

INTERVIEWEE: Edward P. Cliff

INTERVIEWER: Joe B. Frantz

DATE : January 6, 1969

F: This is an interview with Mr. Edward P. Cliff, who is the director of the Forest Service in his office in Washington on January 6, 1969.

Mr. Cliff, let's start by your giving a little bit of your background--how you happened to wind up in this position.

C: I am a professional forester. I've been in the Forest Service now for thirty-eight years. I started out as an Assistant Ranger in the State of Washington.

F: You're a native of Utah, are you not?

C: That's correct. I was born and raised and got my formal education in the State of Utah. I have occupied most of the positions between Assistant Ranger and my present position as Chief. I have served as forest supervisor, staff officer at various levels, regional forester, assistant chief of the Forest Service. I was appointed to this position by Secretary Freeman in March 1962.

F: You stayed on then from the Kennedy into the Johnson Administration without any pause?

C: That's correct.

F: In general, was there any disturbing of this sort of second echelon of bureau chiefs and service directors, and so forth, when you had this change of Administrations in 1963-1964? Or did most of those people, as far as you know, stay in their positions?

C: In the Forest Service all of them stayed in their positions. There was no change because of the change in leadership in the White House. As a matter of fact traditionally the Forest Service has been headed by a

professional forester and the position has not changed with the change of Administration. This tradition has been respected by both parties since the very beginning of the Forest Service.

F: You have a really proud tradition there, going 'way back, of a trained leadership, not political appointments.

C: That's correct.

F: Did you know Mr. Johnson before he became President? Had you ever met him?

C: I had never met him personally. I'd shaken his hand a time or two. The first time I saw him at close range was when I was testifying before the Senate Public Works Committee on the Federal Aid Highway Bill. This was the time when the Interstate System was being proposed. Senator Gore was one of the principal.

F: This was during the Eisenhower Administration.

C: When President Johnson was the Majority Leader in the Senate. He came in and gave support for the Interstate Highway System. I was quite impressed by this. There was a battery of newsreel cameras and newsmen assembled for this occasion.

I next met him, and the first time I ever shook hands with him, was when he was Vice President. He came over to the Department of Agriculture to meet with the agency heads and the members of the Secretary's staff to talk to us about civil liberties--about equal opportunity of employment for people of all races. And I was impressed then, very deeply impressed, with his sincerity and the strong appeal he made to us as leaders in this department, to get with it and to get busy and correct the inequities that had built up over the years.

I have met him several times since he became President. I remember one occasion when I saw him in action as Vice President at the

time of the return of one of the Astronauts. I think it was John Glenn--[They] had a welcoming reception out at the Armory and the Vice President was the principal speaker and he pledged at that time his full support for the space programs.

I've met him on the occasion of the signing of several legislative bills at the White House and at some of our affairs here in the Department of Agriculture. I think it was 1962, prior to the time he became President that he was our principal speaker at the Department of Agriculture awards ceremonies over on the Monument grounds. Since he became President he's appeared at some of our award ceremonies where we've given special honor to people for work improvement and cost saving. I have a picture in my possession which shows me and the President together on one of these occasions. I'm quite proud to have it in my possession.

F: Have you known Mrs. Johnson?

C: Yes, I have become quite well acquainted with Mrs. Johnson.

F: You could hardly escape that, could you?

C: I have been on some of her trips with her and have had a chance and opportunity to visit with her at quite some length on questions of conservation and beautification.

F: What trips specifically have you been on?

C: The first one was a trip in August, 1964, when she was out in Utah to dedicate the Flaming Gorge powerhouse and dam. The Flaming Gorge Dam is on the Green River and it's situated inside of the Ashley National Forest. It was built by the Bureau of Reclamation and backs water into the Flaming Gorge and beyond it into the State of Wyoming--a great recreational reservoir, which has more recently been designated as the Flaming Gorge National Recreation Area by act of Congress. But

the occasion of her trip was to dedicate the Flaming Gorge Dam Power-house, and the Forest Service was involved. I accompanied her on the bus from Vernal, Utah, to the Flaming Gorge Dam site. She made the principal address. I was on the stand with Secretary Udall and Director George Hartzog of the National Park Service, Senator Moss, Senator McGee, and others--Governor George Clyde of Utah. After the dedication we made a trip up into the Flaming Gorge by boat. I was asked to accompany Mrs. Johnson on this boat trip.

Succeeding that we made a trip to Green River, Wyoming, where Mrs. Johnson again made a speech and she dedicated the Flaming Gorge National Recreation Area, which was not really formally designated national recreation area, but nevertheless she dedicated this area which later became a National Recreational Area.

F: She dedicated it in effect because she was just there.

C: That's right and there was a terrific crowd at Green River. Of course, in her usual gracious way she captivated that crowd.

F: Did you find her, by bus and boat, a pretty good traveler?

C: Oh, wonderful.

F: Do you make a great deal of extra preparation?

C: We always make a lot of preparations when the members of the First Family go. This is inherent. But she's very down to earth and easy to talk to and visit with. [She] makes people feel very much at ease.

I've had several other trips with Mrs. Johnson. I was out in Jackson Hole, Wyoming, at the time she was there in September of 1965. She was attending the joint convention of the National Council of State Garden Clubs in the American Forestry Association. This was one of the first trips, one of the first follow-throughs, after the White House Conference on Natural Beauty. While she was there she dedicated Togwotee--

F: I'm glad to know that. I've passed through that area and I never knew quite what to call it.

C: Togwotee Overlook. This is an overlook for an observation point that was constructed on the side of the mountain that overlooks the whole Teton National Forest and the Teton National Park from up on top of the divide. She dedicated that and then she was the banquet speaker of this joint convention at Teton lodge in the National Park. There she was very gracious. She greeted everybody in that huge audience.

Then I was not present at the time she dedicated the first U.S. scenic highway. This happened to be on a National Forest--U.S. Highway I south of the Big Sur in California. About ten years ago the Forest Service acquired about thirty miles of that coast line by exchange with the military, and it's a magnificent coastline. This highway on that coastline was dedicated by Mrs. Johnson as the First Scenic Highway. The trip was arranged by Secretary Udall. I was not personally involved in it. This was in the Los Padres National Forest.

In September 1967 Mrs. Johnson dedicated the Sylvania Recreation Area in the Ottawa National Forest in Michigan. Secretary Freeman was present and Mrs. Freeman. I was invited to participate, and I did. Mrs. Humphrey was there and Liz Carpenter. This was a part of Mrs. Johnson's Crossroads America Tour in the fall of 1967. Sylvania is an outstandingly beautiful area of about 18,000 acres. It was purchased to add to the Ottawa National Forest--beautiful virgin hardwood forests and lakes. It was privately owned up until the time we purchased it about 1966. It was purchased under the funds provided by the Land and Water Conservation Fund Act. This was a landmark piece of conservation legislation which has contributed to the purchase of national forest lands for recreation as well as lands that the Interior Department

administers. Mrs. Johnson dedicated this area. It was an outstandingly beautiful day. They had suffered some poor weather prior to that time and Mrs. Johnson has mentioned several times to me what an outstandingly beautiful day this was. There was a great crowd of people, including a contingent from one of the Job Corps camps. She was presented with a canoe, which is symbolic of that country--a birch bark canoe.

I had the privilege of riding to this ceremony from the airport to Sylvania with Mrs. Johnson and Mrs. Humphrey. She questioned me about the Job Corps, civilian conservation camps which we administer, and was very interested in other Forest Service activities. Last year, in June of 1968--this past summer--I accompanied Mrs. Johnson to the Mount Hood National Forest in Oregon. She was out in Portland to make a principal address to the National Association of Architects. I'm not sure that's the correct name of the organization, but it was their national meeting.

F: I think their initials are NALA, but I couldn't tell you what the L is for.

C: Following the meeting in Portland we drove up to Mount Hood from Portland and had lunch in one of our National Forest Recreation Areas--

F: A picnic lunch?

C: Yes, a picnic lunch. We had baked salmon and other food that's typical of that country. Again, a beautiful day, and we stayed that night at Timberline Lodge. The plan was to make a hike on a mountain trail the following day, but it rained and we didn't make the hike. So we completed the trip by automobile around to the south and east side of Mount Hood and then down the Columbia gorge. In the Columbia gorge we stopped at Multnomah Falls and saw our new visitor information center at Multnomah Falls. Again on this trip I had the privilege of riding

with her and visiting with her about things of interest. She was very much interested in nearly everything she saw. She wanted to know all about the wild flowers. She was interested in the timber harvesting operations and the recreation program.

F: You have to have some fairly specific information with her, don't you?

C: Yes, that's very true.

F: Have you traveled with daughter Lynda?

