Service, U. S. Department of Agriculture, at the 60th Annual Meeting of the Society of American Foresters, Washington, D. C., November 14, 1960

Birthdays often are used as occasions to take stock; to appraise past progress, to see where we are now, and to speculate concerning the future. This opening session of our Society's 60th annual meeting is such an occasion.

It was 60 years ago this month when 7 men met in Gifford Pinchot's office to organize the Society of American Foresters. By the end of the year there were 15 members, just about the total number of professional foresters in the United States at that time. Today, we have more than 17,000 professionally trained foresters currently working in forestry or closely related fields. Society membership exceeds 13,000.

In the earliest years of our Society the forester's orientation and training were almost entirely toward timber. Today, we more fully recognize the other resources and multiple-purpose uses of forest lands. Our education, training, and management practices have broadened considerably. This expansion of our forestry horizon is one of the more significant developments of these past six decades.

Most of the progress which today we review with pride has been made in the last half of this 60-year period, the bulk of it in the past 15 or 20 years. But let's not forget that much of this progress is built on foundations laid by our predecessors in those earlier years.

Probably none of those who attended the first meeting of our Society dared dream that in 60 years, for example, we would have placed most of the forest land of this country under at least some form of organized protection from fire. I doubt if any at that time envisioned that 60 years later we would produce in our forest-tree nurseries more than 2 billion trees in a single year and plant all of them.

I wonder, too, if any of our early-day members ventured to hope that in little more than half a century the number of industry-employed foresters would grow from a number which probably could be counted on the fingers of one hand to more than 7,600? Or that the number of State forestry boards and departments would increase from 3 to 49? Or that there would be 400 privately employed consulting foresters?

In 1900 none of the vast acreage of federally owned forest land had much management beyond, in a very few places, the most rudimentary form of fire control. There was no forestry research of consequence anywhere in the country. Professional education in forestry had barely been started. Only four States had game and fish commissions. In 1900 very few of the hundreds

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of resource conservation and preservation organizations so active today were in existence, and most of them would not come into being for another three decades. In resource conservation the foresters of those early days stood pretty much alone. They had to blaze their own trails.

It is not my purpose to review in elaborate detail the forestry progress that has been achieved in these last 60 years. I want only to indicate our conviction that we have indeed come a long way. Nor do I think it necessary to emphasize at length the vital role played by Society members in achieving this progress. The record speaks for itself, and I think none will begrudge us the privilege of taking solid satisfaction in looking back so briefly over the road we've come thus far.

But it is appropriate, too, that a generous share of the credit for forestry accomplishment go to the many nonforesters who have had much to do with achieving these results. Business executives, administrators, members of the national and State legislatures, and many others have had key roles, have made great contributions to forestry progress. What has been done could not have been done by foresters alone. The influence of nonforesters on forestry is one of the facts of life which present-day foresters would be wise to recognize more fully.

Forestry progress is in many ways intimately related to man's progress in other activities. We cannot consider forestry in a vacuum, as something separate and apart from all other aspects of man's life. If forestry is to keep up with the parade of man's whole progress, we must take steps as long as those of other participants.

The greatest strides in transportation, in communications, in medicine, and in many other aspects of man's way of life have been made during this same period we mark today for forestry. Sixty years ago the Wright brothers had not yet made their historic flight over the sand dunes of North Carolina. Our Society was 20 years old before the radio came into reasonably widespread use. When our Society was being started the automobile industry was barely five years old and there were only a few thousand cars registered in the entire country. The first transcontinental trip by automobile was yet to be made -- and when made would require 64 days. Six decades ago the use of electricity, too, was in its infancy. Before we become too well satisfied with our own 60-year progress, we might ask ourselves if we are doing as well in forestry as we are in putting electricity to work, as well in forestry as in aviation, communications, medicine, or other activities.

It is therefore much more to the point on this 60th anniversary to see not where we've come from but where we are. It is even more pertinent to see where we should be if we are to fully redeem our responsibilities of stewardship for vitally essential resources. We should not evaluate forestry progress solely in terms of how far we've come from a time of essentially no progress. We should also be evaluating past progress and present effort in terms of future needs. The needs of the future should set the policies of today. We should look forward, not backward. We should think beyond what we are to what we could be.

By the end of this century, a short 40 years away, this country may have nearly twice as many people as today. These people will need, and will use

if they can get it, nearly twice as much wood as we consume in this country now. They will need two and a half times more water -- and most of our water originates on forest land. The need for livestock will be about double. Requirements for outdoor recreation will be four times the present level.

Can we foresters do our part in meeting these needs of the future? We have perhaps a better basis for forming judgments with respect to timber than for other resources of forest lands. Studies such as the Timber Resource Review and other investigations give us a good basis for looking ahead.

Briefly, for timber, the Forest Service concluded in the TRR that continued improvements in forestry at the same rate as recent trends would not be good enough. The Forest Service said that it would take a very substantial acceleration in recent trends to meet timber needs in the year 2000. But, the Forest Service also concluded that it would be possible to achieve this acceleration and to meet future timber needs if most of this acceleration of effort could be achieved in the next few decades.

Now let me bring you up to date. Already most of the first decade has passed since the TRR figures were assembled. Despite the very good progress that has been made, it has not been at a rate which today gives promise of fully meeting the year 2000 timber needs.

The only sound policy is to attempt to make our forest lands fully productive. There may be some disagreement as to how quickly this can be done, but certainly we can agree that we should aim no less high. Failure to grow the amount, kind, and quality of timber predicted in the TRR as needed by the year 2000 would be unfortunate. In my opinion it would be very unfortunate -- for the Nation as well as for foresters. But it would not be catastrophic. The need would be no less. But the American people would get along with less timber, would use more substitutes, would do without, and pay a higher price than assumed in the TRR. Much as I dislike saying so, realistic consideration of current forestry progress leads to no other conclusion.

Although we do not have the statistical base with respect to other resources that we do for timber, this conclusion probably would apply as well to several of the other renewable natural resources of forest lands. All these resources are closely related.

Foresters of this country have much of the know-how and can still, if given the funds and the policy, meet the challenge of the years ahead. But whether we are permitted to do so depends in large part on the people who control funds and make policy. Most of these individuals are not foresters. It is essential that foresters move much more rapidly than in the past into positions of leadership in politics, in government, and in business.

There is also another very real question to consider. There may not be enough forest land in this country to meet all the resource needs that are provided by forest lands. Everywhere we see ever-increasing diversions of forest lands to other uses -- for dams and reservoirs, for highways and transmission lines, for airports and urban expansions, for national defense needs, for production of food crops, and for other purposes. These diversions will continue.

Many of these single-purpose uses are as essential to our way of life as use of land for multiple-purpose forestry. I mention them only to emphasize that every acre of forest land diverted to these other uses throws an increased burden on the land remaining in forest. By the end of the century it appears, for example, that one-fourth of our present commercial forest acreage, equivalent to about one-third of our timber-growing capacity, may be seriously sought for nonforestry purposes.

This is why on numerous recent occasions I have sharply raised the issue of multiple use of forest lands versus essentially single-purpose use. I am convinced that the American people cannot afford to use much forest land for a single purpose if that purpose also can be achieved in combination with other uses of the same land. This is especially true for lands in public ownership.

More and more in the future foresters will have to practice multiple use. And I mean practice it, not just preach it. Their concern will be as much with other resources as with timber. Recreation, wildlife, water, and grazing will demand continuously increased attention.

The trend is obvious. Enactment of the Multiple Use-Sustained Yield National Forest Act by the last Congress is one indicator. The enthusiastic reception of the National Forest Program is another. Adoption of Multiple Use as the theme of the Fifth World Forestry Congress and the frequent references to multiple use in Project Twenty-Twelve, the long-range program of the Bureau of Land Management in the Department of the Interior, are still others.

The founders of our professional society did not have to grapple with the multiple-use issue. From today onward, however, defending this basic principle of land management -- and putting it into practice -- will be a constant, major obligation for many forest landowners.

I have mentioned three subjects of major concern to our Society and to all foresters in the years immediately ahead. They are: The urgent necessity to take early action in stepping up the productivity of forest lands, the growing competition for land, and multiple-use management, especially of public forest lands. A fourth subject of top-flight significance, related to the other three but mentioned separately because of its particular importance, is the problem of getting greater productivity on small forest properties.

You know the facts; they have been recited many times. Boiled down to one basic essential: one-half of the timber we will need in the future must be grown on these small forest properties. All of us know what should be done. Forty-three million acres should be planted, but only one percent of this is being done each year. Timber-stand improvement activity should be increased 20 times. Only 14 percent of these small holdings are getting adequate protection from fire. And so on.

Although we may know what to do, we are not so sure how to do it. Personal philosophies of government, inaccurate and unduly optimistic ideas of current progress, uncertainty as to how effective various present programs are, disagreement on budgets, and a lot of other things get involved when we

talk about this problem. In the past, differing philosophies have clashed so strongly that too little gets done on the ground. The net result is that the land stays in poor shape. What these small forest properties will yield 40 years from now will hinge on decisions that will have to be made soon. My fear is that these decisions may be made by default. Negative action is also a decision. It can be just as far-reaching in implication as positive action.

We do not yet have a comprehensive program that I would consider adequate to meet this need. Any adequate solution will require many administrators, politicians, and top executives, as well as foresters, to compromise deep-seated philosophical convictions. Of one thing I am sure: unless we do make such compromises these small forest properties will not contribute their essential share of our raw-material base.

Society history shows that our predecessors wrestled with many tough problems and through long argument and discussion hammered out many fateful decisions. As today we turn away from the past and look toward the future, we can see problems just as tough and decisions just as difficult facing present-day members of the Society.

And now, as we continue looking toward the future, what may we reasonably expect for forestry during the next six decades? I have no particular desire to pose as a prophet and most of what I say must be based on confidence in my fellow foresters and the American public. The basic question is not how restricted our horizons may be but how far will we stretch ourselves to reach the unlimited horizons that do lie ahead.

Assuming that we do aggressively lift our sights, I see the time coming when the general public -- largely city dwellers -- will more fully appreciate its dependence on natural resources, including forest lands. The task of future foresters will be eased correspondingly, for with strong public support many actions which foresters know are needed can more easily be taken.

Foresters themselves will increasingly come to realize that we deal with people as well as trees, that our mission is social as well as economic and silvicultural. Public relations in its broadest and best sense will play a larger part in our professional training, and we will understand better than we do now that many of the more difficult problems in resource management are problems in dealing with people.

Our actions will be questioned, challenged, and criticized more sharply, more frequently, and more widely. Yet I believe that the public will continue to have confidence in the ability and integrity of our profession. I believe that our prestige will remain high and will go even higher. Yet here, too, I inject a word of warning. Public esteem is something that has to be earned continuously. Our own actions will control how high we rate.

I am convinced that much of our success in winning public esteem will depend on how well foresters broaden their own horizons to deal adequately with all the renewable resources of forest lands and not concentrate either their training or their practice exclusively on timber.

As second growth and plantations take over a steadily increasing proportion of our forest land area, more intensive management becomes a necessity. With a growing preponderance of second-growth timber in the Nation's forest inventory, maintaining quality of product will become one of our most difficult problems. To deal with this problem we must step up research in genetics, silviculture, and utilization far beyond anything even the most optimistic of us envisions now.

We will master wildfire and find new ways of employing fire as a useful tool of forest management. The control of insects and disease will be even more necessary than it is today, and I have some fear that unless financial support is greatly increased we may find it difficult to make progress adequate to future needs.

Recreational use of forests will increase greatly. If we can solve the many difficult problems accompanying this use, we will gain strong public support for other aspects of forest land management.

Human encroachment on wildlife habitat may in some places approach a crisis, and decisions may need to be made whether to fence wildlife in or people out.

