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Fred H. Arnold
March 19, 1971

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[Tape #43 - 1 Side, Tape #44 - 2 Sides]

Fred H. Arnold

EVISON INTERVIEW WITH FRED H. ARNOLD

(Original & 1 Copy)

[Tape #43 - 1 Side, Tape #44 - 2 Sides]
Fred H. Arnold

DRAFT 9/25/73

Typist: Thelma W. McDonald

START OF TAPE

Herbert Evison: Today is March 19, 1971. I'm Herb Evison and today I am in Richmond, Virginia in the home of Fred H. Arnold, whom I have known since the very earliest days of the Civilian Conservation Corps. Fred has been in Richmond since 1936. And interestingly enough, I have in my hands the cards which were outside of his office door during the years that he was in the Regional Office in Richmond. The first one reads, National Park Service, Fred H. Arnold, Regional Forester; the next one, Regional Chief, Branch of Park, Forest and Wildlife Protection; the next one, Ranger Services; the next one, Regional Chief, Division of Ranger Activities; and the last one reads, Resources Management and Visitor Protection, which is really quite a bunch of titles for one man to have borne. Fred let's start this off by getting on the record when you were born and where, something about your family, what your father did, your education, your lone venture into matrimony, and the children that resulted therefrom. You were born when and where?

Fred Arnold: Herb, I was born in Rochester, New York on April 21, 1906. My father worked for Cunningham as a carriage maker. He was a woodworker. He worked for Cunningham back in the days when they made fine carriages and hearses. Subsequently, they went to the manufacture of the Cunningham automobile. My father died in 1915 when I was nine years old. I had been attending Rochester public schools, Schools Numbers 3 and 4. I had the fortune, or the misfortune, of being one of those few people whose schoolhouse burned down when he was going to school. That is why part of my grammar school education was in two schools. The family had not moved up to that time. When my father died my mother and one of my two brothers and I moved to Lyons, New York where my mother was born. We lived on a farm there and I learned varied agricultural practices on an upstate New York farm there. I finished my grammar school work in a little cobblestone schoolhouse, which still stands there. We walked about three miles to go to it. The greatest number at one time was about 16 pupils in this little school. And the schoolteacher taught all grades from beginning through the eighth grade.

Herbert Evison: This was a one-room schoolhouse?

Fred Arnold: A one-room schoolhouse. I visited it last fall and again the thought occurred to me, "I wish this could be preserved." It would be a wonderful

example of that type of construction and architecture in that part of the country. It's still in a pretty good state, but it's abandoned and not maintained any longer. After I finished grammar school my mother and other brother and I moved back to Rochester. I entered West High School and completed it in June 1923. I worked the next year at the Buffalo, Rochester and Pittsburgh Railway, now part of the B & O Railway. Then in September 1924 I entered the New York State College of Forestry at Syracuse University, from which I graduated in 1928.

Herbert Evison: With honors.

Fred Arnold: Yes, Herb, I was the top man in my class I will mention in all modesty. I had taken and passed the Junior Forester examination, which was the exam which foresters took for employment in the federal service back in those days. It was an all-day written exam. While waiting for appointment from the list established on the basis of that examination, I got work with the New York State Highway Department, which had a division office in Rochester. I did highway survey work and also plotting of cuts and fills and profiles in the office. Then I received my first offer of employment from the Forest Service which was in New Mexico. That I immediately accepted which was in 1929. I worked on the then Manzano National Forest, now a part of the Lincoln National Forest, on land exchange work. We did topographic mapping, timber cruising and land appraisal. This work ran out and I had not received a permanent appointment. The Forest Service had nothing for me following the field season and after bad weather set in, so I returned to Rochester. By this time the very severe Depression of 1929 had occurred, and jobs were scarce. I was fortunate in locating work with the Eastman Kodak Company in Rochester. I worked in what they called their Statistics, Materials and Supply Division. My major work was to prepare charts and graphs showing all phases of the film industry, showing production, showing exports, showing volume of various materials, personnel charts, and so forth. But this was not for me for any longer than I needed to take it, than I could take it. In the summer of 1930 I went with the Maurice L. Condon Tree Expert Company in White Plains, New York. That's where I met A. Robert Thompson and for a while he was my boss. He was in charge of the sales territory that I worked in. Before I engaged in selling of tree services, I did actual tree work, climbing, pruning, cabling, feeding, all kinds of tree care work. Then I had an opportunity to obtain a fellowship at the New York State College of Forestry to work for my master's degree in forestry. I did some teaching, some laboratory and research work, in return for my fellowship payments. This was in the school year of 1931-32. And in June '32 I was awarded the Master of Forestry degree. Then I worked for a while at the Northeastern Forest Experiment Station at one of their field locations in

Bartlett, New Hampshire. I was doing study plot work on Northern hardwoods there. We did timber estimating and mapping of the plots and took recordings of the understory vegetation. As a part of that employment situation I also engaged in plantation studies in Vermont and New Hampshire. This work petered out. It was only a temporary assignment. In December 1932, through a connection that I had made in Vermont, I worked on the streets of New York City selling Christmas trees. This man whom I had met in Vermont had a crew cutting Christmas trees and local natives making wreaths for him. And I was one of his salesmen in New York City.