C: Yes, just on one occasion. Lynda, several years ago, made a caravan trip sponsored by the National Geographic Society. This was in 1965. She made two stops on that trip in the National Forest. The first was in the Shoshone National Forest in Wyoming where she stopped at Sinks Canyon. Then I met her and got acquainted with her up on the Superior National Forest in Minnesota, which was the end of the trip. They made a canoe trip into the Boundary Waters Canoe area, which is one of our great wilderness areas--now classified under the Wilderness Act. Mrs. Freeman and the Secretary accompanied her on the canoe trip. I didn't, but I met her afterwards, had dinner with her, and participated in the ceremony in which she dedicated our new visitor information center at Ely, Minnesota. I was present at the press conferences.

F: Does she show the same kind of enthusiasm for these forest lands that her mother does?

C: I'd have to answer that honestly. No, I don't think so. But she was enthusiastic about some of the things she saw and did. I think she enjoyed the canoe trip. She was very gracious about everything as far as our relationship was concerned. We sent some Forest Service personnel along as guides and helpers on this trip.

F: There are some people who think that Mrs. Johnson's impact in the area of conservation and beautification is probably going to be about as

great as anything that's been done in a more strictly political sense during this Johnson Administration. Do you have any strong feelings one way or another on that.

C: I think she's had a terrific impact on people's awareness of natural beauty and the out-of-doors. She had a great deal to do with the Highway Beautification provisions of the Federal Aid Highway Acts. She's really been instrumental in getting the public to think about natural beauty and outdoor recreation in a way that they never have before. This includes not only beautification but pollution abatement, cleaning up of junk yards. I think the impact she's had will carry over for a long time.

F: Awhile ago you mentioned the particular area along the international boundary coming under your Wilderness Act. The Wilderness Act did get signed in August of 1964, correct? Well, the date's not important, what I'm trying to get was it did come under the Johnson Administration?

C: That's correct.

F: Would you care to talk a little bit about its effect on your work and what it does mean?

C: Yes, I would. The Wilderness Act was passed in 1964, as you stated. The Forest Service has been in the business of establishing and managing wilderness for a long time. The first formal designated wilderness areas on lands owned by the United States was set up in National Forests over forty years ago. These were established under administrative regulations. We had some seventy-two separate areas set up, some of which were established by the Secretary of Agriculture, if they were over 100,000 acres, and some were established by authority of the Chief of the Forest Service if they were under 100,000 acres.

There's a long story connected to the evolution of the wilderness



system. We first set them up as "primitive areas" and permitted some things in the primitive areas such as fire control roads and some activities which are not now permitted in the wilderness areas. By 1941 we changed the regulations to make them more restrictive and started calling them wilderness areas and wild areas. Some of the primitive areas that were set up earlier didn't measure up to the new criteria. We continued to manage them as wilderness until we could study them and reclassify them.

The Wilderness Act proposal really started several years before the Kennedy Administration even came in. These proposals were debated for a number of years before they finally passed. The Forest Service played an active part in the negotiations and in the hearings for the Wilderness Act, we made certain suggestions and recommendations. We supported the act--the passage of the act as it was finally adopted--and we testified favorably for it.

F: Was this presented as an Administration Act?

C: Yes, it was. The Act blanketed into the Wilderness Preservation System the wilderness areas and the wild areas which had been set up under administrative authority by the Forest Service. It blanketed in under the Wilderness Act as part of the National Wilderness Preservation System some fifty-four areas, all of which were in the National forests. There were none in any other kinds of lands. The first wilderness areas under the Act were all National Forest Wilderness.

F: You're talking of fifty-four out of how many national forest units?

C: We had seventy-two I think, all told. Well, just a minute. We have thirty-four primitive areas left that need to be reclassified. We'll have to check that for correct figures for the record, but we had thirty-four primitive areas that were not blanketed in under the Wilderness

Act. The fifty-four that were blanketed in included the Boundary Waters Canoe area. That's one of the larger ones. It embraced a total of about one million acres. The Act provided for classification of other federal areas as wilderness in the National Parks and the Wildlife Refuges, but up to the time of the passage of the Act no areas had been specifically designated under those jurisdictions. We were the only ones that had wilderness. Now, the Act provided that we had to study these primitive areas, and the Park Service had to study the roadless areas in National Parks and the Fish and Wildlife Services the same.

F: You're studying to what purpose?

C: To determine what areas should be classified as wilderness. In the case of the primitive areas, the law requires us to make detailed studies, including mineral surveys by the Geological Survey and Bureau of Mines, to determine what parts of the primitive areas--whether all or what parts--should be classified as wilderness under the Act. It gave us ten years to do this job and required that a third of them be presented the first three years.

We started on that reclassification job and submitted twelve proposals for reclassification of primitive areas to the President within the three year period. The first new wilderness area to be added to this system was San Rafael Wilderness Area in California in the Los Padres National Forest. That is an area of 142,722 acres. That was the first one. The second one to be added, I think, was the San Gabriel wilderness in the Angeles National Forest in California--an area of 36,137 acres. The President had a special ceremony for the signing of the San Rafael Wilderness Area Bill--

F: He held it here in Washington?

C: In the White House, and I was present at that signing. I think it was significant, too.

F: Was this because it was the first one in some time?

C: This was the first one to be added after the passage of the Wilderness Act.

F: Is there a fundamental difference--you use both words but it seems to me I catch a difference--between a wild area and a wilderness area.

C: Before the passage of the Wilderness Act, we classified wilderness in the National Forests two ways. One, we called it a wild area if it was between 5,000 acres and 100,000, and a wilderness area if it was over a 100,000 acres. Since the passage of the Wilderness Act we call them all Wilderness Areas. A wilderness area can be a rather small area. Some of the wilderness areas proposed in the National Wildlife Refuge System were less than a 100 acres but they have wilderness qualities--at least the ones I have in mind are islands out in the ocean.

F: Do you do an active management--

C: We've dropped the term wild areas now. We call them all wilderness if they classify under the Wilderness Act.

F: Do you do an active management--what you might call an aggressive or affirmative effort in these wildernesses, or do you tend to just let them lie fallow?

C: Well, there is a need for managing people to keep them from destroying the wilderness qualities of the area themselves. Some of these areas--

F: What's the old line, "Man is the only animal who destroys his own environment."

C: Well, they can modify it and they can destroy it. Some of these areas get quite heavy use. Of course, we have to have trails to get people in and out and around and disperse the use. They build fires to cook

their meals and this involves the cutting of wood. We try to get them to get their wood from dead trees and from places where it doesn't interfere with the scenic values. They create a certain amount of garbage and human refuse that has to be disposed of. This is usually done by packing out this stuff that won't burn. We burn the material that will burn, and burying human refuse. All of these things require some management. If you let nature take its course and let people do as they will, they can soon mess up the virgin area. But we try to make our management as inconspicuous and as informal as possible. The idea is to keep these areas just as near primitive as we can. We don't permit the construction of buildings or roads. We try to keep trails maintained in a way that will not create soil erosion. There's a problem of managing pack stock. A lot of these wilderness areas are utilized by people that ride into them on horseback and use pack stock to pack their equipment. This creates some management problems. There is a problem of managing even a primitive environment to keep it that way.

F: Now you've talked a little bit about the Wilderness Act. I wonder if we might talk about some more pieces of specific legislation that you find are particularly significant. First of all, give me some idea of the total body of legislation that we've had under the Johnson Administration and then those acts that you think are of special significance.

C: In all, there have been fifty-seven laws signed by President Johnson which were of significance to the Forest Service in one way or another. Twenty-four of these were highly significant to the Forest Service. I have a list of these acts which I will be glad to give to you and amend the list--

F: We will put them with the transcript to be readily available.

C: It would take a lot of time to discuss each of them, but I'd be glad to

discuss some of the more significant ones.

F: I think I'd better let you choose as to what you think is significant in this. I do want to talk a little bit somewhere in there about this matter of pollution which, as I gather, is really a concern of the 1960's more than at any time previous.

C: Yes, it's one of the serious natural resource problems that this country is facing and that we've got to solve--both air and water pollution. The Pollution Control Acts, of course, apply to the activities of the Forest service and other Land Management Agencies the same as it applies to other people. One of the big jobs we have in managing national forests is to prevent pollution--pollution by human waste as well as by soil erosion--and, as a matter of fact, a good deal of our effort and attention has to be directed in constructing sanitary facilities and water supply facilities which will meet public health standards when we develop camp grounds or winter ski resorts or when we permit private enterprise to develop resorts in the national forests.

We had last year one hundred and fifty million visitor days use in the national forests for recreation. That's a lot of people, and they all drink and eat and create waste and garbage. This all has to be disposed of, and this is an enormous job when you come to think about it. So we're deeply involved in pollution control, pollution abatement, and clean up. We have signed agreements with pollution control authorities in the Department of Health, Education and Welfare on standards to which our facilities will be constructed and maintained and we have a very amicable relationship with people over there.

F: Do you have some professional overlap with the Department of Interior, or some gray areas, that is not clearly defined as to who is responsible for what?

C: No, I think--and I say this quite readily--there's no question about who is responsible for what as between the Forest Service in the Department of Agriculture and the agencies in the Department of Interior. The lines are quite clearly drawn.