Many of the hundreds of so-called undesirable species will become merchantable as through research we find ways to use them. We will unravel the secret of lignin and find profitable uses for this one-third of the tree volume.

We will find better ways to control moisture in wood and thereby overcome major obstacles to increased use of wood, as wood, in competition with other materials. The use of wood as fiber will expand so greatly that I hesitate to set a limit. And the use of wood as a raw material for chemical conversion will surpass the most fantastic guess that any of us is likely to make today.

More and more will foresters be expected to manage forest lands for maximum yields of usable water. The general public will understand better than it does today that protection alone will not suffice to obtain the tremendous quantities of water needed in the future.

The multiple use of forest lands for all the many products and services that these lands can provide will not only become better understood but will be insisted upon. As competition for all forest land resources increases, the effective practice of multiple use will become steadily more difficult and will test our technical and administrative skills to a degree not yet imagined.

To meet all these more difficult tasks of the future, foresters must be better educated and trained. I am convinced that this broadening of our educational horizon must emphasize the humanities, political science, and other subjects that will enable us to deal effectively with the people, nonforesters almost entirely, who make many of the basic decisions controlling what foresters can do.

There will be need not only for more foresters but also for more men from associated professions. The number of industry-employed foresters

will rise, and there will be greatly increased opportunities for self-employed consulting foresters.

This is only a quick glance at some of the things I see on our forestry horizon. Whether or not you agree with my forecast for the future, I think you will agree that the next 60 years will bring far more changes than the past 60. These changes will not be restricted to forestry. But forestry is now and will continue to be one of the significant forces influencing the growth and prosperity of our country. Forestry can be as big a force as we choose to make it. As far as I can see ahead, our horizons are unlimited.

## WATERSHED MANAGEMENT ON THE NATIONAL FORESTS

By Richard E. McArdle, Chief, Forest Service U. S. Department of Agriculture, at Eighth National Watershed Congress, Tucson, Arizona, April 19, 1961

It is appropriate that this meeting consider management of National Forest watersheds. Although the National Forests in these Western States comprise only one-fifth of the total area, they yield more than half of the streamflow. Several thousand communities, including some of the largest cities of the West, are largely or entirely dependent on National Forest water. Two-thirds of the irrigation water of the West comes from National Forest lands. Our management of these publicly owned lands therefore has a significant bearing on the general theme of the discussions this morning, "Water for a thirsty land."

Some day I am going to add up the number of speeches that I have made about water. I've been talking on this subject for more than 25 years. Well do I remember my first speech on water and the chilly reception I got from a large group of water engineers. But if I were to make the same speech to the same group today, I'm sure the reaction would be quite different. Attitudes have changed.

The reasons are obvious. Our population has increased 45 percent since I made that first speech. Not only do we have more people to use water; we use water in new ways, for purposes undreamed of only a few years ago. Our cities are reaching out further and further, sometimes for hundreds of miles, to obtain water for present needs. In many places future urban and industrial expansion depends in large measure on finding adequate supplies of usable water. The use of water for irrigation has doubled in the past 20 years and for domestic and industrial purposes has tripled during the same period. No longer is there question about our growing need for water and the necessity to do something about getting it.

In years past most of my comment was aimed at alerting the general public to rapidly increasing water needs. Today such warnings are less necessary. I think, in general, the public is now surprisingly well informed on our need for water and is aware of the fact that in many places there are difficult problems to solve in order to meet these needs.

The emphasis today should be on achieving agreement on a clear-cut, practical, national water policy -- and on putting the policy into effect. I believe that public opinion will support such action. Future meetings of this Watershed Congress might well be pointed in that direction.

Another encouraging development is the growing interest -- and it's intelligent interest -- in the management of public lands for watershed purposes. The Forest Service welcomes this kind of interest, and we welcome the criticism of our actions which frequently accompanies that interest.

Our own interest in watershed management is as old as the Forest Service. To "secure favorable conditions of water flows," was one of the major purposes for which Congress originally specified that National Forests are established. Congress has reaffirmed this objective, most recently last year. The Act of June 12, 1960, however, goes much further than merely to authorize use of the National Forests for watershed purposes. It directs -- orders -- that the National Forests shall be managed for multiple use -- for water and four other major uses. The Act goes still further and directs that management for these five uses shall be on a sustained-yield basis. Legislative authority for watershed management on the National Forests is specific and unmistakable.

In the earlier years of National Forest administration our emphasis was on watershed protection. The primary objective of protection is maintenance of water quality. The fundamental principle involved is maintenance of a vegetative cover of trees, grass, and brush to hold the soil and to facilitate storage of water within the soil. In the minds of many people watershed protection and watershed management mean one and the same.

Over the years, however, watershed management has come to have a meaning to the Forest Service considerably broader than just protection. Protection with the objective of maintaining water quality is still an integral part of our watershed management policy. But it is now evident that protection alone is not enough. We need to be concerned also with amount and timing of water yield, with quantity as well as quality. Maximum protection of watersheds does not necessarily produce maximum yields of water.



In many places, for example, maximum watershed protection would require maintenance of perhaps the densest possible cover of deep-rooted vegetation. Yet maximum yield of water might be achieved only by removal of the vegetative cover. But this usually would result in rapid runoff with local flooding, little or no deep infiltration to underground storage, and in muddy, unusable water. Neither of these extremes is watershed management, although I have heard each extreme called management.

Watershed management as the Forest Service thinks of it today involves maintenance of an adequate vegetative cover for protection of water quality but altering this cover in such a way as to increase the quantity of water yield. It will not be the same everywhere -- depending on the kind of vegetation, soils, topography, and climate. It will vary also with the relative importance of water as against other uses of forest land in a particular area. Finding the best ways to achieve these results is one of the major objectives of Forest Service watershed management research.

The Forest Service began watershed management research in 1910 at Wagon Wheel Gap in the Colorado Rockies. We were trying to determine the effect of forest cover on water yield. In 1912 studies on range watersheds were begun at the Great Basin in Utah. Since the late twenties the Forest Service has taken the lead in watershed management research on forested lands and on wildlands generally.

Some of our watershed research centers doubtless are well known to you. There is San Dimas in southern California, Fraser in Colorado, Great Basin in Utah, Coweeta in North Carolina. The Davis County Experimental Watersheds in Utah are known worldwide. All told, we now operate field stations at 36 locations where watershed management research is a primary objective.

The scope and character of our watershed management research have enlarged, too. In the early days we gave most attention to measuring the effect of changes in the vegetative cover on water yield, on quality, on periodicity of flow, and on soil erosion. We could measure results, but we didn't know why these results were obtained. Today and increasingly in the future our research will deal with more fundamental laboratory-type studies of the functions of different soils, of climate, of hydraulics, and of different kinds and amounts of vegetation. With basic knowledge of this kind we expect to be able to take the controlling watershed factors in various combinations and judge how a

particular watershed will respond to a particular kind of management. Since research is so essential to all aspects of good land management, we are expanding and accelerating research in all subjects including research in watershed management.

If the National Forests were management exclusively for maximum yields of usable water, the task of the Forest Service, though difficult, would be much easier and simpler than actually it is. These public lands must serve many resource needs. They are owned by all the people, not by any one user group. Water is only one part, though an extremely valuable part, of the total resource complex of the National Forests. These lands must be managed for a combination of uses.

Use of all National Forest resources is increasing rapidly. One reason for this is that until recently these public forest lands were inaccessible. Not many people knew about them, roads were few and far between and people didn't travel around as much as they do today. Another reason is that in some places certain resources outside the National Forests have become less plentiful and National Forest resources are needed to bridge the gap.

But by far the biggest reason why use of all National Forest resources is increasing is simply this: more people. We are beginning to experience what older countries have experienced long before us -- the increasing pressures of a growing population on the land, on natural resources that do not increase automatically as population increases but remain constant, increase, or decrease, according to our husbandry.

These resource pressures will not decrease in the future. They will increase. Large as the National Forests are -- and 186 million acres is a lot of land -- they are not large enough so that every user group, each with some special interest, can have all the land it wants, the particular land it wants, to serve just that one use.

The Forest Service wants these lands to be used. We want them to furnish the greatest possible benefits in products and services to the largest number of people over the long run. The only practical way to do this is not to make an equal division among all uses but over a period of time to achieve the best combination of uses on a particular area. If you want a one-sentence explanation of multiple use, that's as brief a one as I know how to give.

Fortunately, multiple use works very well and from the standpoint of maximum possible use frequently works better than single-purpose use. For example, many National Forest areas are accessible to recreationists only because they can travel on roads built primarily to haul timber. The harvesting of mature timber and thinning of immature timber to stimulate tree growth can be done in a way that in some forest types will increase water yields. Reservoirs to impound water are irresistible attractions for recreationists. Good management of forest lands for both water production and timber production is usually the best management for the desires of fishermen. Good timber management and good hunting of certain kinds go together. Improved accessibility means better protection of vegetative cover from damage by fire and therefore safeguards timber, wildlife, forage, recreation, and water.

This interlocking character of good resource management is often of great benefit to watershed objectives. We know, for example, that deep-rooted plants create greater soil-moisture deficits than plants with shallow root systems. We know that these deficits must be replenished before water will percolate through the soil to recharge groundwater and maintain streamflow. On deep soils conversion from deep-rooted to shallow-rooted vegetation will result in more water available for streamflow if conditions for infiltration are satisfactory and precipitation is sufficient to wet down through the root zone. Removal of chaparral and replacement by grass benefits grazing; it also improves conditions favorable to greater water yield. Removal of low-value water-loving trees along streams and replacement by species using less water benefits both timber production and water yield. Thinning dense coniferous stands on north slopes in areas of heavy snowfall will allow more snow to reach the ground and thereby increase water available to streamflow and at the same time increase timber yield and shorten rotation age.

In attempting to achieve such results as these it is essential that management plans for each use be coordinated with plans for use of other resources on the same area. The four basic principles to be kept in mind when coordinating other uses with water use are: Maintenance of an effective plant cover, maintenance of soil stability, maintenance of maximum infiltration rates, and effective control of surface runoff. In addition, measures to prevent water pollution may need to be taken.

In actual practice this means that in range management, stocking levels and seasons of use must be considered in relation to watershed functioning as well as to sustained production of forage. In timber management it means that logging methods, logging roads and skid trails must be designed and treated to prevent site deterioration and to keep silt and logging debris from reaching streambeds in harmful amounts. It means taking special precautions in road building, prompt restocking of burned areas, and improvement of stream channels.

We have not always been fully successful in either preventive or rehabilitation measures. Sometimes it is because we lack the necessary technical know-how. Sometimes, even though we know what to do, we lack the money to do it. Sometimes poor management or lack of any management on intermingled lands not under our control defeats our best efforts on National Forest lands. And sometimes we make mistakes through ignorance or through carelessness.

Our accomplishments fall short of our desires and we feel this more keenly than anyone outside the Forest Service possibly could. At the same time, in fairness to the many people struggling with these problems, I must also say that the accomplishments are very substantial and that there is much good work to which we can point with pride.

The important thing is to have a definite policy and program for integrated management of these public properties. Equally essential is positive action to carry out the policy. Since we are meeting in the Southwest I shall conclude my comments by quoting one paragraph of Forest Service watershed management policy as it relates to management of National Forests in this region:

"Protection of the watershed and water quality will continue to be a primary objective. Water yields will receive major consideration in the multiple-use management of National Forests in the Southwest. Modification of management practices to improve water yields will be undertaken when proved practicable by research and trial application and when overall public benefits will be enhanced. Although the general policy will be to favor water in applying the multiple-use principle, this does not mean that in every locality water will be given first priority or that land management always will be oriented toward maximum development of the water resource. For example, in some places recreational values will be

dominant, as at camping and picnicking spots or in wilderness and wild areas. In other localities the preservation of natural stream-side vegetation for benefits to fish and wildlife would be of first importance.