Herbert Evison: Did you make a living of it?

Fred Arnold: I made enough to make ends meet. Herb, these were still hard times. We were still very deeply in the throes of the Depression. And, of course, after Christmas there was no more work selling Christmas trees and wreaths. I was out of work. And this was the only time in my entire career when I was out of work for a spell. From January 1 until March 10, 1933 I was unemployed. At that time I was in New Rochelle, New York and New Haven, Connecticut looking for work. I finally located a job with Outpost Nurseries in Ridgefield, Connecticut. This was early in the spring before nursery grown plants were dug for sale. I did various jobs. I helped haul fertilizer from freight cars to the nursery. I drove a stone boat pulled by a horse, picking up stones from nursery fields and various jobs like that, things to keep me busy until the so-called sales garden opened up and I was put in charge of selling from the sales garden. Plants would be dug in the nursery, balled and burlapped and set in peat moss beds at this sales garden, a very attractive sales location. And I sold plants there. Well this wasn't for me any longer than I had to have it either. About that time CCC had become established. This was in May and June of '33. I began getting letters and telegrams from the Forest Service primarily offering jobs as forestry foreman at CCC camps. The one that I took was at a camp in New Hampshire on the White Mountains National Forest as a cultural foreman, which required a knowledge of forestry. I wasn't there very long. I was there from June until the beginning of August 1933, when entirely out of a clear sky I received a telegram from the National Park Service in Washington, D.C. I had made no application to the National Park Service for employment. When one of the enrollees handed me a telegram he said, "Here's a telegram for you. It's signed Demerit" [sic]. Of course, the name later turned out to be Arthur Demaray. The telegram apparently was sent after a letter had been sent to my home address in Rochester offering me a job in Washington with the Park Service, but the letter hadn't caught up with me. I accepted when I finally did receive the letter and went to Washington in early August 1933 and until the time I retired at the end of 1969 I was with the National Park Service ever since.

- Herbert Evison: We'll go into the details of your Park Service career later, but let's complete this personal history by making a little note of your solo matrimonial venture and three of the most important outcomes of that.
- Fred Arnold: While I was in Washington with the National Park Service, which was from August 1933 until July 1936, through a college classmate I met Miss Violet Norma Wilson, to whom I became engaged in 1936. And in November of that year we were married. She then took residence with me in Richmond. In 1938 our first son, James F. (Jim) Arnold was born. In 1940 a second son, Joseph Wilson (Joe) Arnold was born. And in 1942 John Howard (John) Arnold was born.
- Herbert Evison: Now you referred to him as John. Wasn't he ever known as "Jack"?
- Fred Arnold: I tried to call him Jack when he was a little fellow and he despised the name. He would not accept it. It had to be John. Sometimes Violet called him Johnny and she still does at times and he settles for that too.
- Herbert Evison: I want to just put on the record here an item that you gave me, which was that you had three sons and you were also one of a family of three sons. I think that's very interesting. You might just give a little bit more about those three boys. I saw a picture of the bride and groom at the time of the marriage of the youngest of them. You might just record something about them. One is to be married and one is married.
- Fred Arnold: All right, Herb. I want to backtrack just a bit and mention that when our firstborn was a year and a half old, maybe two years old, Violet and I were playing tennis one day over at Byrd Park here in Richmond and we met up with Herb Evison. Herb was playing some tennis there at that time. He looked at the little fellow and he said to Violet and me, "I want to give you just a little bit of advice. Don't give that boy the disadvantage of growing up alone." So as Herb quipped and kidded me a little bit today, we took his advice pretty well and pretty seriously. The other two boys came along, each two years after the first. Jim, the oldest, is the one of the three who wanted to follow in his father's footsteps. He received his forestry degree from Virginia Tech in 1965 and is now working in Roanoke, Virginia with Coppers Corporation. Coppers does creosoting of poles, posts, railroad ties, and so forth. Joe, the middle son, is now in Eden, North Carolina, just across the border from Danville, Virginia, with Fieldcrest Mills. They have several mills in North Carolina and he is safety engineer for those mills. He had been with General Motors for five years prior to this, but in May of last year was laid off because of the poor economic situation and the anticipated strike coming up last fall. Joe graduated from Virginia Tech in industrial engineering in 1963. He graduated before Jim did. John, the youngest, received a B.S. degree in

marine biology and commercial fishery from North Carolina State University in 1965. John went immediately into Naval Officers Candidate School upon graduation. And at Newport, Rhode Island he received a commission in the Navy and was selected by Admiral Rickover for nuclear-powered submarine service. Admiral Rickover interviews all of the nuclear-powered submarine selectees. And John, although he had no background of much consequence in physics or nuclear power or engineering, went into nuclear-powered submarine service. And that's a four-year deal instead of three. He elected to leave the service after the four years were up, which was in December 1969. He returned to Richmond then and in August of 1970 he was married. The youngest was the first one of our sons to be married. He married a girl from Charlottesville, Virginia. In September of 1970 John moved to Rhode Island and is now working for his Ph.D. in oceanography and marine affairs. John is the only one of the three boys married as of now. Jim, the oldest, is engaged. His wedding date is set for June 19 and he is also marrying a Charlottesville girl. Joe, the middle one, is still unattached and I don't know whether he has any serious intentions now or not.