F: Both of you have a certain recreational responsibility now that you used to not have? Is that correct?

C: No, we've always had a responsibility. As long as there's been a Forest Service, we've had a responsibility of managing the lands in the national forest and this includes recreation. Our responsibility is the management of the public use of the national forests. This clearly draws what our responsibility is. The Park Service is responsible for the administration of the National Parks and the Monuments--historical monuments--and other elements in the National Park System. There's no question as to who's responsible for what. This is defined by the assignment of jurisdiction of land management.

There have been some arguments over proposed classification of land--the transfer of land from the national forest to the national parks. It is in this area where you get some differences of opinion. Congress has, in the past, transferred lands from the jurisdiction of the Forest Service to the Park Service. In some cases we have resisted these transfers. In other cases we have agreed with them. The last transfer of this kind was the North Cascades National Park which was created entirely out of land which had been administered by the Forest Service for over sixty years as part of the national forest system.

F: Trying to get some lines here now, if you had a heavily timbered area, for instance, and it moves within a national park service area, then it becomes at that Park Service boundary line their responsibility.

C: That's correct.

F: You don't follow the trees necessarily.

C: No, no, and they don't follow recreation. They are responsible for managing everything within the national park. We're responsible for managing everything within the national forest. There isn't duplication and overlap as some people might think. We sponsor different kinds of recreation than the Park Service does. We permit hunting, recreational hunting in the national forest. They don't in most national parks and national monuments. We sponsor and promote winter sports which involve ski lifts and this kind of development. This is a big thing in the national forests. It's almost nonexistent in the national parks. The artificial nature--

F: Now do you let those ski lifts and so on to concessionaires or do you run some yourself?

C: We follow the general policy of having them operated by concessionaires and built by concessionaires with private capital. There are over two hundred of them on the major ski areas in the national forests. This includes some of the most important, in fact most of the most important ones in the Western United States and some of the very important ones in the Eastern United States.

F: I've noticed with the Park Service, in both Kennedy and Johnson years, a tendency to come east of the Mississippi, a tendency in effect to move in closer to the urban areas. The Park Service, at least, was once considered almost Western. Traditionally, of course, you know your Secretary of Interior comes out of the West. Do you have a similar movement in the Forest Service?

C: We have National Forests in the east. We have national forests and national grasslands which we administer in forty of the fifty states. We have national forests in most of the states east of the Mississippi--

in all but about eight. The lands acreage-wise are not nearly as large as in the west.

In the east we have only about twenty million acres. We are still buying some land. The eastern national forests are mostly purchased. It was land that had been in private ownership, had been burned and cut over and depleted. We had a law passed in 1911, the Weeks Act, which authorized the purchase of national forests on the headwaters of navigable streams in the east to protect watersheds. The purpose had since been expanded and we have acquired about twenty million acres in the eastern United States. We're buying some more under the Land and Water Conservation Fund for recreational purposes. We're doing a small amount of purchasing to block out some of our units where the ownership is still quite scattered and exchanging lands for the purpose of blocking up.

The Park Service, of course, has had some national parks in the East for quite a few years. The Great Smokies was set up a number of years ago. The Everglades in Florida, the Shenandoah Park, The Blue Ridge Parkway, have been in existence for quite a number of years.

But there is emphasis on getting recreational land in proximity to places where people live. This was emphasized and recommended strongly by the Outdoor Recreation Resource Review Commission a few years ago. This is a part of the national policy to try to get adequate recreation facilities, either state or local or federal, in the places closer to the populated areas. This accounts for some of the increased activity in the eastern United States.

F: Are you holding your own or gaining or slipping back in the acreage devoted to forests. Along with that, what sort of pattern are you following in the actual timber output insofar as board feet are concerned?



C: The land that's devoted to forests is increasing actually. Our surveys, which we make continually, indicate that we have more forest land today than we had ten or twenty years ago. Part of this is due to the reversion of farm land to timber land [and] reforestation. The soil bank's responsible for part of this.

At the same time you see the movement in the other direction where we're losing forest lands to highway construction, to the expansion of cities, suburbs, reservoirs, the flooding out of bottom land forests. So far the gains in acreage are a little greater than the losses. Now there is a question of the use to which forest lands are put. Recreation use is growing. Recreation is in competition with the use of the same land that timber production is going ahead on. We feel that on the national forests we can accommodate recreation and timber growing on the same areas or general areas, but you have to modify your timber production to accommodate recreation and vice versa. You have to give and take.

So as we establish new recreation areas and wilderness areas and new national parks are created on timbered acreages, timber land is being diverted to other uses. I expect that some place down the road we will be losing. We'll have less timber land to grow timber on than we have today as our economy expands--more people, more roads, more cities, more recreation--we will cross the point where we start losing land and production of forest products. This means that we will have to do a more intense job of managing the land that is available if we're going to get all of the products that we need for our economy. It's a long answer to a simple question.

F: It's a very significant question, I think. On something like the North Cascades or on the Redwoods, do you get any compensation at all

for any forest land that you might give up? Or is that just sort of an extraction that--

C: No, of course, in the North Cascades this was all federal land. It all belonged to the people of the United States. There the question was what is the best management of that land for the people, and who should manage it? Congress and the country decided that they wanted to make a national park and two national recreation areas and a wilderness area out of the North Cascades. The wilderness area was already a primitive area so it was under Forest Service jurisdiction and will continue to be managed by the Forest Service, that's the Pasayten Wilderness Area. A rather large one and it didn't--

F: How do you spell Pasayten?

C: P-a-s-a-y-t-e-n. That's the name of the major river drainage up there. That remains under the jurisdiction of the Forest Service, but the two national recreation areas--the Lake Chalan (?) and the Lost Lake national recreational areas--will be managed by the Park Service as will the new national park. There will be no compensation of land for the land which was transferred. This was just a transfer of jurisdiction and a change in management policy that goes with that. In the Redwoods, most of the land that will go under the new Redwood National Park is--

F: State land, isn't it?

C: already in state parks. It's contemplated--or hoped--that the state will donate those three state parks to the federal government for addition to the national parks. Then most of the rest of the land which connects up these three state parks--I guess all of it--was privately owned land which will have to be purchased.

The Forest Service was involved in this. We had a small unit of

about 14,000 acres of redwood timberland in that area that we had been managing for years under the principles of sustained yield and multiple use, and using part of it for research. This was known as the Northern Redwood Purchase Unit. The bill, as it finally passed Congress, provided that most of this Northern Redwood Purchase Unit would be traded--Congress authorized the trading of this Northern Redwood Purchase Unit, with the exception of the research area--to the private timber companies in partial payment for the land which would be taken for the park. In this instance, there'll be no off-setting transfer of any land in the Forest Service. This land will be used in part to help pay for the addition of the private land to the Redwood National Park.

F: As I understand it, your multiple use sustained yield principle has become law in the past decade, but as a practice is something the Forest Service has engaged in almost since the beginning. Is that correct?

C: That's correct. The concept was first spelled out in 1905 when Secretary of Agriculture Wilson wrote the first instructions to the Chief of the Forest Service, Gifford Pinchot, on how he wanted the national forests managed. I have the original of the letter hanging on the wall in which the Secretary states in some detail that these lands would be managed for wood, water, wildlife, for forage, for the benefit of the local economies and for sustaining stream flow. It spells out--

F: You're very watershed conscious, aren't you?

C: Very much so. One of the original purposes of setting up the national forests was for protection of watersheds, the production of timber, and these other uses have been recognized along with those two first major

purposes. The principle of sustained yield has been a guiding principle from the beginning, which merely means that these renewable resources we manage so that they keep producing into perpetuity. It permits the rational harvest of the harvestable resources, but they have to be managed and harvested in such a way that they're not diminished in the long run. These two principles have guided the management of the national forests from the beginning but it wasn't until 19-- when did this sustained yield act pass, 1960?

F: I think it's 1960.

C: It was not until 1960 that Congress passed a law which requires us to manage these lands under multiple use and sustained yield. We feel this was a very significant piece of legislation.

F: Sort of an affirmation of policy.

C: That's correct.

F: Now let's get back to some specific legislation. I think I'll let you follow your own lead in that as to just which pieces of legislation, under the Johnson Administration, you think are worth specific comments on.

C: Well, I'd like to start out by talking about the Economic Opportunities Act of 1964. This is the Act which created the Job Corps, among other things.

F: It's not usually thought of as a Forest Service activity, is it, by the layman?

C: The Job Corps--of course, inspired I think by the favorable experience that the country had with the old Civilian Conservation Corps during the depression and this was the part of the economic opportunity act--set up a little differently than the old Civilian Conservation Corps in that it was directed at the most deprived youths and the old CCC

was not. To be a member of the Job Corps a boy has to be a dropout before he's eligible. The average young man is very much deprived from the standpoint of education and other things as I'll develop here. I think this is, from a standpoint of conservation of human resources and natural resources, a noteworthy piece of legislation.