In all instances the relative importance of other resources will be carefully weighed against the public benefits to be gained by modifying land use practices to enhance water yield. The overall objective is to manage the National Forest lands so as to obtain the optimum combination of uses which will benefit the public as a whole. "

## MAKE NO LITTLE PLANS

By Richard E. McArdle, Chief, Forest Service, U.S. Department of Agriculture, at the 50th Anniversary Celebration of the State University, College of Forestry at Syracuse University, Syracuse, New York, April 13, 1961

On this, the 50th Anniversary Celebration of the State University College of Forestry at Syracuse University, I am honored to address you.

I honor the founders of this College of Forestry for their foresight so many years ago. I respect its students, past and present. I applaud the faculty for building a distinguished institution of higher learning, with well-recognized standards of excellence.

Yours is one of the oldest forestry schools in the United States. But age in itself is no assurance of quality. Nor does a superb physical plant guarantee high standards of instruction.

The faculty provides the key to quality. Individually and collectively, their zest, their vision, their maturity, their experience, their ability to stimulate young men, and perhaps most of all, their possession of those virtues which in total we call character--these are the ingredients of excellence.

I do not mention technical competence. This you are assumed to have.

Why do I stress these points? Because to meet the challenges--that is to say, to make the most of the opportunities for wise land use, and to deal effectively with the competition--for forest land use in the future we must rely heavily on the foresters being trained today.

And so I feel that many of the "challenges" we are to talk about are directed primarily to the faculty of this College of Forestry. These are challenges to make your plans wisely, to maintain your excellent standards of instruction, and to stimulate the young men who come under your influence in their formative years for as long as you enjoy that privilege.

This is why, although the topic assigned to me is "Future Challenges in Forest Land Use," I give my comments a subtitle: "Make No Little Plans."

Your founding date, 1911, is a long time ago. I do not object to taking an occasional backward look. But as President Kennedy said in his Inaugural Address, "The world is very different now." We must accept conditions as

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they are now, not as they may have been. And we must look ahead another half century to a world even more different than our world of today. The challenges of forest land use are not those of years past but of today and the years ahead.

"From the beginning of civilization, every nation's basic wealth and progress has stemmed in large measure from its natural resources. This Nation has been, and is now, especially fortunate in the blessings we have inherited. Our entire society rests upon--and is dependent upon--our water, our land, our forests, and our minerals. How we use these resources influences our health, security, economy, and well being.

"But if we fail to chart the proper course of conservation and development--if we fail to use these blessings prudently--we will be in trouble within a short time."

Here in a few words from the President's recent message to Congress on natural resources is the challenge of our times to those of us whose life work is management of natural resources.

Imagine that you are looking at a map of our country. Here is all the land we have. Since we are not an aggressor nation, this is all the land we are likely ever to have. From this land we must obtain almost all our food, our clothing, our shelter, the fuel to warm that shelter and to cook our food. From this land we must in addition obtain the raw materials of industry to manufacture those things that make life more pleasant, more than mere existence. Except for the seas around us there is no other place to obtain these basic necessities of life.

By the end of this century--a short four decades away--our country will have twice as many people as we have today. There will be twice as many stomachs to fill, twice as many bodies to clothe, shelter, and warm. We shall need more of everything--more food, fiber, timber, water, minerals, energy, fuels, outdoor recreation--more of everything that in large part can be had only from land.

All of these greatly increased needs must be met from the same total area of land that we have today.

Actually, we shall have less land from which to obtain these necessities of life. Productive land--land capable of producing food, fuel, shelter, clothing, and raw materials--for industry increasingly is being diverted to other uses: to superhighways, airports, urban development, for national defense, to name only a few. Every acre so diverted throws just that much more burden on the remaining acres.

Unfortunately, too, not all of our land is capable of producing these necessities of life. We have many millions of acres of desert and low-quality land, more millions of acres too high, too cold, too rocky, or too wet to justify inclusion in our productive base. We cannot afford to think only in terms of total acres. We must focus our attention on productive acres.

We speak of challenges as the central theme of our discussions. Yet I do not care for the word, with its implication of a summons to a contest. The only contest is to overcome our own inertia.

We are a peace-loving and proud people, blessed by a bountiful nature and pledged to high standards. In natural resources, as in other resources, we are not weak; and we need not be insecure. With renewed effort and with public attention, we shall assure an abundance of natural resources for America, and with this abundance our civilization will prosper.

In the few years that I have been Chief of the Forest Service, I have given more than half a hundred major talks. The theme of many of these has been directed toward the future. To name a few: "Opportunities and Goals for Forest Management," "Trends in Forestry in the South," "Timber Resources for America's Future," "Timber on the Horizon," "Water, Forests and People," "The Sixties--Decade of Decision," "Horizons Unlimited," and so on.

Why have these talks been so oriented? I have hoped in my small way to stir the public's imagination, to stimulate our forest scientists, to give encouragement and strength to the forest industries, to impart some knowledge to our students, and to create confidence in the public service. This has been my personal challenge--one of faith and leadership.

Today we are assembled on this 50th Anniversary Celebration to hear eminent men talk about forest resources, forest production, new wood uses, fibers and molecules, and forestry education. It is my earnest hope that in these discussions we will throw off the bonds of conservatism, escape the shackles of tradition, and explore in a broader spectrum than usually occurs when professionals talk with fellow professionals about conservation of natural resources.

Let us consider water for a moment. Water is one of the most valuable products of forest lands. In large measure the challenges, the opportunities, for wise use of forest lands reflects our opportunities for obtaining adequate supplies of usable water. We foresters have been indoctrinated in the merits of erosion and flood control through protection of upstream watersheds. Only of late has our thinking turned to watershed management in the sense of affecting in a positive manner the yield, the quantity, of water. We have in the past been concerned mainly with the quality of water, which is a product of watershed protection, and but little with quantity, which is the end result of watershed management. Hindsight now shows that our foresight of years past was not good.

In many places water is becoming the chief limiting factor in further urban and industrial expansion. Our cities are reaching out further and further, sometimes for hundreds of miles, to obtain increased supplies of water. The conversion of salt water to fresh is being endlessly explored, and someday science will make this process both practical and economical.

What effect will such discoveries have on the need to adjust land uses to water needs? As a practical matter, how far inland may converted sea water be transported? In what manner and to what degree will this possibility of the



future affect today our long-range planning for forested lands, and especially our priorities for forest land use?

This is the kind of land-use problem that poses a challenge to the ingenuity of our scientists and should shake us foresters out of our classic patterns of thinking.

I'll give you another example. Forest recreation is the idol of the moment. It has the attention of legislators, of State and local governments, of study commissions, and of universities. People are flocking to the outdoors in unprecedented numbers. Why?

The influx is more than can be explained simply by population expansion. Is the phenomenon that we are experiencing a passing fad, or is it the beginning of something much more permanent?

I think a significant factor could well be that in our free society the low- and middle-income groups have begun to find a new source of spiritual fulfillment hitherto available primarily to the well-to-do. The usual explanations are the prosaic ones of better roads, the automobile, and more leisure time. But perhaps there are other more fundamental reasons such as higher costs of more luxurious types of recreation. There is also the undeniable fact that the middle-income segment of our population is becoming a larger and larger proportion of the total.

Half a century ago we were mainly a rural people. Today the situation is exactly reversed and we are becoming a nation of city dwellers. In the ever-growing competition for use of forest land, is it not logical, that we ask ourselves if a preponderance of city dwellers doesn't mean that outdoor recreation--some way to escape the pressures of crowded living--has also become one of the necessities of life?

Should the great popularity of outdoor recreation continue, and I think it will, there will be posed real problems of competition for forest land use, of programing, of multiple-use land management, of financing, including cost-sharing by the beneficiaries, and questions of institutional responsibility. These problems will test the skills of administrators and the wisdom of policy makers. Again--a challenge for wise use of natural resources and especially of forest resources.

This ever-growing competition for land is going to make foresters adjust their traditional thinking. We see everywhere great urban expansions--communities pushing back the forest in the same way but on a vastly larger scale than happened three hundred years ago when our forefathers settled this country. A huge 10-year highway program is under way. Transmission lines for electrical power, for oil and gas, are spreading across the land. Despite the promise of saline water conversion we can expect continued large withdrawals of forest land for reservoirs of all kinds.

Land will continue to be needed for national defense, for atomic energy, and similar purposes.

There are tremendous pressures to set aside timberlands for parks or other specialized recreational use. One estimate forecasts an increase in forest land used as parks and wildlife refuges from about 27 to 47 million acres by the year 2000. Another recent proposal is an increase to more than 60 million acres in less than 10 years. I do not know which estimate is more nearly correct. I do know that this is a use of forest land which must have our serious consideration.

There is still another kind of competition for forest land that many of you may not have thought about. This is the prospective need of forest land to grow food crops. It may seem ironic to talk about needing more land for food production when today we have large surpluses of some agricultural crops. Actually, most of the experts dealing with this subject do not forecast any substantial change in total acreage devoted to production of food crops, at least not for the next 15 to 20 years. The increases we shall need in the next couple of decades can be obtained through widespread application of better management, increased use of fertilizers, improvement in plant varieties, and other technological advances.

Although some predictions are that by the end of the century as much as 73 million acres of forest land may be diverted to food-crop production, the probabilities are that the total diversion of forest land to food crops will be less. A more significant change and one much more certain is diversion of the best, the most productive forest land to food crops. The better land will go into food crops and the poorer land into forests. The net effect on timber production will be substantial.

In total, the possible further diversion of forest lands for urban development, parks, reservoirs, food production, and so on could mean that one-fourth of our commercial forest land, equal to one-third of our timber-growing capacity, may seriously be sought for other purposes within the next few decades.

National policy on these competitive needs for forest land may very likely be determined for the most part fairly soon. The outcome of these issues cannot fail to have a significant long-range effect on forestry and forest-land use. This is one of the destiny decisions of our times. Call it a challenge if you wish.

The competition for forest land inevitably brings with it an ever-growing need for greater intensity of management. This is why the Forest Service subscribes so heartily to multiple use as the best practice of management for most of the publicly owned forest lands in the United States.

Multiple use helps to overcome problems of scarcity. It tends to reduce or resolve conflicts of interest and competition for resources. It promotes balance in resource use. It impedes the ascendancy of single-interest pressures. Properly applied, multiple use involves consideration of both aesthetic and economic criteria in arriving at management decisions. It offers balance between materialistic and non-materialistic values.

Multiple use is being extended in varying degree to other public and to privately owned forest lands, mainly those in the larger ownerships. A major policy question of our time is to what extent Federal and State educational, technical, and other assistance programs should encourage multiple use on the smaller forest ownerships.

Heretofore, public stimuli focused on such lands have been directed primarily to growing more and better timber. Nowadays foresters need to think in broader terms.

Concepts of forestry by foresters urgently need to be broadened. Failure to do so will continue to exclude foresters from many of the policy decisions of today that affect the use of forest land for the tomorrows. Now, as in the past, I firmly believe that most such policy decisions are made not by foresters, but by legislators, executives, financiers, engineers, and men of other disciplines and orientation. If ever there is a challenge to foresters, it is to escape from narrow technocracy and to engage actively in the practice of political science and business management.

Another of forestry's greatest handicaps is the difficulty of attracting public notice. In part, this is because foresters must deal largely in terms of a distant future. Problems of immediacy get the attention and the money. Problems of the future compete poorly. But compete we must.

To compete effectively we must make the public understand its dependence on forests. This is another of the great challenges in natural resources--the competition for public understanding.

Let me pause for a moment to explain what I mean by "the public" and to examine its vital connection to leadership.