Herbert Evison: Of course, the thing that I am very interested in and interested in getting on tape is your Park Service career. When you were first hired by the Park Service you took a job in Washington and I'd like to know a little about that. For one thing, did you go into that section of the CCC organization which was concerned with the areas of the National Park System, or into what was known as State Park ECW?

Fred Arnold: Before I go into that, Herb, I would like to mention, referring back to my previous statement that I had made no application for employment with the National Park Service, I found out after reporting for work with the Service in Washington that Chief Forester John Coffman had written to his long-time friend and classmate in forestry at Yale, Nelson C. Brown, who was one of my professors at Syracuse. And although he was not my major professor, I majored in silviculture and management and forest protection, Nelson Brown was head of the Wood Utilization Division, Nelson went out of his department to recommend me to John Coffman, along with John Shanklin, for work with the National Park Service in ECW. This was at the time when the Service, as well as the Forest Service and other federal agencies, were staffing up for ECW and other emergency programs. And there was a need in the National Park Service for people with education and experience in forestry, conservation, wildlife, and so forth, to beef up the staff, the small staff then in the Washington Office. My first work in the Washington Office was as a member of John Coffman's staff. John had moved into Washington from Berkeley where he was in charge of forestry work. Subsequent to my coming with the

Service John was made Chief Forester of the National Park Service. Subsequent to that still the Branch of Forestry was established. My first title was forester-inspector. I made field trips to the CCC camps operating in the Eastern national park and monument areas, going over the projects that the boys were doing and assisting in the planning and the direction and advising of the supervisory personnel in the camps on the conduct of forestry-related programs, fire hazard reduction, forest fire control, tree planting, individual tree care, erosion control, and so forth. I was on that work from July 1933 until late July 1934 when I was transferred to the position entitled Assistant Supervisor, ECW. And this was largely an office position still under John Coffman and Don Libbey, who at that time had been transferred to the Washington Office. I was engaged in administrative and technical control work over the ECW program in Eastern camps. This was more of an office position. I did very little field work. I wrote instructions and informational material on the conduct of various forestry operations in the camps. I did some work in connection with recording of work progress in the camps, and so forth. That was from July 21, 1934 until April 1935. At that time I was transferred to the State Park Division under Connie Wirth over in the Bond Building. And Herb, that's where I think you and I first became associated.

Herbert Evison: Yes that's right.

Fred Arnold: In that position I was forester in charge of the forestry program in state parks throughout the country. You recall, Herb, the state park work became regionalized under the Bond Building administration of Connie Wirth and yourself. In each of these regions of the state park program we had a regional forester. And technically these regional foresters reported to me. Administratively they were under the administration of the regional director in the various regions. This preceded, of course, the National Park Service regionalization of '36 and '37. In that capacity I did a lot of field work. I traveled rather extensively East and West. There were approximately 450 CCC camps in state parks at that time throughout the country. In addition to going over forestry-related work programs in various state parks I continued to prepare instructional and informational material for dissemination throughout the state park regions of the Service.

Herbert Evison: Fred, I think it would be interesting to put on the record at this point the names of the various men who were foresters in this State Park ECW Program and answerable technically to you.

Fred Arnold: Herb, as of the time I was transferred from the State Park Division to the newly established regional headquarters in Richmond, which was under the ECW regionalization of 1936 and which was at the ultimate development of the State Park Division and its field regions, there was a

regional forester in each one of the eight state park regions except one. That was Region 3, which included the states of Delaware, Maryland, West Virginia, Virginia, North Carolina and South Carolina. In the regions that were staffed with a regional forester there was Charlie Lockhart in New England and Charlie Elliot in the region that included the Southeastern states. Wendel Horsley was in Region 7, which was the Southwest; Anton J. Tomasek in Region 5. which included the Lake states plus Missouri, Illinois, Indiana, Kentucky and Ohio; Burnett R. Sanford in Region 8, which was the West Coast. Ralph Smith was in Region 2, New York, Pennsylvania and New Jersey. And Ferdinand Priester was in Region 6, which included the states of Minnesota, Iowa, North Dakota, South Dakota, Nebraska, Montana and Wyoming. Viljo (Bill) Saari worked under Charlie Lockhart in Region 1 up in New England. Temple Robinson was in Region 3 – well this appointment never developed. Temple Robinson never functioned in that capacity. He is listed here with the notation that his appointment was cancelled.

Herbert Evison: Fred, the group, of which you were a member over there in the Bond Building, was widely referred to as the Bond Building faculty. It has some quite extraordinary men in it, and I wonder if you wouldn't like to mention a few of these people and perhaps comment on them as experts in their fields or as just human beings.