The purpose of the Job Corps of course was to assist youth to become more responsible, become employable, and become productive citizens rather than a drag on the economy. The only alternative, some of these boys would be in public institutions or on relief (with) the kind of background and training they had. Within the Job Corps there was authorized a Youth Conservation corps to be made up of no less than 40% of the male enrollees. There are Job Corps installations for young women and there are urban centers. But we're talking about the conservation centers which 40% of the male enrollees had to be in conservation centers. These enrollees were to be assigned to camps similar to the old CCC camps where their work activities would be directed primarily toward conserving and developing national resources.

The Director of OEO was authorized by the law to enter into agreements with other federal agencies for the establishment and operation of these camps. Such agreements were made with the Departments of Agriculture and Interior. The program was given the name of Job Corps Conservation Centers. The Forest Service was delegated the responsibility to act for the Department of Agriculture. We have the only Job Corps Conservation Centers in Agriculture. The only ones that Agriculture has are managed by the Forest Service. This time the Job Corps differs from the old CCC in that emphasis is placed on training and education. Half the time of these young men is spent in classrooms, and the work they do in the field is conducted with

training in mind, training in job skills. Teaching them how to work is a very important part of it. The conservation development is just, you might say, a by-product of this primary training job. This is where it differs primarily from the old Civilian Conservation Corps. That was a work program.

The first centers were opened in early 1965 and by June 30 the Forest Service was operating twenty-two centers with a capacity of about 3,000 enrollees. The expansion of the program continued and by June 30, 1966, there were forty-six Forest Service centers and a capacity of 8,211 enrollees. One more center was opened later. By June 30 we had in the Forest Service 8,434 enrollees in forty-seven centers. This number was reduced in 1968 because of budget problems when the Job Corps was forced to close sixteen centers. The Forest Service lost two centers. As of now, we have forty-five active Job Corps centers in the national forests and capacity for a little over 8,000 corpsmen.

F: Now you go beyond the CCC which built dams and seeded forests and so forth and actually, in a sense, training them to be timbermen, I presume.

C: We're training them to do all kinds of things. Primarily, one of the first things we have to train these boys is to read and write. Twenty-five to thirty percent of these kids are illiterate. The average school grade completed is the ninth grade, but tests showed that actual reading and math levels averaged below the fifth grade. As I say, almost thirty percent couldn't read at all. We hired teachers--

F: You're running a giant school program among other things.

C: to run special kinds of training for these kids to teach them to read and write and to comprehend and express themselves. Then we give them

training in work ranging all the way from auto mechanics to operation of heavy equipment, wood working, carpentry, plumbing, masonry, anything that we do in the forest in the construction of buildings or camp grounds or reforestation, road-building. These boys get training right on the job. So they're getting classroom instruction and they're getting job training instruction. There's a health program that goes with it. Over eighty percent of the kids that go through these camps have never seen a doctor or dentist for the past ten years.

F: Incredible, isn't it.

C: It's just incredible that these conditions exist, but we take care of about 8,000 in the centers we're running. The Interior Department takes about another 7,000 or so. There are about 15,000 boys currently in this program. Of course, there's a turnover as they complete the work, but we're not even scratching the surface as far as getting at the total number that could benefit by this kind of program. It's a human renewal program, in a large sense, and the results are quite gratifying. There're some disappointments, we are disappointed at the ones that drop out but [of] the ones that complete the course we're able to place a large percentage of them in useful employment. They become taxpayers instead of tax consumers. Quite a number of them go on to school, and a large percentage go into the military when they were rejected--

F: They were not eligible earlier.

C: They were rejected earlier because of some physical or learning deficiency. I was told by one of the leaders in the organization that thirty percent of the boys said that--at least this was in one camp--thirty percent of them said the reason they wanted to be in the Job Corps was to get themselves in shape so they could serve their country in the military. Thirty percent!

F: Remarkable.

C: In one area. This has been a gratifying experience to me and I think--

F: I wonder how many of them had never seen a tree.

C: That's right.

F: Or running stream.

C: Quite a few of these boys are from rural areas as well as from cities, but we're dealing with a very deprived boy. I heard one of the leaders in the Office of Economic Opportunity say there's no other institution in our country today that's set up to take care of this kind of youth except a penal institution. That would be the next step for a lot of them.

F: Which, of course, is a total expenditure with very little compensation.

C: We talked about the wilderness preservation system and this is a piece of landmark legislation. Four of the five additions to the wilderness system that have been made since the passage of the act are national forest areas--I have already mentioned two of them--in fact I've mentioned three--San Raphael in California was the first one. The second forest service area was the San Gabriel, an area of 36,000 acres. The third one was Mount Jefferson wilderness area in the State of Oregon which is nearly 100,000 acres along the crest of the Cascade Range. The fourth was the Pasayten wilderness which was established by the passage of the North Cascades National Park Act. This was a provision in one section of the Act which reclassified the Pasayten primitive area as a national forest wilderness area. Of the twenty-six wilderness proposals sent to Congress by President Johnson this year, seven were national forest proposals. We have five others which we submitted to the president.



F: It's been quite a--

C: I think this is correct. We developed recommendations on twelve since the passage of the Act.

F: It's been an active time for you, hasn't it?

C: Yes, of course this is a continuing job. We still have twenty-two primitive areas to make studies on and then there are some areas that had no classification as primitive areas that are being proposed by various groups and individuals as possible additions. We have to study these out.

F: Approximately how much of this wilderness area is grassland? Or do you keep a separate category on that?

C: I can't answer that. We don't keep a record in that way. Most of these are mountain areas and most of them are high mountain areas. They include some mountain tops, rocky areas, some areas above timberline, as the picture of Mount Adams on the wall here. That's a wilderness area--that mountain, and the border of timberland at the foot of the mountain, it is called the Mount Adams Wilderness Area in the State of Washington. About a third of it, as I remember, is timbered. And that timber, some of it is good commercial quality and some of it is sub-Alpine timber, and as you get up toward timberline its value or potential value for anything except scenery and watershed protection is minimal. There is open grassland, but I don't know what percentage.

F: Well, it's not important.

C: One piece of landmark legislation that passed just at the closing days of the most recent Congress was the National Wild and Scenic Rivers Bill, signed by the President on October 2, 1968. This bill, this Act named eight rivers as national wild and scenic rivers. Five of these eight are in the national forests, and four of them will be

administered wholly by the Secretary of Agriculture, with the cooperation of other agencies as the occasion demands. But they're essentially all in the national forests, four of them. One of them, the Rogue River in the State of Oregon, will be managed jointly by the Secretary of Agriculture and the Secretary of Interior. It runs partly through Bureau of Land Management land and partly through National Forest land. Nearly four hundred miles of the rivers in the initial Wild and Scenic Rivers System will be administered by the Secretary of Agriculture. National forest system areas will be involved in twelve of the twenty-seven study rivers designated by the bill, so we have to have a very strong interest in the Wild and Scenic Rivers Act.

We'll have a continuing responsibility for managing rivers that are classified under this Act, so we're very much in this picture. We supported this legislation. I testified along with Secretary Freeman for the bills and we are going to be very much part of the administration of them.

The National Trails System Bill which was signed by the President on October 2, 1968, is another piece of landmark legislation. This established two national trails and authorized the study of additional trails for possible later inclusion in this system. The two trails which were included in the system are the Pacific Crest Trail, which runs from the Canadian line along the Cascade and the Sierra Nevada summits clear to the Mexican line. The bulk of this trail system is in the national forests. Parts of it go through national parks and a very small amount goes across private land. This trail will be managed by the Secretary of Agriculture and Forest Service will be the lead agency in managing the Pacific Crest Trail with cooperation as required from the other local, state, and federal agencies.

- F: October 2 was a kind of busy day in your life.
- C: It set up a real big job load for us. The other trail is the Appalachian Trail here in the East in the neighborhood of two thousand miles long. It stretches from Maine to Georgia. Five hundred miles of this trail is within the National Forests. The Forest Service will manage that five hundred miles but under the general coordinating leadership of the Secretary of Interior, because the bulk of it is outside of the national forests.
- F: I have a personal interest in this because I want to walk a portion of it. Will you have something like hostels or refuge areas along the way?
- C: There are shelters. There are simple open-faced shelters along the Appalachian Trail where people can get out of the weather and the Appalachian Trail Club has some hostels at various places. There's quite a good system of trail huts or hostels in New Hampshire where the Appalachian Mountain Club operates them under permit from the Forest Service in several cases. They have some on other lands and the management system will permit shelters and hostels as they're needed every place except where these trails go in wilderness areas. We don't permit these kinds of things in the wilderness areas. The same thing will be true on western trails.

Now there are a number of study trails set up. Fourteen were named in the legislation, and eight of these will involve national forest areas, so we have a study assignment in connection with both the rivers and the trails.

We have quite an extensive trail system in the national forest now. We have over one hundred thousand miles of trail of various kinds and a substantial part of this will tie in with some of these

major trails that will be included in the national trails system.