The public in my opinion is that nebulous body which is everybody. The public most often makes its will felt negatively in what it will not tolerate. Rarely does the public provide leadership for affirmative and creative action; but it does respond to leadership from its officers who have the means to know and the responsibility and competence to lead. It would be brash indeed, for example, to assume that the public really understands the technical facts of atomic energy, the treatment of cancer, the essentiality of water, or the details of forestry and therefore will develop the programs needed in the public interest. Public opinion, if uninspired, uninformed, and undirected by responsible and conscientious leaders, can drift toward what is not good for the Nation.

To those of us who serve the public that is everybody, I say let us always be willing to discuss, but let us never hesitate to lead. Leadership, too, is one of our major challenges, one that should not, must not, be dodged.

I call your attention to one more challenge in use of land for forestry purposes. Our institutional arrangements for forestry are certain to be reassessed from time to time. I mean our system of National and State Forests, and the balance between public and private forest land. The pattern of forestry responsibility between State and Federal Governments is quite different

in the United States than among our Canadian neighbors to the North and among many other countries. Assignment of responsibility within a given level of government for the management of certain lands or for functional responsibilities is likewise subject to periodic reassessment.

The established pattern of private forest land ownership with three-fourths of all privately owned forest land split into millions of small holdings is an accepted pattern in this country, but recognized as unfavorable to the practice of forestry. What, if anything, should and can be done to overcome the problem of smallness?

In summation, I have tried to tell you what to me are some of the imposing problems that we must solve if our people are to have resources for the future. Among them are how to compete for public attention and all that goes with it; how to double our water yield and triple our power capacity in the next 20 years; how to control water and air pollution and convert salt water to fresh; how to accommodate great increases in needs for both outdoor recreation and timber; how to provide leadership to our people, impart knowledge to our youth, and stimulate our scientists; how to meet immensely stiffer competition for land and space; how to best arrange our institutional patterns in order to serve our people well; how to think creatively; how to shake the bonds of tradition and to plan wisely; and last but not least, how our profession can engage effectively in shaping the policies of today that in turn mold the framework of tomorrow.

These are not problems or "challenges" of mere academic interest. These are problems that must be solved if we as a people expect to live well, perhaps to live at all. These are urgent problems and they are big problems. We must make plans big enough to fit these needs. I leave with you these words of Daniel Burnham:

"Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans. Aim high in hope and work, remembering that a noble logical diagram once recorded will never die, but long after we are gone will be a living thing asserting itself with ever-growing insistency."

*Office Memorandum* • UNITED STATES GOVERNMENT

TO : All Forest Service Officers

2100  
DATE: October 28, 1960

FROM : Richard E. McArdle, Chief

SUBJECT: Multiple Use

I usually hesitate to ask you to read speeches, mine or those of anyone else, but I think you should see these two. One is my keynote speech on multiple use for the recent Fifth World Forestry Congress and the other is Ed Cliff's speech later in the Congress. You will note that these two speeches are coordinated; mine is more general, whereas Cliff's is more specific as relates to management of the national forests.

When talking about multiple-use management of national-forest lands we should make sure that certain significant points are emphasized and understood. These have not previously been clarified in Forest Service policy statements, nor do they occur in our regulations or manual instructions.

These prerequisites to multiple use are mentioned in my speech in the five paragraphs on page 6, beginning "An essential of multiple use is . . ." You will note that multiple-use management requires that there be more than two major uses, and that there be coordination of uses. Note also the references to time period, size of area, control by one authority, and to basic objectives.

I recently have heard multiple-use management referred to as a concept, as a principle, and as a practice. Obviously it is all three.

If you find here some ideas useful for your own speeches, we shall be delighted to have you make any of our sentences or paragraphs your own.

*Richard E. McArdle*



*Fifth* WORLD FORESTRY CONGRESS  
*Cinquième* CONGRES FORESTIER MONDIAL  
*Quinto* CONGRESO MUNDIAL DE SILVICULTUR.

Seattle, Washington • August 29-September 10, 1960

GS/P/12-U. S. A.

THE CONCEPT OF MULTIPLE USE OF FOREST AND ASSOCIATED  
LANDS - ITS VALUES AND LIMITATIONS

by

Richard E. McArdle  
Chief, Forest Service  
U. S. Department of Agriculture

It is a great honor to address this first general session of the Fifth World Forestry Congress. My subject is the same as the theme of the Congress -- the multiple use of forest lands. This theme is an appropriate sequel to the Fourth World Forestry Congress at Dehra Dun in 1954. There the theme was the role of forested areas in the land economy and economic development of a country.



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As FAO noted, management of land to serve as many uses as possible is everywhere becoming more essential. When there is abundance of natural resources and few people, there is little need for multiple-purpose land use. But when increasingly large numbers of people must rely on an unchanging or diminishing resource base, they must make the most effective use of the resources they have. Multiple use of renewable land resources thus is a necessity born of scarcity of resources and abundance of people who need these resources.

Competition for the use of land is growing throughout the world. This competition will not decrease but will increase as world populations increase. World population is now about 3 billion persons. It has increased as much in the last two decades as was the total growth of population up to the year 1750. In 1800 my own country had 5 million people. One hundred years later we had 76 million. In the next 50 years our population doubled. The census now being made in the United States indicates an increase in our population from 5 million to 180 million people in 160 years. And U.S. population is expected to nearly double again by the end of this century.

It will not surprise you who come from older countries to hear that in the U.S.A. we are now feeling the impact of a dynamic population growth on a static land base. Older countries already have had this experience. A few countries represented here today still have abundant natural resources, more than adequate for their present populations. Inevitably, however, as their populations increase, their need for resources will increase, and competition for the use of land in those countries will become more intense.

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many nations, propose to dedicate our discussions at this Congress to sharing our knowledge and experience so that we may improve policies and practices relating to wise use of forest lands.

The wise use of forest lands, however, cannot be considered in a vacuum. It must be considered in relationship to the fullest possible yield of all the products and services that forest land provides for people.

In past years many of us have thought that we had enough land in forest in the U.S.A. to meet all foreseeable needs for wood and other products and services of forest lands. Today we are not so sure. We think our earlier estimates were too conservative. We are now genuinely concerned. Much forest land is being taken for other uses. Competition for land is becoming intense in the United States.

For example, wherever you may travel in this country you will see great expansion of urban areas. This is taking land which heretofore was included in our estimates of available forest area.

Superhighways, new airports, transmission lines for electrical power, oil, and natural gas, and construction of dams and reservoirs are taking many millions of acres of forest land. Forest land will continue to be taken for national-defense purposes.

Large pressures are developing to set aside additional forest lands exclusively for recreational use. Conversion of land from forest to food production, inevitable in the next few decades, will include sub

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be hard pressed to meet future wood requirements even if no more of our present forest land is diverted to other uses.

In addition to meeting greatly expanded requirements for wood production, forest land management in the United States faces greatly increased demands for the other products and services which forests provide. For example, exclusive of Alaska, more than one-half of all the water of the western United States originates on the national forests, although these publicly owned forests comprise only one-fifth of the total area in this part of our country. Maintenance of a forest cover on this land protects water quality. Protection alone, however, will not produce the large increases in quantity of water needed by greatly increased numbers of people, by agriculture, and by industry. These requirements have doubled in the last 20 years and are expected to double again in another 18. To increase water yield, manipulation of the forest cover is essential. If your tours take you to some of our experimental forests, you will see how the methods used in timber harvesting can serve also to increase water yield.

Many coniferous U.S. forests and intermingled grasslands are used for grazing of domestic livestock. In this country, as in yours, forests also provide the habitat for many kinds of wild game. These uses are increasing.

Recreational use of national forests has tripled in the past 12 years.

Use of forest land for these several purposes is nothing new. In

be hard pressed to meet future wood requirements even if no more of our present forest land is diverted to other uses.

In addition to meeting greatly expanded requirements for wood production, forest land management in the United States faces greatly increased demands for the other products and services which forests provide. For example, exclusive of Alaska, more than one-half of all the water of the western United States originates on the national forests, although these publicly owned forests comprise only one-fifth of the total area in this part of our country. Maintenance of a forest cover on this land protects water quality. Protection alone, however, will not produce the large increases in quantity of water needed by greatly increased numbers of people, by agriculture, and by industry. These requirements have doubled in the last 20 years and are expected to double again in another 18. To increase water yield, manipulation of the forest cover is essential. If your tours take you to some of our experimental forests, you will see how the methods used in timber harvesting can serve also to increase water yield.

Many coniferous U.S. forests and intermingled grasslands are used for grazing of domestic livestock. In this country, as in yours, forests also provide the habitat for many kinds of wild game. These uses are increasing.

Recreational use of national forests has tripled in the past 12 years.

for the permanent good of the whole people, that all of the resources were for use, and that decisions would always be made from the standpoint of the greatest good of the greatest number in the long run. These instructions have constituted Forest Service doctrine from the beginning. They are the genesis of multiple use.

Full recognition of the multiple-use principle of land management was given by the Congress of the United States about two months ago. The Act of June 12, 1960, directs that the renewable resources of the federally owned national forests, some 181 million acres, shall be managed for sustained yield and multiple use. General legislative authority to manage these public properties for use of their watershed, timber, forage, outdoor recreation, and wildlife and fish resources was provided many years ago. The significance of the recent legislative enactment is, first, legislative recognition of multiple-use and sustained-yield principles of management; second, a clear-cut directive to apply these principles on the national forests; and third, naming the basic renewable resources for which the national forests are established and administered and assuring them equal priority under law.

Although this law applies to only one class of publicly owned lands, the principles involved have wider application. On the federally owned national forests the objective is to meet the needs of all the people. On State lands, the objective would be to best meet the needs of the citizens of that State. On privately owned lands the objective would be to best meet the needs of the owner. He would express those needs in whatever terms he might choose. These private-owner criteria usually tend to be economic ones.

The Act spells out definitions of multiple use and sustained yield as these principles are to be applied to the national forests. Since the general objective is to manage these lands so that they best meet the needs of the American people, the Act and the accompanying legislative reports require that the five basic renewable resources shall be utilized in the combination that will best serve the people. Emphasis is on utilization, not preservation.

The legislative definition requires that management decisions are to be based on the relative values of the various resources and not necessarily on economic factors only. Intangible values which are difficult to express accurately in monetary terms also are to be considered. The definition does not require maximum production for all resources or for any one resource.

The legislative history of this Act directs that in making application of the principle of multiple use to a specific area equal consideration is to be given all of the various renewable resource uses, but this does not mean using every acre for all of the various uses. Some areas

will be managed for less than all uses, but multiple-use management requires that there be more than two uses.

An essential of multiple use is positive, affirmative management of the several uses involved. Haphazard occurrence of these uses on some particular tract of land does not constitute multiple-use management. Multiple use is not a passive practice. On the contrary, it is the deliberate and carefully planned integration of various uses so as to interfere with each other as little as possible and to supplement each other as much as possible. Multiple use is by no means an assemblage of single uses. It requires conscious, coordinated management of the various renewable resources, each with the other, without impairment of the productivity of the land.

Multiple use must be over a period long enough to experience the cycle of the seasons; that is, a year or more. It does not require that all uses involved must be practiced simultaneously at the same instant.

Size of area is a key factor in multiple-use management. Application must be to areas large enough to give sufficient latitude for periodic adjustments in use to conform to changing needs and conditions. On the national forests we normally think in terms of our smallest administrative units, which at present average about 200,000 acres. On large private holdings similar acreages might be applicable, but for small private ownerships the unit areas would, of course, be much smaller. They might be as small as 40 acres.

Multiple-use management of the renewable surface resources obviously requires control of all uses on the same land by one authority. Such management is not possible if several coordinate authorities are each trying to direct different uses on the same land. Central decision making is a prerequisite.