Fred Arnold: Herb, by the time the group broke up that was a very sizable outfit and I won't attempt to give you even a 10 percent listing of the people. But to do as you ask, to mention some of the ones that I recall more vividly, I would have to include Connie Wirth and yourself, Herb, as the administrative heads of that group. Ronnie Lee was the historian. He had been moved in there from Shiloh. Ab Good was the architect. R.A. Vetter, we called him "Darby" Vetter, was our legal advisor.

Herbert Evison: Of course, I think he was even more commonly referred to as "Judge".

Fred Arnold: I guess so because of his legal connections. Ed Preece was the engineer. Howard Rothrock was the geologist. Ken (K.D.) Simmons was the landscape architect. George Baggley was with wildlife. Frank Childs, although a forester, was in the Bond Building in charge of erosion control matters and related work. There was H.B.K. Argasborg, a man of Norwegian descent, whose background was in wildlife. There was Max Sunshine who had been Mrs. Eleanor Roosevelt's tailor. He served in a clerical capacity.

Herbert Evison: He was her milliner, not tailor.

Fred Arnold: I stand corrected. There was Roy Knabenschue, a former balloonist in this country, one of our early balloon navigators. Rene Reixach was in the

clerical, administrative group, Al Pesnon, the same. Then there was a group of field inspectors including Norman Newton, Paul Brown, Herb Maier and Don Alexander. Al Lindstrom was in the office. He wasn't a field man. What was his function?

Herbert Evison: He was the personnel man.

Fred Arnold: Right. I remember George Gibbs in that connection.

Herbert Evison: Yes. Now most of these people in this last list that you mentioned were not actually in that office. Most of them were regional officers. George Gibbs was a former Olmsted man who became kind of a stormy petrel regional officer up in Minnesota and in that part of the Midwest. The first group that you mentioned were all actually I think in the Bond Building. Of course, not all of those that you mentioned were considered parts of the faculty. The faculty were Connie Wirth and I as the administrative men and the rest were the specialists in their various technical fields. I think you will admit yourself that there were some pretty darn good men in that group.

Fred Arnold: Yes there were and pretty darn hard working men. And I remember some evenings we worked and also some Saturdays and weekends we worked. So this extra work week isn't anything new.

Herbert Evison: Far from it in the CCC days I can tell you. Finally, when the regions were first set up, I think I'm right in this, when they were established in June 1936, they were established to take some of the load off of the Washington Office in the direction purely of emergency activities. They had no say about regular activities in any of the field areas of the National Park System. I went to Richmond as Regional Officer on June 1, 1936. And you reminded me this morning that you came in there in July as the regional forester. I think it would be interesting to get some comment from you, not of the kind that would necessarily have appeared in any of your official reports but on things that happened. Now you mentioned at lunch today a little group that I was instrumental in getting together that I think would be fun to have your remembrance of it on the record.

Fred Arnold: We did some singing in those days, Herb, and you mentioned a group. You organized a little choral group and we had quite a lot of fun singing together once in a while on a little social occasion. We also played some softball and I think you did some of the pitching Herb. Among other teams that we beat we took over the Washington Office softball team at least once up in Fredericksburg. And we used to play Colonial here in Richmond and down at Yorktown. I remember Clarence Montgomery, among others, was a member of the Colonial team.

Herbert Evison: Actually most of our softball was right in our own regional office league. We had three softball teams. That was in the days when it was a seven-hour day and when it was daylight saving on top of that. At the time we left the office there was quite a lot of the afternoon left, plenty of time to have a softball game before we had to go home to dinner.

Fred Arnold: Right. We had some dramatics now and then. We put on little skits at some of the office parties once in a while. You did some of the coaching in connection with those occasions also.

Herbert Evison: Fred, just recently I came across the book or the script, whatever you would call it, that we used at that famous minstrel show that we gave at the party which was a farewell for Carl Russell and a welcome for Tillotson. Reading that gave me some very nostalgic feelings. I remember one of the people at the party, no longer a part of the Richmond group, was Earl Weatherwax. I remember one of the jokes in that was, "Bones, you know that in the regional office they took a vote on what player was the most valuable to the Richmond National Parkers softball team?" And somebody made the mistake of reading that, "the most valuable player on the softball team." And I had to correct him and call his attention to the fact that that wasn't the way the question was framed. It was the player most valuable to the team, the answer being Weatherwax, who played on the Washington team and made all the errors that enabled us to bet them.

Fred Arnold: I remember that one, Herb. It brought down the house with laughter too. I think that was the same party at which the question was asked in a little quiz session cooked up for the occasion that goes as follows, "What is the correct and full name of the area administered by the National Park Service in Fredericksburg?" And the one to whom it was asked goofed it. Of course, the answer is Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park and Cemetery.

Herbert Evison: I congratulate you, Fred, on still knowing that. I wouldn't have been able to answer it today or then. Of course, it wasn't no work and all play there. Do you remember in connection with the work any particular events of that CCC period?