Other conservation legislation which is important to the Forest Service: there have been four national recreation areas involving national forest lands established by act of Congress during the Johnson Administration. These are areas within national forests which will be managed primarily for recreation but other uses are permitted so long as they do not conflict with the major purposes for setting up the area. They are areas of special recreation significance. They have to be fairly close to population centers or heavy public use. They're developed for mass recreation primarily although there can be primitive recreation included.

One of these was the Spruce Knob-Seneca Rocks National Recreation Area over here in West Virginia, which is quite close to this big metropolitan area--Baltimore, Washington, Richmond, Pittsburgh. This is within a few hours drive of over six million people.

F: That ought to get considerable use.

C: It is being managed by the Forest Service. It involves a rather substantial acquisition program of private land or easements to protect the scenic value. That's just getting underway.

The Mount Rogers National Recreation Area, an area of 150,000 acres, was established within the Jefferson National Forest in Virginia in 1966--May 31, 1966, the President signed that bill. This is within a few hours drive of many million people. My note says twenty million but I don't know where they got that. This is an area that will be administered as part of the National Forest System by the Department of Agriculture.

Then in October 1, 1968, the President signed the Act which created the Flaming Gorge National Recreation Area in Utah and Wyoming and assigned administrative responsibility to the Secretary of Agriculture. Now this is one which is of interest. You asked earlier if

there were any compensating transfers. In a case like the North Cascades where the National Forest gave up land for National Park, these are not handled as compensating transfer but these transfers can and do work both ways. In the case of the Flaming Gorge the part of this reservoir which was in Wyoming was spread out over quite a bit of public domain land administered by the Department of the Interior. Then when you got into Utah, into the real gorge, that was National Forest land. We started out with an agreement that the Forest Service would manage the part inside the national forest; the Park Service would manage the part outside. This was decided to be not an efficient method of management in this instance.

F: This was after you were underway that you came to this decision?

C: This was after we were underway and managing it, prior to the passage of the Act. The Act provided for the transfer of the perimeter lands to the Forest Service and the management of this area by the Forest Service, so this can work both ways. While this Flaming Gorge area is a terrifically popular area, it's in the early stages of development but it's already receiving over a million recreation visits annually.

F: Where do they come from--Denver, Salt Lake City, and tourists?

C: They come from all over. Of course, it's right near a trans-continental highway. It's in an area where there are not very many large bodies of fresh water and this reservoir has proved to be a rich fish producer and it's a very popular place. It's really made us get down and dig to keep ahead of the use.

The fourth one--and this one might have been mentioned earlier because it was created by the Act signed by the President on November 8, 1965--is the Whiskey Town Shasta-Trinity National Recreation Area

in Northern California. It's about a half-day's drive from the San Francisco Bay region. It consists of three units; one unit around Shasta Lake, which was a reclamation reservoir on the Sacramento River; another unit on Clair Engle Lake or Trinity Reservoir, which is a reclamation reservoir on the Trinity River, fairly close to the Shasta; and then the Whiskey Town Reservoir which is outside these Shasta-Trinity National Forests. There are three units. The Shasta and the Trinity Reservoirs are inside the national forests and the Forest Service manages them. Whiskey Town is quite far removed and is managed as a separate unit by the Park Service. This seems to be the logical way to handle this particular situation, whereas in the case of the Flaming Gorge where it has a single Reservoir lying across it, it wasn't the most efficient way.

I could go on and on in talking about legislation, but this highlights some of the more significant ones. In the appropriation field there has been some very noteworthy progress made.

F: Let's talk about that briefly.

C: I would like to talk about it. The Johnson Administration's support of conservation programs clearly reflected in the appropriation and budgeting processes during this past five years or more, where in fiscal years 1964 to 1969, inclusive, the Forest Service received appropriations of almost 1.9 billion dollars. This is about the same amount we received during the preceding twenty years.

F: Really moved ahead.

C: Or from 1944 to 1963. The appropriations for fiscal 1969 was \$335,000,923 (three hundred and thirty five million, nine hundred and twenty-three dollars) which was about forty-four percent greater than those received in 1963--a forty-four percent increase in this period

and six hundred percent greater than in 1950. During the period 1964 to 1969 the Forest Service participated with other agencies and bureaus in the Job Corps Land and Water Conservation Programs. Since 1965 \$227.2 million of Job Corps funds have been allocated to the Forest Service by OEO (the Office of Economic Opportunity) to permit the construction and operation of the forty-seven camps I mentioned earlier.

F: Do you have some sort of interagency committee that decides what shall be the amount, what the activities will be and so forth?

C: On the Job Corps?

F: Yes.

C: That is controlled by the Office of Economic Opportunity.

F: They in effect assign it.

C: They make that decision and assign the part of the job to us. We participate informally more-or-less on a continuing basis in counselling. So it's been a team-work proposition, but primarily that responsibility has been theirs. But this has been quite a large impact on the Forest Service and it's been a real challenge and an opportunity. Sixty-three and four tenths million dollars of land and water conservation funds have been allocated by the Bureau of Outdoor Recreation to the Forest Service for purchase of recreation lands in the national forests. This commitment to invest in our natural resources has resulted in many dividends in forest research, state and private forest, in the administration of the national forests-national grasslands. It has been a strong commitment by this Administration.

Although it is not possible to summarize the accomplishments in all fields a review of some of the achievements during the Johnson

Administration, I think, shows what has been done. In timber management the allowable cut on national forests increased from eleven billion board feet to 12.7 billion board feet between 1960 and 1968. The actual timber cut in 1960 was 9.4 billion and in 1968 it was 12.1 billion, an increase of nearly three billion board feet. Reforestation increased from one hundred thirty-four thousand acres to three hundred twenty-one thousand acres in 1968--this is reforestation on national lands, not private lands. This is the largest amount that was ever planted and seeded on national forests in the history of the Forest Service, three hundred twenty-one thousand acres. It even exceeded the production during the Civilian Conservation Corps days.

F: Forests, in effect, are doing a gradual comeback from their low point about the turn of the century.

C: Yes, our national surveys now show that we're growing timber in this country at a more rapid rate than it's being harvested.

F: I see so many uses for timber that we used to didn't have, good glues, things like that, but it would bend--

C: --the timber that we are harvesting is getting more utilization. But if you consider all species and grades sizes, we're growing wood faster than we're using it up right now.



INTERVIEWEE: Edward P. Cliff

INTERVIEWER: Joe B. Frantz

DATE : January 6, 1969

C: The road construction activities are a pretty good barometer of the progress that we have made in development in some of the national forests. During the Johnson Administration we have constructed, with appropriated funds, 6,725 miles of road in national forests.

F: That's a fair amount of highway.

C: And we constructed by timber purchasers--timber sale allowances-- 24,742 miles. A total of 31,467 miles have been constructed or reconstructed during this period.

F: Let's clarify one thing. I am George-Pacific. I get a timber concession. Do I put in my access roads? Do you put them in for me? Is it a compromise? How does this work?

C: It usually involves both federal expenditures and expenditure by the purchaser.

F: You get a certain amount of road free in that.

C: The Forest Service would build some of the main trunk roads with appropriated funds. Or they may be already in existence. The timber sale, when it's awarded--it's awarded by bid, bidding procedures-- requires that certain roads be built by the purchaser to certain prescribed standards. The purchaser builds that road with private capital. If it's a road we want to keep on the permanent system, and we want a road better than the one that is needed to remove the timber in that sale, we may supplement the purchaser's expenditures with federal funds to bring it up to a higher standard than would be required for his one operation. This is frequently done, so there's a supplemental investment by the federal government.

In either case, though, it's federal resources that is building the roads. If the company--purchaser--builds the road at his expense we make an allowance in the timber appraisal for the estimated cost and we reduce the amount of the stumpage price that we're advertising timber for by the cost of the road so the federal government is really paying for the road one way or another.

Well, in all, during this period we constructed or reconstructed 31,467 miles of roads, which is--

F: A whale of a lot of road.

C: And in addition, three and a half thousand miles of trail. The construction of roads through appropriated funds increased thirty-nine percent over this period. Trails increased one hundred fifty percent during the Johnson administration.

Quite a spectacular development has happened in recreation--recreation development. The appropriation level for recreation on the national forest increased from \$26,105,000 in fiscal year 1965 to \$39,844,000 in fiscal 1969. In this five year period \$173,338,000 provided for recreation development and management on the national forests. This is sixty-two percent of the total funds appropriated for this purpose since 1923--sixty-two percent in this five year period.

F: Amazing.

C: So you can see what an upsurge has happened in recreation and we're being hard pressed to keep up with the demand. During the five year period almost one billion visitor days were spent by recreationists on the national forests--one billion in five years. This is forty-nine percent of all recreation use ever recorded, nearly half.

A: All these figures are fairly staggering both in what they mean right now and what they portend.

C: Yes.

F: The American public is discovering the out-of-doors.