In brief, multiple-use management as we practice it on the national forests requires us to consider all of the five basic renewable resources, although on any specific area we may not have all of them in operation at any one time. It obliges us to coordinate these various uses even though doing this results in less than fullest possible productivity of some uses. The requirement for sustained yield applies to all renewable resources and is aimed both at getting a high level of productivity and at preventing over-use of any resource or impairment of productivity of the land.

Multiple use is not a panacea. It has limitations, but it also has overriding advantages. I am convinced of the distinct advantages of applying multiple-use management to the great bulk of our forest land.

First of all multiple use helps to overcome problems of scarcity. It tends to reduce or resolve conflicts of interest and competition for resources. It promotes balance in resource use. It impedes the ascendancy of single-interest pressures. Properly applied, multiple use involves consideration of both esthetic and economic criteria in arriving at management decisions. It offers balance between materialistic and nonmaterialistic values.

Multiple use properly understood and properly applied is now, and will continue to be, the best management for most of the publicly owned forest lands of the United States. It will gradually become the best management for many of the large private holdings. It will always have less applicability to smaller private properties, but many of these owners will in time find it to their own best interest to practice some degree of multiple use.

Finally, the overwhelming advantage of multiple use is that through it foresters can make forest lands contribute their utmost to society. The basic purpose of forest conservation is a social one -- to satisfy the intangible as well as the materialistic needs of people. In this way, I believe foresters can make a major contribution to human betterment and perhaps even to world peace.

And now a closing word to you as eminent leaders in a respected profession. Multiple-use forest management is a challenge to foresters to broaden their vision. We must be forest land managers instead of primarily timber growers. The thinking of foresters is believed to be preoccupied with timber and dominated by silviculture. To some extent this criticism is justified. But multiple use, when properly applied, eliminates this bias. The future success of foresters and the contribution of the forestry profession to the welfare of our countries may depend on our response to the need for a balanced use of forest land resources. May we now and always perform in the best interests of the countries we serve.

Statement of Richard E. McArdle, Chief, Forest Service, U. S. Department  
of Agriculture, on the "Program for the National Forests" Before the  
Sub-Committee on Forests of the Committee on Agriculture,  
House of Representatives, 86th Congress,  
1st Session, May 14, 1959

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am glad to pick up where Mr. Peterson concluded in explaining the national-forest program recommended to the Congress by Secretary Benson.

Mr. Peterson briefly explained the need for the program, recalled progress in recent years and the good to the country from putting the program into effect.

I shall try to summarize the specific program proposals, tell you something about the acceleration that would be involved in relation to our present activities, and give you an estimate of what the program would cost.

The national-forest program is no "quickie" affair. The Forest Service for many years has maintained an inventory of needed works. This project work inventory is roughly equivalent to Dr. Elliott's famed five-foot bookshelf. It is our shelf of needed jobs.

The Forest Service also has completed recently an exhaustive study of our present and prospective timber situation. Conclusions of that study as to future timber needs were instrumental in establishing long-range national-forest timber goals. The findings of a Departmental Committee on Research Evaluation contributed to the research program.

The point I am trying to make is that the program sent to the Congress by the Secretary has been developed carefully over the years, is soundly based, and has been thoroughly considered.

In the first instance, the estimates were developed in our national forest and regional offices in accord with certain basic assumptions. The field estimates have necessarily been screened and coordinated, both functionally and geographically, in order to mold the integrated program which you have before you. I hope you will bear these points in mind when I later describe the costs of the program and the step-up that would be involved over present operational levels.

### The National-Forest Program

The program consists basically of two parts. First, we developed a series of long-range objectives for each of the main renewable resources of the national forests such as water, timber, range, recreation, and wildlife. These are geared to what we believe should be achieved in resource management by

# NATIONAL FORESTS AND ASSOCIATED LAND-UTILIZATION PROJECTS



Chart 1

the year 2000. Second, we outlined a series of some 65 major actions and numerous subitems organized into 6 groups of activities. All of these should be accomplished within the next 10 to 15 years in order both to meet current needs during that time and to prepare adequately to meet the longer range objectives.

The long-range objectives are geared to the basic assumptions that by the year 2000, population will reach 332 million people, an 88 percent increase over now, and that gross national product by that time will reach \$1,800 billion, or about 4 times the present (chart 2). Higher assumptions could have been used. We believe those chosen to be reasonable.

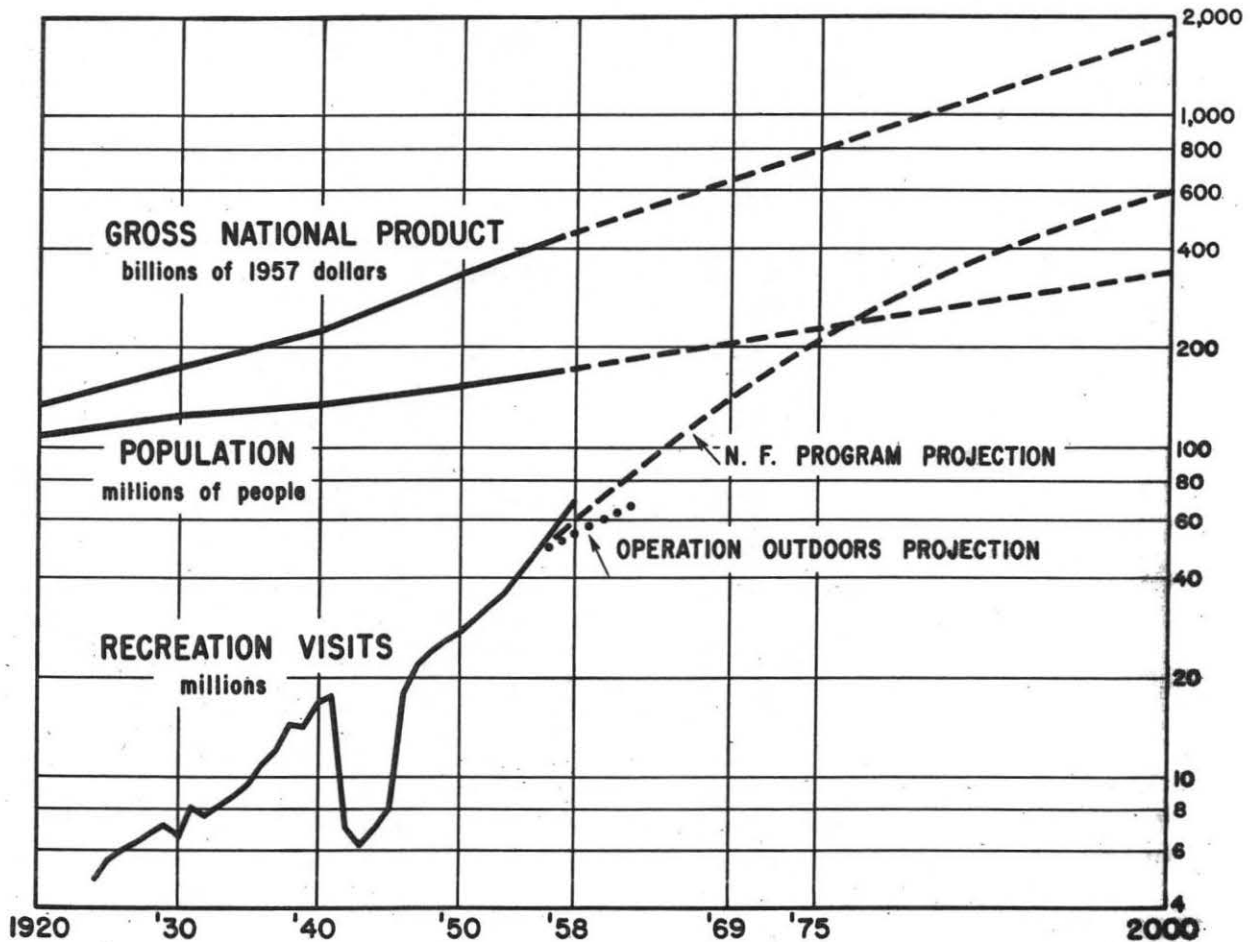


Chart 2

The action proposals for the next 10 to 15 years are called the "short-term" or "interim" program. Today I want to talk primarily about this short-term program. Furthermore, the cost estimates and comparisons with present levels of activity relate only to the short term.

The program consists of six groups of activities: Resource development and management, protection, roads and trails, land adjustments and uses, administrative structures and equipment, and research. In the resource

development and management group, I would like to comment specifically on timber, water, range, and recreation and wildlife.

**Timber:** The long-range timber goal for the national-forest system is an annual harvest on a sustained-yield basis of about 21 billion board feet of sawtimber by the year 2000. This goal is about 3 times the 1957 timber cut and is that portion of the national need which the national forests could reasonably be expected to produce under intensified management.

By the end of the short-term program, annual cut should reach 11 billion board feet (chart 3), in contrast to 6.4 billion board feet in 1958 and 8 billion in 1959. The increase in annual timber cut by the end of the short-term program will be enough to build 400,000 5-room frame houses or enough to house twice the population of the District of Columbia.

### TIMBER CUT

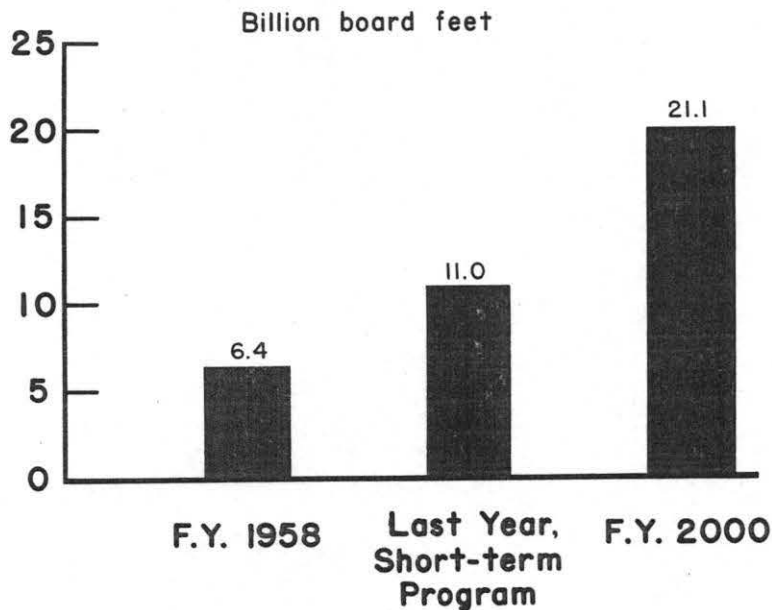


Chart 3

Better standards of regeneration, hazard reduction, salvage, and erosion control will be applied, and inventories and timber management plans will be completed and brought up-to-date.

Three-fourths of the needed planting job on the national forests will be completed during the short-term program. This will mean planting an area larger than Connecticut. An area twice the size of Massachusetts, or over 17,000 square miles, will be treated with various stand improvement measures such as pruning, weeding, thinning, and release cutting.

**Water:** Water resource management of the national forests has two principal long-range objectives: (a) Protection of the watershed by stabilizing the soil and thereby preserving and improving water quality, and (b) managing the area to increase water yield. Both objectives will continue to receive major consideration in the long-range multiple-use management of these lands.



The national forests cover one-fifth of the West, receive one-third of the precipitation because of their high elevation and mountainous character, and furnish over half the waterflow.

Much of our water-resource management depends upon how we manipulate the timber, the range, and the wildlife habitat, how successful we are in protection against fire, how efficient we are in building roads, and in minimizing erosion hazards.

But in addition to those impacts on water-resource management caused as a result of other national-forest activities, there are numerous specific things that need doing to improve the quality and increase the quantity of water.