(Tape #44 - Side 1)

Fred Arnold: With the establishment of the four regions, Regions 1, 2, 3 and 4 in 1936, a complement of specialists was assigned to each, at least one specialist in one of the major fields, including an engineer, landscape architect, wildlife management man, a forester and a few others. Thus the regions were in a position to give the superintendents of the areas and the CCC camps functioning in those areas much more assistance, help and supervision, technical advice and generally improvement of the standards of work

performance than the Service was in a position to give under the former arrangement. Furthermore, there was no separation between state park work and straight National Park Service work. Both aspects were handled by the same staff in each of the respective regions. I'm sure that one result of this reorganization and the increased opportunities to work closely with the field was to raise standards in the performance not only in my own field, performance of forestry-related work, but generally in all of the other professional fields. Also, we in the professional fields learned to, we had to, work harmoniously and closely together to accomplish the overall objectives in the program. In my own field, forestry, we constantly had to strive to recognize and to achieve acceptance of the principle that there's a difference between forest protection and management practices in a national forest or in a private forestry enterprise where production of forest products is paramount and the kind of forestry that we properly should apply in a park or recreation area. So this was one of the things that we constantly strove with to get across, to have more completely understood and the reasons for it and to gain performance of work in accordance.

Herbert Evison: I think it would be very worthwhile to get on the record here a few general observations about what those differences were. I think, for instance, a thing that would be considered on a commercial forest a valueless weed might be a very valuable plant in a park forest. I hope you can offer some points of contrast between the two kinds of practice, of forest protection and forest management.

Fred Arnold: We foresters in coming into the National Park Service, most of whom had had experience in commercial forestry products, had to learn quite a number of things. And among them was that forest stand improvement as such is not a proper objective in a park. In a park we want the forests to grow and develop as naturally they do. We found that in most parts of the East at least forest planting is not necessary. Given protection with forest or individual seed trees nearby an area will become reforested by natural means. Too meticulous cleanup of the woods of the forest in fire hazard reduction operations is not only undesirable in a park area because it tends to tidy up the woods, but they don't look natural and it's wasteful of manpower. There are many other factors of difference between the two. I think these that I've cited will give an idea of some of the things we were working on.

Herbert Evison: I would make this point and I think you would agree with it, that to a park forester there isn't such a thing as a weed tree.

Fred Arnold: Right. No species that's native to an area should be discriminated against. A so-called weed species may be essential in the normal, natural evolution

of a stand from the time an area is bare land, such as following agriculture or fire, until a mature forest is developed. Some of these so-called weed species have a very proper place. Similarly, dead snags, dead trees, particularly those that are suitable for various forms of wildlife, are objectionable to a commercial forester, but very definitely belong in the forest that's maintained for recreational purposes.

Herbert Evison: Fred, that's exactly the kind of statement that I wanted, and I think it comes from you about as well as from anybody that it could come from. I'm very obliged for that contribution.

Fred Arnold: Herb, in the "Journal of Forestry", which is the professional organ of the Society of American Foresters, in the July 1935 issue I had an article entitled, From Commercial to Recreational Forester. In that article I endeavor to point out some of these differences that we have been discussing, differences between commercial forestry practices and acceptable, proper practices in park and recreation areas. Among the statements in that article is this one here which may be worth mentioning in connection with the topic we're discussing right now:

The forester becomes patient with Nature, knowing that if given protection against her worst enemies, he may be confident of her ability to work out her own destination satisfactorily.

Herbert Evison: Fred, I have just learned today, in fact just within the past few minutes, of an interesting assignment that you had in the late '30's in connection with the Vanderbilt Mansion. You have just shown me some correspondence in connection with that that I think might well go into the record complete. First, tell something about the chore that you were assigned to at the Vanderbilt Mansion.

Fred Arnold: Vanderbilt Mansion did have back in 1940, before the area was established as a national historic site, many interesting trees, shade trees, lawn trees, ornamental trees in a great variety of species. Knowing of this and of the importance of giving proper care to these trees once the area was established as was proposed and was imminent, the Regional Director requested me to go to Vanderbilt Mansion and make a study of the trees, the trees on the lawns, and of the woodlands, and present a report with recommendations as to the care and management of these resources. I did this and wrote a report which is dated July 24, 1940 with quite a number of illustrations, photographs which I took myself. It contains a list of specimen trees by scientific name, common name and native range. Some of them are not native to the United States, for example, the ginkgo. I presented the report and the original was transmitted to the Washington

Office, which in turn sent a copy to the Secretary's Office. The Secretary's Office, knowing of President Roosevelt's interest in Vanderbilt Mansion and in the trees and the resources of the area and his interest in forestry and trees in general, transmitted to the President a copy of this report. I did not know this had been done until in mid-August the Regional Director received a memorandum signed by John Coffman in which he explains that a copy of my report had been sent by the Department to F.D.R.

Herbert Evison: I wish you'd just read that letter of transmittal from Coffman.