C: They're discovering the national forests and the national forests are a real significant part of the outdoor recreation picture. We really provide more recreation than the Park System does--the National Park System--but we have larger areas.

F: I don't know whether this is the time to ask this question. Is there anything that you either attempt to do beyond just persuasion, or can do, toward sort of zoning the approaches to your national forests and recreation areas, so that you don't go through a whole lot of sort of tawdry, tinselly things to get there?

C: Of course, we do not have any control outside the national forests. It's true that some of the approaches go through the neon lighted resort areas on private land. There's some of that even inside the national forests where there's private land inside that we don't control. We're attempting to solve some of this by scenic easements. Another approach that we're following is trying to get the counties to zone. But where it's private property--

F: You are aware of this problem.

C: Oh yes. The National Park Service has the same problem.

F: Oh yes. I've been down, for instance, to Gatlinburg outside of the Smokies, and Yellowstone--

C: Where you have unrestricted private development that detracts from the natural setting you get in the public areas. To proceed with the recreation picture a little bit. We added capacity in public facilities to accommodate 154,000 people at one time during this five-year period. We expanded our capacity, particularly to improved picnic and public camp grounds and other areas, to accommodate 154,000 people

at one time in 1689 different areas. During this same period the capacity for 120,000 persons at one time was added to the winter sports areas on national forest lands. The present capacity [of] developed sites on national forests is 1,245,000 people at one time. On any one day we could accommodate a million and a quarter people, which is quite a capacity.

F: Yes it is.

C: This is an increase of 274,000 since 1963, another measure of progress. The visitor days of recreation use in national forests was 150,000,000 in 1967, which is 27,000,000 more than in 1963.

To help meet the projected need for public recreation sites the forest service has acquired 271,037 acres of land for recreation purposes--with land and water conservation funds appropriation, 271,037 acres. Included in this are such primaries as Sylvania Tract, which we mentioned earlier, and parts of the Mount Rogers National Recreation Area.

The efficiency of administration of recreation sites on federal water projects was enhanced considerably with the passage of Public Law 8972. This provided for Forest Service administration of recreation sites on federal water projects on national forests. Major new concepts of conservation and education are being pioneered.

Among those of major importance is "Patterns for People," which was dedicated by Assistant Secretary of Agriculture John Baker. This new concept is especially designed to reach the disadvantaged and handicapped people. We have a pilot plan or pilot trial on the George Washington National Forest Massanutten Division, about two hours drive from here. The development of the Mineral King area in California as a major winter and summer resort by the Walt Disney Corporation is

expected to be a bright example of private development under special use permit to help meet the needs of increased public--

F: Did you approach them or did they approach you? How did that get started?

C: We made a study to determine the kind of use that was desirable in that area and we put out a prospectus and invited proposals. In the prospectus we stated certain minimum requirements and facilities that would be expected and advertised for bids or proposals.

The response was very surprising to us. We got about six real high-class proposals which exceeded our minimums by far. Finally it settled down to two that were the most outstanding. We considered these very carefully, had conferences with both the proponents--[of] which Disney was one--and finally awarded the preliminary permit to Disney Corporation. So solicited. We went out after them. We had a public solicitation of proposals and they came forward with one of the proposals. This is destined to be one of the great recreation developments.

F: It'll be a pulling point from all over.

C: The annual receipts for forest recreation while not enormous increased from 1.5 million dollars in 1963 in round numbers to \$4,083,867 in 1967. Supporting Mrs. Johnson's beautification program, our landscape architecture program has matured from concern for site design and aesthetics to concern over the manipulation of total forest environments. We are pioneering and leading, I believe, in what we call landscape architecture on a massive scale--designing a landscape of entire watersheds, entire mountainsides, and laying out our recreational areas, our roads, and our timber harvest and timber management areas according to landscape principles. We now employ over one hundred

thirty landscape architects. I think I'm safe in saying that we're the largest employer of landscape architects.

F: I'd think so. Are foreign countries showing any interest in this program?

C: Yes. In fact, there's been a considerable amount of attention given to this in England, for example. Of course, in other parts of Europe they've been sensitive to this for a long, long time, but they haven't actually applied the professional skills deliberately to go out and establish landscape design. I think it's just kind of worked gradually into a pleasing pattern of land use over the centuries in parts of Europe. But we're really putting a lot of emphasis on this, knowing that we can improve on the way that we've traditionally done things, and giving the forest land managers a new skill in the form of landscape architects to help them design resource management programs.

F: Before we leave legislation completely, Mr. Cliff, let me ask you about the Cradle of Forestry and also the Kerr Memorial Acts. Can you elaborate a little on those?

C: I'll be glad to comment on that. The Cradle of Forestry is an area in the Pisgah National Forest in North Carolina, which truly was the cradle of professional forestry in American--this area in and around the Pisgah. This was where the first professional forestry was practiced in the United States. The Vanderbilt family had a large estate known as Biltmore and they acquired considerable land in what is now the Pisgah National Forest. They hired a professional forester to manage this. This man happened to be Gifford Pinchot, and he managed the forests on the Biltmore estate until he became employed by the Federal government as Head of the Forestry Bureau in the Department of Agriculture.

F: He was the first trained forester in our history, was he not?

C: He's the first one that really practiced forestry. There were some European foresters that resided in the United States, but he's the first American that received formal training, and actually established the practice of forestry. He was succeeded by a German forester named Schenck who established the first forestry school at what is known as the Pink beds in the present Pisgah National Forest and gave formal forestry training to American youth at this very primitive school. So this area has great historical significance from the standpoint of forestry in this country.

The Forest Service set it aside a number--four or five years ago, and designated it as the Cradle of Forestry. We established a visitor's information center. We have reconstructed some of the old forest school buildings. There's only one of the original buildings still standing and we have photographs of the old ones. Some of them have been reconstructed on the same sites, or as near to the same sites as could be located. Quite a number of people who attended the Biltmore Forestry School are still alive. They're very old men now, most of them, but with their advice and their financial help we rebuilt the old school building.

On July 11, 1968, the President signed the Act which gave official recognition to the Cradle of Forestry. One thing, other than the official recognition that it does, it authorizes the receipt of private donations and sets up a procedure for accepting donations to reconstruct and develop this Cradle of Forestry area. This is the main thing that it does. The other bill which established a special area was the Kerr Memorial Bill, which became an Act when the President signed it on June 4, 1968. This is an arboretum. It's to be developed as a natural

arboretum in which we will plant and display the major native flowering plants and trees.

F: Is this an Oklahoma state--

C: It's in Oklahoma in the Ouachita National Forest and it's adjacent to the Talamina Scenic highway which starts in Arkansas and goes along the summit of the mountains and extends into Oklahoma. Or I guess you could say it starts in Oklahoma and ends in Arkansas, depending on where you start from. This highway is about completed.

Before he died, Senator Kerr--who was instrumental in getting us appropriations for this highway construction--conceived the idea of building a natural arboretum in a suitable place along this highway. It's in an area that has unusually significant geological formations, too. It's an area of great interest from natural history standpoint.

Before this could be even started Senator Kerr died, and his colleagues in the Congress sponsored legislation which would establish this arboretum with suitable buildings--public information center buildings, interpretive buildings, interpretive trails--as a memorial to Senator Kerr. This bill passed. It, too, authorizes the acceptance of public contributions--donations--for developing and managing the area. It's anticipated it will be managed in part [by] public funds and in part [by] donated funds and developed in this way. There's been a great deal of interest in both of these bills.

I wanted to talk a little about forest research. You know the Forest Service has three major responsibilities. We've talked a great deal today about the national forests, and this is one of our major responsibilities and the one that involves management of 187 million acres of land, if you include the national grasslands.

F: The perpetuation of good conservation practices.



C: The National Forests require the employment of most of our people and it's where most of our budget is spent because of the large land area that we administer directly. But we have two other major responsibilities, which are quite important.

One is the leadership in promoting and encouraging forestry on state and private lands. A third of all the land in the United States is forest, even today, and most of this is privately owned. There is in this country, 500,000,000 acres of commercial forest land and seventy-two percent of this--nearly three-fourths, either seventy-two or seventy-three percent, nearly three-fourths of it--is privately owned. Sixty percent of it is owned by non-industrial owners, private citizens, mostly small owners. Half of them are farmers, that own farmland with farm wood lots. This, of course, is important in our total forest land management picture. Three-fourths is privately owned. We can be well off from the forestry standpoint or we can be poor, depending on what happens to this three quarters of our commercial forest land that's in private ownership. The industrial owners are doing a reasonably good job. The non-industrial owners--it varies from good to very poor. This is where the big challenge is and we do have programs to work through the states to encourage and help protect and develop and practice forestry on these private forest lands.

F: You just added me as one of your parishioners.