These include such things as completing soil surveys on an area larger than the State of Alabama, or about one-fifth of the total national-forest area needing such surveys; controlling erosion on 14,000 miles of roads and trails, or over  $4\frac{1}{2}$  times the distance between New York and San Francisco; stabilizing 10,000 miles of gullies and channels; and numerous other items such as control of sheet erosion and stream pollution, construction of upstream flood control structures, inventories of water yields, and watershed management plans.

Range: A long-range objective for management of 68 million acres of rangeland in the national-forest system is to improve the range resource in order to achieve a sustained high level of forage production, and better watershed conditions. This objective can be attained through intensified management, better range practices, and more balanced use.

Range analyses and management plans are to be completed on each of the nearly 8,800 range allotments on the national forests. Undesirable or poisonous range plants will be controlled or revegetation will be undertaken on nearly 7,000 square miles. Enough fence will be built to enclose 115 ranches the size of the King Ranch in Texas--some 18,000 miles. Nearly 10,000 water facilities are to be built. And finally, where stocking adjustments are necessary to balance utilization and available forage, these will be carried out as rapidly as practicable bearing in mind the needs of both the range and other factors.

Recreation and Wildlife: Probably the most phenomenal increase in any use of the national forests in the next few years will be in recreation. Recreational visits have multiplied about 7 times since World War II. We expect them to nearly double again in the next decade and to be 9 times more than present levels by the end of the century (chart 4).

Briefly, our long-range recreation objective is to prepare to accommodate this tremendous number of people adequately but modestly, and with due safeguards for their health. Likewise, our goal is to develop the wildlife habitat to yield a fish and game population adequate to meet the needs of an equally phenomenal increase in hunters and fishermen.

Some 13 major action proposals are listed for recreation and wildlife habitat development on page 15 of the printed program. I can only mention a

Land Adjustments and Uses: Effective management of the national forests requires reasonable consolidation of ownership where there is intermixed public and private land. Although such consolidation is a continuing function, the proposal for the interim period is to exchange about 1.4 million acres of scattered or checkerboard national-forest land for other areas. By doing this, some 11 million acres of private and State land can be excluded from national-forest boundaries. Special attention will be given to completing the consolidation of national-forest lands in the Boundary Waters Canoe Area in Minnesota and in certain key watersheds in the Cache National Forest in Utah.

It is also proposed to survey, post, and establish corner markers on 100,000 miles of national-forest property lines. This is equivalent to going around the State of Pennsylvania a hundred times.

The determination of surface rights of mineral claimants on national-forest lands underway since the approval of the Act of July 23, 1955, will be completed. This determination will have been made on 120 million acres of national-forest lands.

Administrative Structures and Uses: Certain administrative structures and equipment for fire protection, housing, communications, and transportation are absolutely necessary. We plan to build in the short-term program some 2,700 dwellings, another 2,700 service buildings, and over 500 lookouts; replace 9,000 radios; build 3,000 miles of telephone lines; build 25 new aircraft landing fields; and reconstruct 37 existing fields.

Research: Forest research is the handmaiden of progress. It must keep ahead of practical application. The research program proposed for the short-term period is needed to yield not only quick results for applicability during that period, but also information of value in attaining long-range objectives. Only that portion of the total forest research program of the Department of Agriculture that has a direct impact on national-forest management is included. This is estimated at about two-thirds of the total.

Research must have adequate laboratories, greenhouses, scientific equipment, and other facilities. The short-term program includes the construction of 17 specialized laboratories and related greenhouse and service facilities for research in pests, tree genetics, physiology, forest soils and hydrology, forest fires, and forest products; 30 office-laboratory buildings; and stream gages, fencing, and other minor research installations on about 100 experimental forests and ranges.

Some 14 specific fields of research are outlined in the short-term program covering each of the basic renewable resources of the national forests and ranging all the way from research in tree genetics to the preferences of recreational users.

### Step-Up Proposed in Short-Term Program

We must not develop one resource and lag behind in another. During the past years, some unbalance has crept into national-forest resource management. The recommended program would restore desirable balance and

coordination. Variable rates of speedup are proposed for different activities. Comparisons are derived by relating what is proposed for the short-term program to what has actually been done in the past 10 years.

The step-ups range all the way from a 50-percent increase or less in some activities to a hundredfold increase in gully and channel stabilization. For example, annual timber cut should increase 1-3/4 times, but reforestation and stand improvement over 19 times (chart 6). This is essential in order that timber harvesting does not get further out of balance with regeneration and cultural measures. Likewise, whereas recreation visits are expected to double, new family campground and picnic units will increase 19 times. This also is essential to bring these facilities into balance with numbers of visitors. Over 3 times as much road mileage is proposed for construction in the short-term program as was built in the past 10 years.

## STEP UP IN SHORT-TERM PROGRAM

( Selected comparisons )

Activity	Unit	Past 10-Year Period	Short-term Program	Step Up ( Times past level )
Annual Timber Cut	Billion bd. ft.	6.4 *	11.0 *	1-3/4
Reforestation And Stand Improvement	Thous. acres	762	14,750	19
Soil Surveys	Thous. acres	1,750	33,000	19
Erosion Control - Road, Gully, & Channel	Miles	250	24,000	96
Range Analyses And Management Plans	Number	3,126	5,664	2
Reseeding And Noxious Plant Control	Thous. acres	750	4,400	6
Recreation Visits	Million visits	68.5 *	130.0 *	2
New Family Campground And Picnic Units	Number	5,398	102,000	19
Road Construction	Miles	24,788	90,000	3-2/3
New Dwellings And Service Buildings	Number	796	5,440	6-3/4

\* Last year of period.

Chart 6

### Estimated Costs

Now as to costs. The Chairman's letter of April 27 to Secretary Benson requested that Department witnesses be prepared to discuss the "cost of the proposed program and the various parts thereof."

The figures I am about to give you are our best estimate of what the short-term program would cost in terms of 1958 dollars. What may be recommended in subsequent budget requests to the Congress will necessarily depend upon overall budgetary needs and financial resources of the Federal Government. However, the Secretary of Agriculture has recommended to the Congress a program of needed action on the national forests. You who must evaluate this recommendation are entitled to know how much the Department of Agriculture believes it would cost.

Basically there are two kinds of expenditures--recurrent and nonrecurrent. The former includes such things as timber sales, administration and management, maintenance of recreational areas, preparation and maintenance of management plans, inventories, and range analyses, and the continuing aspects of research. Nonrecurrent costs include such things as timber stand improvement, channel and gully stabilization, tree planting, range reseeding, construction of facilities, road buildings, and wildlife habitat improvement. The total cost of the program divides roughly 50-50 between recurring and nonrecurring items.

Due to the recurring nature of some activities, total costs will be greater the longer the short-term activities are strung out. In the estimates given below, the assumption is that the interim program will be completed in 12 years.

Costs are explained in 3 ways: (1) Total and annual costs, (2) costs by functions, and (3) costs in relation to revenues.

Total and Annual Costs: Total gross costs are estimated at \$3.4 billion. This is about \$2 billion more than national-forest activities would cost in the next 12 years if they continued at the 1959 level without change (table 1).

**TABLE 1. --Comparison of estimated costs if program accomplished in 12 years with estimated F. Y. 1959 level of expenditures**

(All figures in thousand dollars)

Type of expenditure	Costs to accomplish program in 12 years		Costs if F.Y. 1959 level of expenditure continued for 12 years		Difference between F.Y. 1959 and needed level	
	Total	Average annual	Total	Average annual	Total	Average annual
Recurrent.....	1,719,000	143,200	912,000	76,000	807,000	67,200
Nonrecurrent....	1,675,000	139,600	520,800	43,400	1,154,200	96,200
Total.....	3,394,000	282,800	1,432,800	119,400	1,961,200	163,400

If program costs were compared to a continuation of recent trends in expenditures related to national forests rather than to 1959 costs, the step-up would be much less. National-forest expenditures have increased very rapidly in the past 10 years--from \$54 million in 1950 to \$119 million in 1959 or more than double. Continuing this trend for the next 12 years, total costs would be about \$2 billion or \$1.4 billion less than estimated program costs.

The average annual cost of the program would be about \$283 million, or \$164 million more than the 1959 level of \$119 million.

The program has been so planned that costs should increase at approximately equal amounts for each of the first 5 years, then level off for the next 6 years at a maximum annual cost of \$321 million, and decline somewhat the last year of the short-term program because of completion of certain non-recurrent items (chart 7).

### TRENDS IN NATIONAL FOREST COSTS

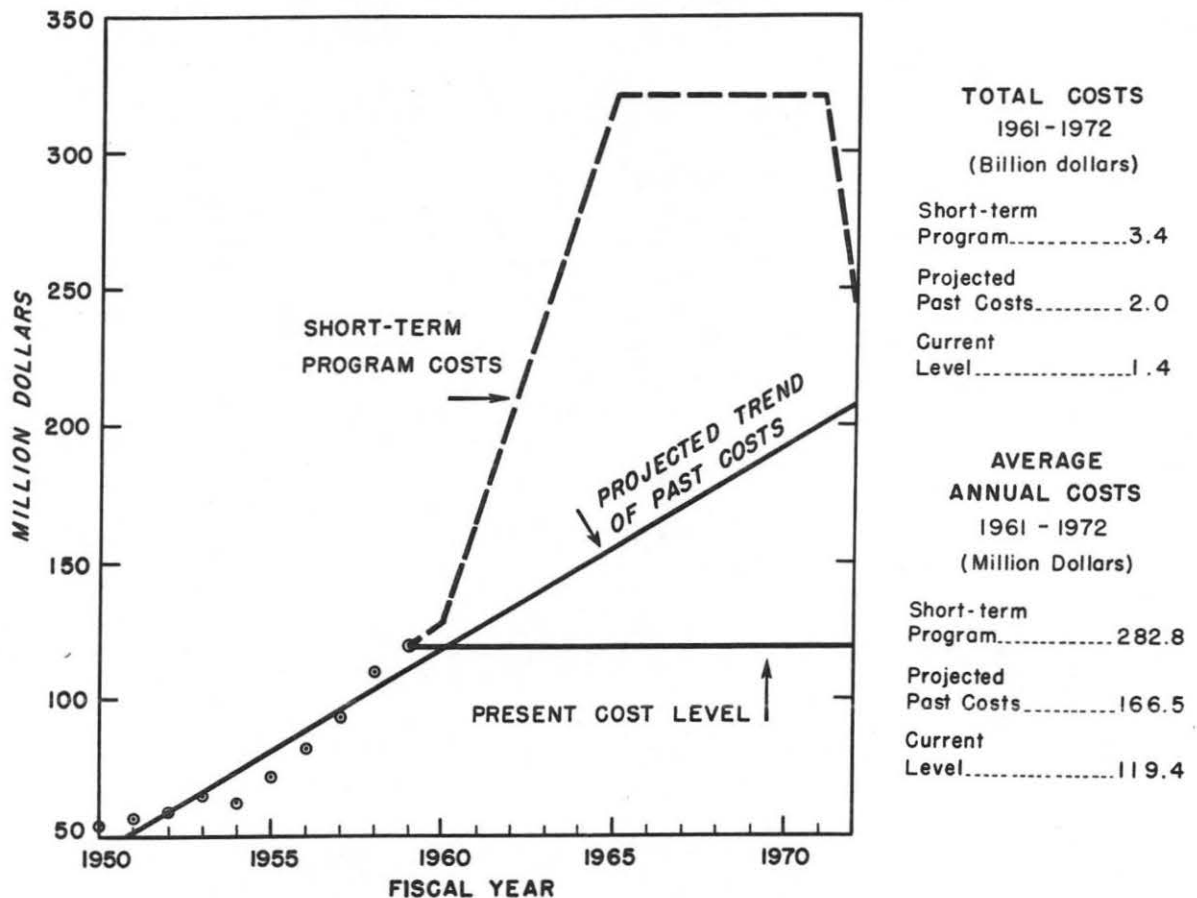


Chart 7

Assuming that the program gets underway in 1961, the increased costs would be \$38 million annually for each of the first 5 years. This means that for each of the first 5 years the annual step-up in cost would be \$38 million more than the preceding year.