Fred Arnold: All right. John Coffman, Chief of Forestry's memorandum for the Regional Director, Region 1, dated August 16, 1940 reads:

On August 2, Acting Director Demaray sent a memorandum to first, Assistant Secretary Burlew, in regard to the action which had been taken with reference to the points listed in Mr. Burlew's memorandum of July 2 relating to the Vanderbilt Mansion National Historic Site. With that memorandum Mr. Demaray transmitted Regional Forester Arnold's report of July 24 which we had retyped as an original. This report Mr. Burlew transmitted to the President and attached is a photostatic copy of the memorandum in this regard which was dictated and initialed by the President. Regional Forester Arnold will no doubt be delighted to know that his report was so carefully reviewed and likewise approved by the President. And Mr. Demaray thought that a photostatic copy for Mr. Arnold might aid in maintaining his morale in those hectic days of expectant fatherhood (Our second son was coming along about that time.). The President's instructions with regard to replacement of trees will, of course, be followed by Mr. Arnold and all others who share in this responsibility.

/sgd./ J.D. Coffman
Chief of Forestry

Fred Arnold: Now the President's memorandum is as follows:

THE WHITE HOUSE
Washington, D.C. August 12, 1940

Memorandum for Honorable Ebert K. Burlew –

I have read with interest Regional Forester Arnold's report on the Vanderbilt place. I fully approve his suggestion that the place so far as open spaces, lawns, and so forth, are concerned should remain permanently in present condition. Please tell Mr. Arnold,

however, that in order to attain this there should be laid down a rule as follows:

"When it is estimated that an existing tree has an estimated additional length of life of 25 years or less, another tree, preferably of the same variety, should be planted at once as close to the original tree as possible."

The reason for this is that we do not want to lose the general character of the present planting and it is always possible that half a dozen key trees near the house might die almost simultaneously.

/sgd./ F.D.R.

Fred Arnold: That gave me a big boost needless to say, Herb, not only because it was during the days of expectant fatherhood, but I was trying to do the best job I could here as Regional Forester. You have no idea what a terrific lift this gave me.

Herbert Evison: I can readily believe that. I'm glad that you resurrected that particular report so that we could read those two documents into the record. Do you think of any other special assignments that you had or that you supervised that might be interesting to mention or to describe on this record?

Fred Arnold: Do you wish me to confine the incidents to happenings before the end of the CCC, the so-called emergency period?

Herbert Evison: Of course, at the moment I am trying to sort of mop up on that period. If you have any others that date to that period, I think now is the time to get them on.

Fred Arnold: Herb, you probably remember the so-called "Ghost Forest" in Shenandoah National Park, the forest of dead chestnut trees in the Big Meadows area.

Herbert Evison: Yes.

Fred Arnold: With the establishment of several CCC camps in Shenandoah National Park and the heavy emphasis in those days upon fire hazard reduction and cleanup of the woods, the forests in Shenandoah were pretty badly depleted at the time the park was established. Many of the stands of forest had been cleared for agriculture or partially so. And there were so-called "deadenings" here and there in the area, trees left and the hill farmers cultivated between the trees. The chestnut blight had ravaged through the former thrifty stands of chestnut in the park and the stands of chestnut were dead. Some were in the last stages of dying. Some were throwing up chestnut sprouts. The old root stocks maintained ability to throw out growth for many, many years. With the progress that was going on in cleanup of the woods, it seemed evident that with continued operation of

the camps there wouldn't be any stands left which would show what a stand of dead chestnut looked like, particularly in a location where it could be readily seen by visitors. So as a result of a suggestion, which I had a hand in, the so-called "Ghost Forest" was reserved in Big Meadows in Shenandoah National Park. This stand of dead chestnut snags has now long since disappeared through natural wind throw, decay, and so forth. But during the perhaps 20, 25 years that there was essentially a stand of dead chestnut trees there it proved to be an object of great interest to visitors.

Fred Arnold: I am proud of the part that I played since establishment of the CCC region, the ECW region and even before that, in the protection of the Eastern white pine against the white-pine blister rust disease. With the cooperation and assistance of the Department of Agriculture we made great use of the CCC camps in eradicating ribes, currant and gooseberry bushes, which are the alternate hosts of the white-pine blister rust disease. If these plants are removed from within a varying distance, but approximately 300 feet from the nearest pine, the pine can be reasonably well protected against infection by the white-pine blister rust disease. Now the areas in this region where this work was most needed and most active and applicable were Shenandoah, the Blue Ridge Parkway and Great Smokies. With persistent, well planned, well supervised and carried out white-pine blister rust control operations by the CCC boys, we made a big start in the protection of the white pines in those areas. This was carried on after the camps were discontinued and now very little work is necessary to protect the white pines.

Herbert Evison: Having gone over the Blue Ridge Parkway only about six or seven months ago I have a vivid remembrance of how impressed I was the beauty of the white pine and the extent of it. Every time I go over the Parkway, I'm astonished at how much territory that white pine extends over, and it is a beautiful forest.

Fred Arnold: Yes, it is, Herb. It's thrifty looking and for the most part has a good, rich, green color.

Herbert Evison: Yes it does, just beautiful.

Fred Arnold: Another experience that stands out in my memory is the one which I had with Dr. E.P. Meinekie. Dr. Meinekie had been a plant pathologist with the Department of Agriculture and was on the West Coast. I think he had recently retired at the time of this occasion and had been engaged by John Coffman to come East and advise us on some of our forest pathology and campground development and protection problems in the East. I had the great good fortune to be assigned by John Coffman to conduct Dr.