C: These are grant-in-aid programs or matching fund programs for forest fire protection, protection against insects and disease, and technical assistance which is given by state employees. They act very much like the county agricultural agents in dealing with the land owners. We work traditionally through the state forestry organizations on these programs. These are important programs. We feel that the President's

Council on Recreation and Natural Beauty, which was established under his Executive Order 11278, is providing stimulus for an urban forestry program which is in this state and private sector. We feel that federal-state relations have generally been strengthened in state and private forestry and related conservation programs. The progress made from the budgetary standpoint has not been very great in comparison with what I have cited for national forests. But the progress made by the states themselves has been quite significant.

F: You have also implanted an idea that you think is going to be enduring.

C: Oh yes, I'm sure it will be, and there's a need for making further progress. Now, the third responsibility is for forest research. We have the federal responsibility for conducting research in forest land management in all of its aspects. The forest research programs provide the knowledge and methods which are needed in improving management of forest lands whether they be federal lands or state and private lands. We work cooperatively with the many private agencies, as well as state agencies. This research program applies across the board. It applies to both our other programs, in other words.

Historically, like agriculture research, forestry research has been funded far below the level of support for other research in our industrial society. But, recognizing this, the Johnson Administration increased the level of support for forestry research quite dramatically. Funding stepped up from an annual appropriation of \$25,200,000 in 1964 to \$38,800,000 in fiscal 1969--a fifty-four percent increase in five years. The design and construction of research laboratories at thirty-four locations in twenty-six states, with an expenditure of \$15,677,000 is a most notable contribution to the progress of forestry research in this country. This is all under this past administration, or the Johnson Administration.

- F: You're looking, among other things, not only for improved timber but for new uses.
- C: Oh yes. We conduct research in forest products utilization and forest engineering. Also, we have embarked on a program on forest recreation research, forest wildlife habitat research, watershed management research, forest insect diseases control research, fire control research, economics--all phases of forest land management, both the timber management and management for other resources.
- F: Do you use your forests themselves as a sort of a laboratory for, say, college forestry classes?
- C: Yes, we have experimental forests that are set aside for research purposes where permanent plots, permanent studies are made. Many of these are in the national forests. Many of them are outside the national forests. Some of them are on privately owned forest lands under long-term agreements. These areas are available for study and observation by scientists wherever they are. That is, they come to these places for study and observation. We cooperate with the universities. Quite a few of our research headquarters are located on university campuses where we have a collaboration. And we do cooperative research where they'll take some phase of a problem and we'll take another phase. This works very well.

But we had very few modern laboratories and facilities prior to 1960. The Forest Products Laboratory was the outstanding lab that we had. That's at Madison, Wisconsin. It's the world's outstanding forest products laboratory. In 1959 we started breaking through to get some money for research facilities. In the next five years \$9,455,000 was appropriated for research facilities. The culmination of this construction period was reached during the administration of President Johnson when new

facilities were provided at over forty percent of the work locations of forest service scientists. These modern labs and the latest in technical equipment speed the pace of research. The greatest benefit will come in the years ahead as research puts these facilities to ever increasing use--research for new knowledge and improved management of all resources. Most noteworthy of these facilities is the new complex for woodpulp, fiber and chemical research at the Forest Products Laboratory at Madison. Here we spent 5.1 million dollars in enlarging an already-famous laboratory, which makes it the most outstanding research facility of its kind in the whole world.

Other major research installations include \$1,280,000 for headquarters in the Rocky Mountains Forest and Range Experiment Station at Fort Collins, Colorado, and a million dollar addition to the Forest Sciences Laboratory at Athens, Georgia--in addition, a similar sized Forest Insects Biological Laboratory at Delaware, Ohio. I've mentioned only a few of the quite large number of the research facilities that have been constructed. And they do improve our ability to attract high quality scientists and to hold them.

Increased support has led to major advances in forestry sciences and land management practices. The discoveries are too numerous to mention, but the impacts of some of the most dramatic could be--well, just to mention a few. First, production from seed orchards of commercial quantities of seed of genetically improved pines, having superior growth, form and resistance to pests. This is now operational and getting underway in a big way. Instead of planting scrub seed from run-of-the-mill trees, we're able to plant genetically improved seed from superior parents, following the lead in the things that have been done for so many years in agriculture. You can apply these same things to growing trees.

Another is a special pattern of timber cutting that greatly increases the accumulation of snow, delays its rate of melt, with resulting substantial increases in water delivered from forest watersheds. This is very significant, and will be more so in the future--in the west especially.

F: I have found in the past decade, for the first time, when I come east to New York and New England they talk water problems just the way we always have out west. Some areas are quite conscious of it.

C: That's right. New guidelines and techniques for the rehabilitation of lands denuded and disfigured by strip mining and accelerated erosion. We have developed methods for reclaiming strip mined lands. We're continuing this research but we can say that we now know how to rehabilitate strip mined lands in many, many kinds of soils and rock formations.

New markets for forest products from low-value timber--which you commented on a short time ago. With emphasis on timber growing in depressed areas like Appalachia. We developed know-how for the development of a private forest recreation industry in the east with resulting new jobs and new income sources for the rural forest land owners. We are doing research in forest recreation. We've developed sex attractants to lure to their death major insect pests of forest trees, namely pine bark beetles. This is a real breakthrough on the biological controls of insect pests.

F: You, to a certain extent, neutralize them sexually?

C: The attractant process does not necessarily mean sterilization. Sterilization technique is important in some insects. The attractant, the idea is to attract the bark beetles into a central location where they can be killed. The techniques for doing this are still being

developed, but we have developed the attractant which will attract the male beetle for a long ways to a central point where you either trap them or--

F: Must be fascinating.

C: We developed airborne infrared mapping of forest fires which can make accurate maps through smoke and darkness--very significant--and this is operational. We're developing aerial logging systems that reduce requirements for road construction and protects soil and water values and gains access to areas that are difficult or impossible to enter by other means. Our nationwide forest survey has pointed out new industrial development opportunities leading to a rapidly growing gigantic plywood industry in the south and establishment of pulp mills in the south and central states. Those are just a few.

F: Do you do paper research?

C: Yes, yes. As a matter of fact, we developed the semi-chemical pulping process at the Forest Products Laboratory in Madison which made it possible to utilize hardwoods for pulp making to a greater degree than they had ever been used before. It opened up a whole new market in low grade hardwoods and made it possible, in turn, then to practice forestry on land which were virtually taken over by low-grade hardwood and provided a market for this kind of material, which was in over abundant supply. This created a new economic base for many areas in Appalachia, the Ozarks, and places like that.

F: Where you have a real commercial value for something like this, do you get into any sort of royalty arrangement--

C: No.

F: or is your material and knowledge made available?

C: The knowledge is made freely available. Where the government scientists

develop these processes--quite frequently--if they are patentable, we'll patent it for the public, if it's a patentable idea or process. We will get a patent for the public and then make it freely available for anybody to use.

F: Another question before we leave that. You talked about your road research. One, do you build your own roads and, two, do you make any great effort to keep your roads from scarring landscapes?

C: In answer to the first question is that we do build some roads, but most of the roads that we build with appropriated funds are built under contract. In fact, all of them except very, very minor inexpensive roads that cost less than \$12,000, I think is the guideline, are contracted. We develop the specifications--the details of the specifications for the road--and then ask for bids and follow a formal bidding procedure in the awarding of contracts. Yes, we are paying a great deal of attention to the location and design of roads to prevent scarring of the landscape, and we're paying more attention to this now than ever before. One of the things we use our landscape architect on is to work hand-in-hand with the road designers to help improve the layout. We pay a lot of attention to location with regard to streams and bodies of water to prevent siltation. I'm not saying that we have solved all of these problems but we recognize that some of the things we've done in the past could have been done better and people are more conscious than ever before of the aesthetic values and in turn we're more conscious.

One other kind of research that we're working on that's, I think, significant of the Johnson Administration impact--we're doing quite a bit of research on low-cost housing. At the Forest Products Laboratory and at the Laboratory at Athens, Georgia, we have a Forest Utilization

Research Program. We have assigned them the responsibility and challenge to develop good houses that can be built at a lower cost for the benefit of people who need housing but can't afford the standard kind of housing. Our researchers have come up with several very promising and interesting designs for low-cost housing that are attracting quite a bit of attention and are now being put into operation. They have some experimental designs on the drawing board which depart from traditional architectural and building practices that show quite a bit of promise. This is to augment and to help other programs that the administration is sponsoring.

The Department of Agriculture has a program for helping finance low-cost housing in rural areas. It disturbed the Secretary that so-called low-cost housing was costing ten or twelve thousand dollars, for example--some more, some less-- but they really weren't low-cost in the terms of the income and the ability to pay--the kind of people we're trying to help. So I challenged our people to get onto this and to come up with good houses that would cost less money--of course, using timber for construction, because that's our responsibility.

F: You're not interested in concrete blocks.

C: And this research shows considerable progress.

F: Were you a participant in that pilot housing program that just opened up down in Austin, Texas?

C: No.

F: They tried, I think they had twelve different types of design. They're trying to figure out which one would be practical.

C: I don't believe we were involved, although some of our research people might have been.