In round figures and in oversimplified terms, it can be said that the program would require increased costs of about \$40 million for each of the first 5 years, then leveling off at about \$321 million for most of the remaining short-term period.

Of all the costs I am mentioning, I would like to impress upon you these two estimates.

Costs by Function: Table 2 shows the estimated annual program costs for each of the 6 principal functions and for several subitems.

**TABLE 2. --Estimated costs by functions**

Function	Fiscal year 1959	Short-term program	
		Average annual	Maximum annual
	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>
Resource Development and Management:			
Timber.....	19.1	59.2	68.6
Soil and Water.....	1.8	10.0	11.3
Range.....	6.2	13.1	15.2
Recreation and Wildlife Habitat.....	12.6	33.8	39.4
Protection:			
Insects and Disease.....	6.6	8.4	9.5
Fire.....	14.2	25.7	29.1
Roads and Trails <sup>1</sup> .....	<sup>2</sup> 35.8	<sup>3</sup> 77.2	<sup>4</sup> <sup>5</sup> 85.0
Land Adjustments and Uses.....	4.3	10.4	11.6
Structural Improvements.....	10.6	15.4	17.6
Research.....	8.2	29.6	33.3
<b>Total.....</b>	<b><sup>2</sup> 119.4</b>	<b><sup>3</sup> 282.8</b>	<b><sup>4</sup> <sup>5</sup> 320.6</b>

<sup>1</sup> Roads & Trails do not include roads constructed and maintained by timber purchasers. Cost for F.Y. 1959 estimated to be \$40.8 million; average annual cost for short-term program is estimated at \$51 million; and maximum annual cost for short-term program is estimated at \$56 million.

<sup>2</sup> Includes road and trail 10 percent fund, or \$8.9 million.

<sup>3</sup> Includes road and trail 10 percent fund, or \$15.0 million av. annual.

<sup>4</sup> Includes road and trail 10 percent fund, which varies from \$14 million in 5th year to \$19 million in 12th year.

<sup>5</sup> This level should be reached in 5th year of program and continue at about this level thereafter except for roads and trails which reach \$85 million in 5th year and increase to \$89 million at end of short-term program due to increase in road and trail 10 percent fund.

Construction and maintenance of forest development roads and trails would continue to be the most costly item with a maximum annual direct expenditure of Government funds during the short-term program of about \$85 to \$89 million. In addition to the direct Government expenditures for forest development roads, there would continue to be a substantial portion of the total road program constructed and maintained by timber purchasers and financed through reductions in amounts paid by the purchasers for national-forest timber. This amount would average \$51 million annually during the short-term program.

Expenditures for timber resource development and management would be the second largest item and those for recreation and wildlife habitat would be the third. These would be followed closely by the estimated costs for research and fire protection.

Based on average annual costs, following are the percentages that the major items would make of the total:

Roads-----	27	Recreation and wildlife habitat --	12
Timber-----	21	Research -----	11
Fire protection-----	9		

All resource development and management items together would be 41 percent of the total program.

Costs and Revenues: Near the conclusion of his statement, Mr. Peterson mentioned the expected benefits to the Nation from this program. The major benefits probably are those that are not measurable in monetary terms.

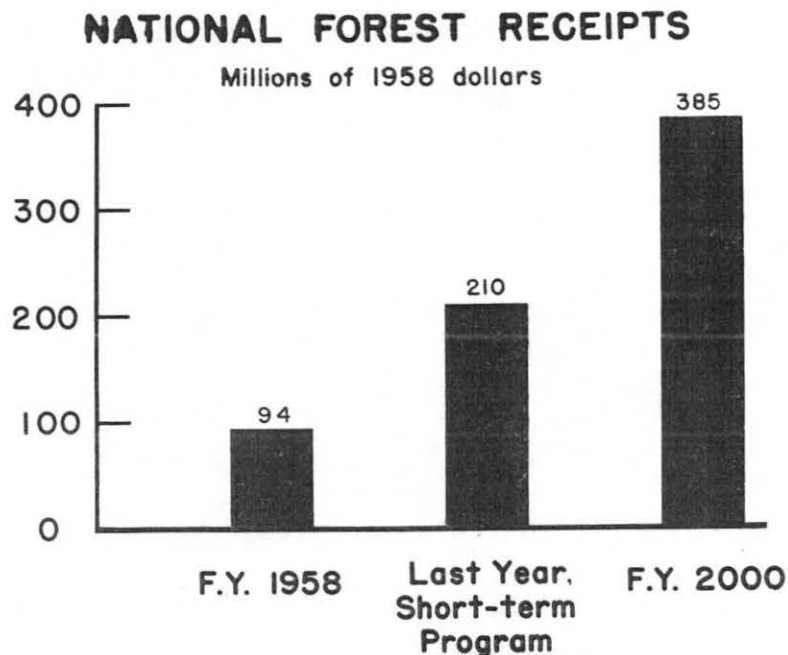


Chart 8

But purely from the dollar standpoint, it is worth noting that revenues from the sale of timber and other national-forest products and services are expected to increase from \$94 million in F.Y. 1958, and an estimated \$110 million this year, to \$210 million at the end of the short-term program and \$385 million annually by the year 2000 (chart 8).

This increase in national-forest receipts would substantially lessen the impact of the proposed program on the Treasury. For example, in F.Y. 1959, expenditures will exceed receipts by about \$9 million. Near the end of the short-term program, it is estimated that costs might exceed annual revenues by about \$100 million. But thereafter the reverse trend becomes evident. Costs will gradually stabilize and even if they should reach \$350 million annually by the year 2000, receipts by that time will be in excess of costs to the extent of about \$35 million annually.

Although the national forests were not established for the purpose of making a profit it is nevertheless satisfying to anticipate that once the program has become implemented, these properties can be expected to yield a net financial return in addition to their many other benefits.

-----

Up to this point, Mr. Chairman, Secretary Peterson and I have explained this program wholly from a national point of view. I know that a great many members of Congress and others throughout the country will want to know what this program means with respect to the national forests in individual States.

The physical work to be accomplished during the short-term program and the estimated costs of doing this have been developed for each State. There is not time to go into the detailed State figures this morning, but I would like to offer to the Committee a series of State tabulations which summarize the program for the national forests in each State.

It is my hope that these tabulations may be incorporated in the printed record of these hearings because of the very great interest that I know will attach to them.

That completes my statement, Mr. Chairman. May I say again that we in the Department of Agriculture are grateful for the Committee's interest in the program and for the opportunity to explain it to you this morning. We shall be glad to try to answer any questions.



UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

Address Reply to  
CHIEF, FOREST SERVICE  
and Refer to



WASHINGTON 25, D. C.

R  
SUPERVISION  
Organization  
Research Field Centers (Map)

August 11, 1955

*WV  
ERD*

Directors and  
Regional Foresters

Dear Sir:

Enclosed are a few copies of our revised map (as of July, 1955), showing Forest Service Research locations. Regional Stations will want to send one or more copies to each field research center headquarters. If you need more copies let us know.

We have attempted to bring out as clearly as possible the names, character, and location of our experimental forests and ranges. The letters "T", "R", and "W", indicate whether timber, range forage, or water is being emphasized in the research program on the experimental area. Our information on experimental areas may not have been entirely complete. Accordingly, we would appreciate any comments you may have for our use in the next revision.

You will note that we have shown the names of the towns where office headquarters for field research centers are located.

We believe you will find the new revised map much more useful than previous maps of this kind.

Very truly yours,

RICHARD E. McARDLE, Chief

By *R. P. Harper*

Enclosures

# FOREST PRODUCTS LABORATORY AND REGION

FOREST SERVICE - U. S. D

JU



# D REGIONAL FOREST AND RANGE EXPERIMENT STATIONS

U.S. DEPARTMENT OF AGRICULTURE

JULY 1955



### LEGEND

- ▲ FOREST PRODUCTS LABORATORY
- ★ REGIONAL EXPERIMENT STATION HEADQUARTERS
- EXPERIMENTAL FORESTS AND RANGES, THE FIELD RESEARCH CENTERS FOR STUDIES OF TIMBER (T), RANGE FORAGE (R), AND WATER (W)
- FIELD RESEARCH CENTER HEADQUARTERS.



Edward P. Cliff

## Dr. McArdle Retires Post With USFS

The Georgia National Forests office said here today that Dr. Richard E. McArdle has retired as chief of the U.S. Forest Service and has been succeeded by Edward P. Cliff, former assistant chief in charge of national forest resource management.

Paul Vincent, chief of the Georgia forests, said that during Dr. McArdle's tenure as chief and his 39 years in the federal service, the Kentucky native chalked up progress in all fields of forest development and particularly in multiple use areas, expanding wildlife and recreation opportunities.

Secretary of Agriculture Orville Freeman announced the resignation and new appointment from Washington. New Chief Cliff, a 32-year career forester, has had direct responsibility for forest management over the country.

Visitors increased from 33 million in 1952 to 115 million in 1961, using facilities and programs installed under Cliff's management.

Washington Star, 3/19/62

## Protector of Forests

Retiring voluntarily from his post as chief of the United States Forest Service, Richard E. McArdle leaves a record of distinguished service as a protector of America's remaining forests. Few men have won such wide recognition, nationally and internationally, for their work in the field of conservation of our natural resources.

Dr. McArdle, in his ten years as Chief Forester, gave energetic leadership to the causes of improved forest management, forest research, wildlife development, outdoor recreation and related activities. He represented the United States in world conferences on conservation and was a founder of the North American Forestry Commission. He will be sorely missed at the Forest Service. Fortunately, however, he will be succeeded by Edward P. Cliff, a colleague who also has distinguished himself in forest conservation. Chief Forester Cliff, a veteran of 32 years in the Forest Service, is well fitted by training and experience to carry on the work so ably done by Dr. McArdle.

*Miss Martin  
special file*

UNITED STATES GOVERNMENT

# Memorandum

J + E  
- Forest Service R-9  
Milwaukee 3, Wisconsin

TO : R. E. McArdle

DATE: March 15, 1962

FROM : M. M. Nelson, Regional Forester

SUBJECT:

Personal

Dear Mac:

Attached is an editorial which appeared in the Milwaukee Journal last night. I am sure you will be interested, especially if you read the whole editorial and don't stop at the first sentence.

Red

## Top Forester Retires

Relatively few Americans will remember hearing the name of Richard E. McArdle, who retires Saturday as chief of the United States forest service. A hulk of a man, a soft spoken Kentuckian, he has not sought the limelight but neither has he backed away from a tough fight when he felt that principle or public interests were involved.

When he took over as chief 10 years ago, cattlemen who grazed their stock on national forest lands in the west had a bill in congress to give them more or less perpetual rights to those grazing permits. Its passage would have dimmed hopes of McArdle to demonstrate, in the national forests, the advantages of a multiple use program—recreation as well as timber production, watershed protection, soil conservation and erosion control, wildlife, wilderness preservation, etc.

The grazers' bill was defeated, largely because of McArdle's determination and leadership. Some years later, congress heeded his plea for an enlarged program for camping, picnicking and other recreational use of national forests. In 1960 McArdle got congress to specify that the management of the national forests should be directed to multiple use.

Last fall we watched McArdle dedicate a one and one-fourth acre model national forest at the Ghost Ranch museum in New Mexico. This shows, in miniature, the many beneficial uses to which national forest lands are put, while still conserving resources for the future.