Meinekie to most of the then existing areas in the East, from Acadia all the way to Shenandoah. We didn't get into the Southern states. I think Dr. Meinekie had a great influence upon my understanding of some of these problems and how they should be handled in park and recreation areas versus commercial areas where commercial production of forest products is important. He had a tremendous mind, a man of great and wide experience. I think I probably learned as much from him in this rather brief association than from many of my professors that I had in college for a full semester.

Herbert Evison: Of course, I'm glad that you mentioned Dr. Meinekie. I remember I had heard of him I think even before I started with the Park Service because of the studies that he had made in the sequoia forests, redwoods and Sequoia gigantea, his studies of the effects of human impacts on the health of those trees. I know that that study has been carried on in recent years by what's his name out there at San Jose State College – well I can't think of the name, but those same studies have been carried on much more extensively in recent years under the auspices of the National Park Service incidentally. But the point I was going to make was that Meinekie's name has lasted in the National Park System because of a special kind of campground development that he worked out. We call it I think a Meinekie campground or a Meinekienized campground.

Fred Arnold: The Meinekie Campground System.

Herbert Evison: You know for one thing the protective values of that. I think it would be interesting if you got on the record what the nature was of the Meinekie Campground System.

Fred Arnold: The Meinekie concept of campground development, maintenance and operation was to so plan each unit in a given campground area that you provided adequate space for each function, the tent – the campers and trailers hadn't come into the picture then – the fireplace in proper relation to the tent, considering prevailing wind direction, distance, and so forth, and the spur for parking the automobile and still allowing a little buffer zone between it and the next unit. Also, part of his concept was that as with heavy use, wear and tear the unit became over worn, it should be abandoned and be given a chance to heal by natural means. In other words, have another campground to alternate with.

Herbert Evison: The equivalent of letting a field lie fallow at regular intervals.

Fred Arnold: That is the principle.

Herbert Evison: One characteristic that I remember that you didn't mention and that is that your circulation was all by narrow, one-way roads.

Fred Arnold: Right.

Herbert Evison: You and I I think by this time have been in probably 50 Meinekie designed camps because they're widely distributed over the National Park System.

Fred Arnold: There are two publications that Dr. Meinekie wrote in this connection. I believe there are more. But the two that I recall are entitled "A Campground Policy" and "Camp Planning and Camp Reconstruction." He also designed a camp fireplace. I remember him saying, "There's no need for some of these tremendous fortifications that are built in campgrounds in the name of a fireplace that a simple, properly proportioned, well-constructed structure will do the job. It doesn't have to have a chimney on it.

Herbert Evison: Right. I can remember some of those monstrosities in the early days of developing campgrounds too, great, wide things with the chimney up seven, eight or 10 feet in the air and no real convenience in cooking either.

Fred Arnold: A mistake which was made in developing some of the earlier campgrounds in the Eastern areas was the tendency to clean up too completely. There wasn't enough consideration given to the fact that with use the people would wear out the shrubs and the ground cover fast enough. I used to see in the CCC days newly developed campgrounds where the undergrowth, the scrubs and the herbaceous growth on the ground were not only removed and no buffer zone left between a camping unit and the next one, but they went to the extent of raking up all the leaves and baring the soil. So that in addition to the trampling and the wearing effect of use by campers you invited erosion. It occurred.

Herbert Evison: Not to mention dust.

Fred Arnold: That's right, making it a less pleasant place to camp and to cook and eat.

Herbert Evison: Fred, I was talking with you earlier in the day about a fire control school or a kind of training school, which I was fortunate enough to attend in the late '30's down at Highlands Hammock conducted at the CCC camp there that was superintended by Allen Altvater. You reminded me that you were also there and several other people that both of us know. I think it would be nice to get on the record a little something about the scope of those schools and who the teaching that was given there was directed at.

Fred Arnold: Herb, in a program as comprehensive and important as the ECW or CCC resource conservation program was and the rather rapid recruitment into it of so many untrained people, not only the enrollees but to a great extent supervisory personnel in the camps came from many walks of life and

were not trained. Some of them were engineers, landscape architects and a few foresters and wildlife men but not many.

Herbert Evison: And many of them just as much in need of making a living somehow or other as the enrollees.