F: You have been very generous with your time. I've cut into a whole



afternoon for you. I would like to ask you a couple of questions in closing. One would be any thoughts you might have on the discussion that never quite dies that involves the reorganization of several of the departments. I'm thinking particularly in this case of the one that every now and then comes up that, maybe, Forest Service would be more compatible in the Department of the Interior. Or maybe the Department of Interior would be happy if it had the Forest Service. You can come at it from either angle.

C: The proposal has been made in the past, at intervals, that the Forest Service be transferred to the Department of Interior and that the Department be reconstituted and renamed the Department of Natural Resources. I can remember these proposals as far back as the days of Harold Ickes and Henry Wallace, when an effort was made to transfer the Forest Service to Interior, but it never did get accomplished.

The Hoover Commission studied this. The National Resources Task Force in the Hoover Commission--or it might have been the Public Lands Task Force, I'm not sure of the terminology--recommended that the Forest Service be transferred to the Interior Department. But the Hoover Commission as a whole rejected that recommendation and recommended it stay in Agriculture. So, over the years there have been differences of opinion. The proponents of this move feel that since the Forest Service is managing public lands and the Interior Department is managing public lands that this might work better if they were all in one agency and that the occasional controversies that arise over the transfer of land from national forest to national parks, for example, would be more easily settled. And some of these controversies get quite warm in the public arena.

F: You could have an intra-departmental quarrel instead of an inter-departmental.

C: My view on this, and the view the Forest Service has traditionally taken, is that the Department of Agriculture is our natural home. We're dealing with renewable resources that come from the land through land management. It involves the application of the biological sciences. It involves research which is closely allied to the research being done in the Department of Agriculture in soils and entomology, plant nutrition, and watershed management. Most of the research has a close alliance and is closely coordinated with research in agricultural lands, genetics--the whole field. As of yet there has been no comparable biological research in any other department, aside from Fish and Wildlife research. This may change. But, anyway, there's been a natural relationship here that's been very beneficial.

But more than that, Agriculture has been the department that is traditionally associated with giving help and advice to the private landowner, as opposed to public land management. And as I stated earlier one of the major responsibilities of the Forest Service, and one of the real strong arguments for keeping it in agriculture, is this big problem of proper management of privately owned forest lands, which make up nearly 3/4 of all the forest lands. This and the research relationships seem to be our view for keeping the Forest Service in the Department of Agriculture.

It doesn't really settle problems to just put agencies under one super organization. We all know of problems within departments that haven't been settled because the agencies were in the same department. There is a danger of concentrating too much power in one department. It isn't possible to put all of the natural resources in one department

anyway. There are a dozen different federal departments and agencies dealing in natural resources in one way or another. If you were to put all natural resources under one cabinet officer it would make a big overwhelming department which would, likely, be unmanageable. It would be a terrific concentration of power. To make sense it should include all agriculture lands because the most vital resources in this country are the food-producing lands--

F: and the water.

C: And the water producing lands, which are primarily privately owned and primarily the responsibility of Agriculture. This is most of the story on the Department of Natural Resources.

F: It's a good story. One last general question. What sort of role do you play in either timber export or import?

C: The Forest Service had no responsibility or authority to try to control imports or exports either, up until the passage of the recent Morse Amendment to the Foreign Aid Act in the last Congress. The United States imports a considerable amount of timber and pulp paper products from Canada. I don't remember the statistics, but it's a substantial amount and has been for a long time. We import tropical hardwoods from some of our Latin American neighbors and even from Asia and Africa. There's a considerable amount of Philippine mahogany coming in from the Pacific to this country. On the whole this is a desirable thing to supplement our own supplies with imports. As far as the tropical hardwoods are concerned, we're getting a kind of material that isn't particularly competitive although it might be competitive somewhere locally with our indigenous woods.

The most controversial question that has come up in the last few years has arisen because of the export of unprocessed saw logs from this

country to Japan. This has grown into rather substantial proportions. A billion and a half, or more, board feet of saw logs were exported to Japan last year, and this year it appears that it will approach two billion board feet. I would like to check those figures for the record, but it's been growing. Most of these exports have come from the states of Oregon and Washington with some smaller amounts from northern California--in an area where there is an intense demand for saw timber to keep the existing saw mills and plywood plants operating.

It's contributed to an intensely competitive situation where there's not enough saw timber to keep all our domestic industry operating at full capacity, but the Japanese have been able to pay enough for logs to take them away from domestic mills. There is some evidence that this has caused mill closures and created some labor problems and economic problems in local communities. On the other hand it creates jobs for the longshoreman and for seamen, for shippers and the ports. So it isn't all one-sided.

But it's developed into a bitter controversy and the timber industry--the saw milling industry and the plywood industry--is feeling the pinch on price rises for raw materials and shortage of supplies has been putting pressure on to prevent the shipment of logs that are produced on public lands--the national forests primarily--in an unprocessed form to Japan.

There have been some legal arguments over this as to how much authority the Secretary of Agriculture might, or might not, have. Last April the Secretary took steps, in concert with the Secretary of Interior, to limit the shipment of unprocessed logs which were produced on the national forests and on the Bureau of Land Management Lands in Oregon and Washington. With the passage of the Foreign Aid

Act in 1968, Senator Morse was instrumental in getting the amendment which made this a requirement and extended it to all the lands west of the 100th meridian--all public lands. So we are in the business of policing export controls on saw logs produced on the national forests. There are certain exemptions and there are certain provisions for making exemptions if, after public hearing, it can be found that certain kinds of logs in certain localities are excess to local needs. This authority runs for three years, and there are certain other restrictions that can be applied. But there is an exemption written into the law that something like three hundred fifty million board feet can be exported, which is the same amount that the two secretaries were permitting under their regulations.

F: Bootlegging hasn't become a problem?

C: We don't think so. We make it a requirement of the contract that the logs that are purchased must be manufactured in the United States with the exception of these exemptions. It put some pretty strong incentives on the purchaser to make sure that the requirements of the contract are not violated. If he is found to violate this part of the contract he can be barred from purchasing federal timber, which can be quite a severe penalty to a purchaser that's dependent primarily on the purchase of federal timber for his very existence. Then the other members of the industry help to police. That is, it tends to be self-policing. This has been a very controversial thing. It has many facets--the longshoremen, the shipping industries. It involves relationships with our strongest ally in Asia. There are just a lot of angles. It's been a

F: Very tender problem.

C: Very thorny problem. Personally, I do not like to see raw material

raised on public land exported if it's needed to support local employment and local industry. I think it's far sounder to send to Japan, or any other country that needs our raw material, the raw material in a semi-finished form, as in lumber, so that we can get the benefit of the primary manufacture. The longshoremen and shippers will get the benefit of the shipment. This is a personal viewpoint. I realize this whole field of foreign trade--that if you sell you have to buy and there has to be somewhat of a balance. There are lots of strong arguments for trade with the minimum of restrictions.

F: We'll close on an easy one. What are you going to do about the Chestnut blight?

C: The Chestnut blight killed all the original stand of Chestnut in this country, and there's no solution in sight.

F: I hadn't heard of any. I just wondered if you had any later information.

C: We've done experimenting with hybrids. We've been running down all of the leads where we hear of Chestnuts that have resprouted and appeared to be immune. We know of some trees that escaped the blight because of geographic location and we collect seed source and are continuing some research to develop genetically superior strains that have immunity. But I can't say that there's very much hope on the horizon right now to ever reestablish Chestnut in the dominant position it once had among our hardwood forests.

F: Thank you very much Mr. Cliff. This has been most enlightening.

GENERAL SERVICES ADMINISTRATION  
NATIONAL ARCHIVES AND RECORDS SERVICE

Gift of Personal Statement

By Edward P. Cliff

to the

Lyndon Baines Johnson Library

In accordance with Sec. 507 of the Federal Property and Administrative Services Act of 1949, as amended (44 U.S.C. 397) and regulations issued thereunder (41 CFR 101-10), I, Edward P. Cliff, hereinafter referred to as the donor, hereby give, donate, and convey to the United States of America for eventual deposit in the proposed Lyndon Baines Johnson Library, and for administration therein by the authorities thereof, a tape and transcript of a personal statement approved by me and prepared for the purpose of deposit in the Lyndon Baines Johnson Library. The gift of this material is made subject to the following terms and conditions:

1. Title to the material transferred hereunder, and all literary property rights, will pass to the United States as of the date of the delivery of this material into the physical custody of the Archivist of the United States.
2. It is the donor's wish to make the material donated to the United States of America by terms of this instrument available for research as soon as it has been deposited in the Lyndon Baines Johnson Library.
3. A revision of this stipulation governing access to the material for research may be entered into between the donor and the Archivist of the United States, or his designee, if it appears desirable.
4. The material donated to the United States pursuant to the foregoing shall be kept intact permanently in the Lyndon Baines Johnson Library.

Signed

Edward P. Cliff

Date

May 21, 1973

Accepted

Harry J. Shusterman for  
Archivist of the United States

Date

Oct. 15, 1973