That "smallest United States national forest" stands as a tiny but fitting symbol of what McArdle has accomplished so unostentatiously for the United States national forests and for forest management. Those who know him know how many reasons the nation has to be grateful to him. They also know how emphatically he would insist that the credit should go to others, especially his subordinates in the forest service. McArdle has always been like that.

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As Forest Chief

# McArdle In Retirement

Secretary of Agriculture Orville L. Freeman has announced the voluntary retirement of Richard E. McArdle as Chief of the Department's Forest Service, and the appointment of Edward P. Cliff, former Assistant Chief in charge of National Forest Resource Management, as the new Chief Forester, effective March 17.

In announcing Dr. McArdle's request for retirement, Secretary Freeman expressed genuine regret and went on to say "Your reputation for leadership and foresight has been more than borne out by your dedication. On behalf of the President and the Department I commend you for long and outstanding service to causes close to the heart of the American people."

Dr. McArdle, who is 63, rounds out ten years as Chief Forester while completing a lifetime career of 39 years in Federal service. During this time, he has served with distinction in every major geographic region in the country and his work assignments have covered the three major areas of Forest Service responsibility: Management of the National Forests, Forest Research, and State and Private Relations. He served for eight years as Assistant Chief of the Forest Service.

A native of Lexington, Ky., retiring Chief McArdle was educated at the University of Michigan, where he earned Bachelor, Master, and Ph.D. degrees.

During his tenure as Chief of the Forest Service, outstanding progress was made in the management of the National Forests, forest research, and in encouraging better management and pro-

See McArdle, Page 2

# McArdle

(Continued From Page 1)

tection of State and private forest lands. The Development Program for the National Forests, sent to the Congress by President Kennedy last year, set forth a well-planned and coordinated program to meet the rapidly expanding needs for more and better recreation and wildlife opportunities, timber production, watershed management, and grazing on the 186 million acre National Forest System. Another natural resource milestone, the Timber Resource Review, released in 1955, was the most comprehensive study of the Nation's forest resources ever made.

In the field of international forestry Dr. McArdle gained distinction by ably representing the United States in world conferences and proceedings. He has held posts in the United Nations organizations and was a founder of the North American Forestry Commission.

In 1960, he served as Chairman of the Organizing Committee for the Fifth World Forestry Congress, which brought together at Seattle, Wash., some 2,000 delegates from 70 nations—the largest conference of its kind ever held. Appointed Head of the United States Delegation, he was elected President of the Congress.

In addition to honorary degrees conferred on him by his Alma Mater, the University of Michigan, and by Syracuse University, Dr. McArdle has received USDA's Distinguished Service Award, the American Forestry Association's Distinguished Service Award for Conservation, the Career Service Award of the National Civil Service League, the Award for Merit of the Public Personnel Association, the President's Gold Medal for Distinguished Federal Civil Service, the Rockefeller Public Service Award, the Silver Buffalo of the Boy Scouts of America, from the Government of Mexico the Order of Merit for Forestry of Miguel Angel de Quevedo, and the New York State College of Forestry Gold Medal for Distinguished Service.

During the late 1930's, he was Dean of the School of Forestry at the University of Idaho. A World War I veteran, he served overseas with the U. S. Army. He is a member of many professional scientific organizations and honor societies. Dr. McArdle is married, and two of his three sons are foresters.

Mr. Cliff, new Chief of the Forest Service, is a career professional forester with 32 years of service with the organization. A native of Heber City, Utah, he graduated from the College of Forestry, Utah State University, in 1931 with a B. S. degree in Forestry. Entering the Forest Service that year as Range Ex-

The Luffen News  
March 11, 1962



### Career Foresters

Richard E. McArdle is stepping down as chief of the Forest Service with a long record of achievements. Though only 63, he has spent 39 years with the Federal Government and was assistant chief of the Forest Service for eight years before he stepped up to the top position a decade ago. Under his leadership the "multiple use" idea has been given special emphasis. The national forests have been administered with the object not only of conservation but also of maximum use of their vast resources, consistent with long-range preservation. He has given the country a new awareness of recreational values in the national forests and of their great potential for water, timber, forage and wild-life.

Continuity in the development of the country's forest resources seems to be assured by the naming of Edward P. Cliff as Mr. McArdle's successor. Mr. Cliff is a professional forester with 32 years service in the organization and has recently functioned as assistant chief in charge of National Forest Resource Management. He will have a special opportunity to carry out the development program for the national forests sponsored by the Kennedy Administration.

# Retiring as Forest Service Chief

WASHINGTON (UPI) — Dr. Richard E. McArdle, chief of the U.S. Forest Service since 1952, will retire March 17, Agriculture Secretary Orville L. Freeman announced yesterday.

McArdle will be succeeded in the \$19,000-a-year career Civil Service post by Edward P. Cliff, another Forest Service veteran

State University, has 32 years of service in the agency he will now head. In 1950 he was named regional forester for the Rocky Mountain regional at Denver, Colo., and since 1952 he has been on the agency staff here.

In recent years, Cliff has been in direct charge of managing the national forests and has helped develop expanded use programs. During his tenure as assistant chief, timber production has risen from 4.5 billion to 8.5 billion board feet annually and camping and picnic facilities have grown to handle 115 million visitors annually.



—AP Wirephoto

EDWARD CLIFF

who has been assistant chief in charge of national forest resource management, Freeman said.

The Forest Service, a unit of the Agriculture Department, manages the national forests for timber production, grazing and public recreation, and operates other programs including research and cooperation with state and private forestry.

Freeman, in a letter to McArdle dated March 6 and made public today, acknowledged his request for retirement after 39 years of federal service "with genuine regret."

McArdle, 63, was born at Lexington, Ky., and educated at the University of Michigan. Before becoming chief of the Forest Service in 1952 he was assistant chief for eight years. In the late 1930s, he was dean of the School of Forestry at the University of Idaho. He was also dean of Heber City, Utah.

**U.S. Forest Chief R. E. McArdle, Retires**  
WASHINGTON, D.C.—Secretary of Agriculture Orville L. Freeman announced the voluntary retirement of Richard E. McArdle as Chief of the Department's Forest Service, and appointment of Edward P. Cliff as new Chief Forester.

TIMES, SUNDAY, MARCH 11, 1962.

### CHIEF FORESTER NAMED

Cliff to Succeed Dr. McArdle as Head of U. S. Agency

Special to The New York Times.

WASHINGTON, March 9—Edward P. Cliff was named today as Chief Forester of the United States Forest Service, effective March 17.

The appointment was announced by Secretary of Agriculture Orville L. Freeman, who also made known the retirement of Dr. Richard E. McArdle as chief of the Forest Service.

Dr. McArdle, who is 63 years old, has served for ten years as Chief Forester and thirty-nine years in the service at posts throughout the country. He is internationally known for his work and is a founder of the North American Forestry Commission.

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McArdle Cliff

Richard E. McArdle, 63, chief of the Department of Agriculture's U. S. Forest Service for the past 10 years, will retire March 17, it was announced yesterday. A native of Lexington, Ky., he is a veteran of 39 years in the Forest Service. McArdle will be succeeded by Edward P. Cliff, who has been with the Forest Service for the past 32 years. Cliff is a native of Heber City, Utah. He lives with his wife and two children in Alexandria.

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6 Spokane Daily Chronicle, Friday, March 9, 1962

## McArdle Ends Forest Work

WASHINGTON (AP) — Secretary of Agriculture Orville L. Freeman announced today the retirement of Richard E. McArdle as chief of the department's forest service.

He will be succeeded in the \$19,000-a-year post by Edward P. Cliff, a career professional forester who has been with the service for 32 years.

McArdle, 63, has been chief of the service since 1952.

### Fanfani Wins Support

ROME (UPI) — Premier Amintore Fanfani won a vote of confidence in the chamber of deputies Saturday for his new center-left government coalition that will depend on support from the leftwing socialists. The vote was 295 to 195. There were 83 abstentions.

### Today's News Today

PIONEER PORTLAND Girl Scout "days" in story by Eleanor

ARCHITECTS here present and home, a college dining hall

LUTHERAN REPORT condemn religious quackery," reports J. Ford Reed, Page 9.

AMUSEMENTS	3
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CROSSWORD	4
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See ~~McArdle~~ Page 2

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March 11, 1962

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Mr. Cliff, new Chief of the Forest Service, is a career professional forester with 32 years of service with the organization. A native of Heber City, Utah, he graduated from the College of Forestry, Utah State University, in 1931 with a B. S. degree in Forestry. Entering the Forest Service that year as Range Examiner on the Wenatchee National Forest in the State of Washington, he progressed through various assignments to Supervisor of the Siskiyou National Forest at Grants Pass, Oregon; the Fremont National Forest at Lakeview, Oregon; Assistant Director of Range Management in the Washington, D. C., headquarters; and Assistant Regional Forester in charge of Range and Wildlife Management in the Intermountain Region at Ogden, Utah.

In 1950 Mr. Cliff was appointed Regional Forester of the Rocky Mountain Region of the Forest Service at Denver, Colo., where he served ably in achieving better relationships between western stockmen and the Forest Service in the use of grazing allotments on the National Forests. In 1952, he returned to Washington, D. C., as Assistant Chief of the Forest Service in charge of National Forest Resource Management. As a member of the Chief Forester's staff he worked closely with research and cooperative State and private forestry programs.

With direct responsibility for management of the Nation's National Forests, Mr. Cliff provided leadership in coordinating the multiple-use management of National Forest resources. This included development of camping and picnic facilities for National Forest visitors to accommodate an increase from 33 million visitors in 1952 to 115 million this year; improved watershed developments, wildlife habitat, and grazing opportunities through re-seeding of range lands and better control of livestock to reduce erosion damage, as well as doubling the cut of National-Forest timber from 4½ billion to 8½ billion board feet.

The new Chief Forester has long been affiliated with a number of professional societies in the field of natural resource conservation. He is a charter member of the American Society of Range Management and the Wildlife Society, a member of the Society of American Foresters, American Forestry Association, and the Wilderness Society.

## The Sentinel-Record

8—Hot Springs, Arkansas

Tuesday, March 13, 1962

### Forest Service Chief Retires; Successor Named

Retirement of Richard E. McArdle as chief of the U. S. Forest Service, effective March 17, has been announced in Washington by Secretary of Agriculture Orville L. Freeman.

Edward P. Cliff, former assistant chief in charge of national forest resource management, has been named his successor, according to information received here by John T. Koen, supervisor of the Ouachita National Forest.

McArdle last visited the Ouachita in December when he conferred with Congressman Oren Harris and local leaders on the forest program. He also was taken for a tour of the Ouachita National Forest during that visit.

Dr. McArdle, who is 63, rounds out 10 years as chief forester while completing a lifetime career of 39 years in federal service. During this time, he has served in every major geographic region in the country and his work assignments have covered the three major areas of Forest Service responsibility: Management of the national forests, forest research, and state and private relocations. He served for eight years in the post from which he is retiring. He is a native of Lexington, Ky., and received his Bachelor, Master, and Ph. D. degree from the University of Michigan. He has won many honorary awards.

Cliff, the new Forest Service chief, is a career professional forester with 32 years service with the organization. A native of Heber City, Utah, he has a B.S. degree in forestry from Utah State University. In 1950 he was appointed regional forester of the Rocky Mountain region of the Forest Service at Denver. In 1952 he returned to Washington, D.C., as assistant chief of the Forest Service in charge of resource management.

A student of American history and geographic landmarks, for 10 years Cliff has been USDA representative on the Interdepartmental board on Geographic names. In 1961 he was named chairman of that board.

W/O

# Forest Service Chief Retires; Successor Named

Hot Springs New Era  
Hot Springs, Arkansas-3  
Monday, March 12, 1962

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c: w/o (from Hot Springs  
Sentinel-Record)