Fred Arnold: Right. The fact of the Depression, which we had referred to before, was one of the reasons for creating this program and men were recruited into it from many walks of life. Consequently, in order to achieve program objectives and to develop standards and maintain high standards once developed, training in many fields was, of course, necessary. The Branch of Forestry under John Coffman in Washington recognized this and rather early in the game a specialist in training was engaged. Jack Barrows was the first incumbent in the position. He and I planned and conducted, with the assistance of others, throughout the region, which then extended from Maine to Florida and roughly to the Mississippi River, a great many first, forest fire control training schools and then later training schools in a broader spectrum of subjects. The one that you mentioned at Highlands Hammock State Park was one of those. We would pull together selected supervisory personnel from all the state park and national park CCC camps in a given state or a group of states into a geographically, reasonably central location. We would spend two, three, or perhaps four days giving training. As I said, our first emphasis was on fire prevention, forest and field fire prevention and control of fires. We gradually worked in such things as fire hazard reduction and tree planting, that is, in failed areas where natural regeneration would not occur. Then later when the war came on we had courses for groups of camps. This was, of course, before the CCC program was discontinued. There was a period there after the war started when the CCC camps were still operating. Many of them had been closed out and they were in the act of phasing out others. We gave some training in civil defense, in protection against incendiary fires and chemical warfare defense. Jack Barrows and I had attended chemical warfare school at Edgewood Arsenal, Maryland. And on the basis of that instruction we gave instruction to the supervisory people in the camps. Then, of course, these camp superintendents and the foremen were expected to and did pass this training on to the other supervisory people in the camps and in turn to the enrollees. When one looks at the fire control record of the early '30's and compares it with that in the late '40's in these national and state park areas in the East, he can see pretty concrete evidence that something had happened. Now we don't take the full credit for it and attribute it all to these training sessions because along with this the various states were getting more staffing and were doing training.

Herbert Evison: Getting more training-minded.

Fred Arnold: Yes and better, more effective legislation for fire control was being passed by the various agencies. Other federal agencies were in the act also. So the overall picture is one of really tremendous improvement in the fire record between the beginning of the '30's and the end of the '30's in Virginia and Mammoth Cave for instance. I can remember at Mammoth Cave they were reporting say in 1933, '36, two and 300 fires a year. And in the last 10 years of my tenure they were reporting no more than four or five fires a year. These were fires which occurred within the park or that were close enough to park boundaries to require action by the park.

Herbert Evison: In the case of Mammoth Cave, if I remember rightly, in the early days the neighbors of the park were not very much in love with it and there was a tremendous number of incendiary fires there.

Fred Arnold: That is right. It's not only a matter of training in fire prevention and in fire control, but a tremendous factor in that particular case was improved human relations, improved neighbor relations. There were, as you say, many disgruntled neighbors. There were many of the residents around the park who felt that they had not been treated fairly and who had expected more in settlement for their lands, if they had formerly lived in the park, than they finally received.

Herbert Evison: Fred, with the CCC gone and with the war on, the Region 1 staff became a skeleton of what it had been in its heyday. You were one of those who remained on as a member of the Regional Office staff throughout the war. I was part of it for two years during the war, from 1943 to 1945. I think it would be interesting to get on the record something of what the situation was with respect to the protection of the forests of the parks and your connection with it during those war years when not only was the Regional Office skeletonized as far as force was concerned, but the field areas were just barely able to take halfway respectable care of the field areas.

Fred Arnold: Yes Herb, as you have indicated, I was not involved in World War Two. I was of an age by that time at which they weren't particularly interested in recruiting me. Incidentally also, I escaped World War One. I was too young for it. This is not to say that I would not gladly have served if I had been selected for some service. As you noticed in some of the photographs, I showed you I had had some military training. The CMTC, Citizens Military Training Camps, a training program which was established after World War One, was a program that I voluntarily participated in. I spent one summer at Plattsburgh Barracks in New York in infantry training, and two summers at Camp Alfred Vale, New Jersey in the Signal Corps training. So that was the extent of my military training. Now as to the situation in the Eastern national park and monument areas during that period, one extremely fortunate thing was that with so many

people involved in the war in one way or another, with gasoline seriously rationed, also considering that in those days if gasoline were abundantly available, people weren't visiting the parks as much as they are now. So the public use was down. As I say, this was a very fortunate factor. So as far as protection is concerned, we didn't have the exposure to fire starting.

Herbert Evison: To human carelessness.

Fred Arnold: That's right. Vandalism was not much of a problem yet. Even if it had been there were so few people relatively speaking visiting the areas it wouldn't have been much probably. With a reduced staff we carried on. Surely, we were pressed to keep the areas open, protected and maintained for use. But I look back upon that period as one in which we gained much from what had been accomplished during the emergency period, particularly during and as a result of the CCC program. The facilities that had been built by these emergency activities were quite new. The heavy burden of maintenance hadn't set in so heavily then. There were those favorable factors that enabled us with reduced staffs as you say, not only in the Washington and Regional Offices, but in the field, to carry on. I think the parks in the Eastern region came through in surprisingly, remarkably good condition.

Herbert Evison: Don't you suppose that the greatly reduced load of visitors actually gave some of the improvements that had been made during the CCC days a better chance to establish themselves, your plantings, for instance, in certain places, than would have been the case if the normal volume of use had continued?

Fred Arnold: Right.

Herbert Evison: Fred, you've given us a picture of what the situation was like in the parks during the war. The war ended and one of the immediate results of it was a tremendous flocking to the parks by the people who hadn't been able to visit them for four years or more. I think I would like to get on here something from you about events, postwar, immediately and during the later years.

Fred Arnold: As you say, Herb, public use of the parks grew in geometrical proportion in the postwar years with increasingly heavier impact upon the parks and their resources. In due time we received some more staffing which helped. We resumed the operation of a traveling tree crew which we had before the war and had to discontinue during the war years. This traveling tree crew gradually picked up the cumulative workload of pruning mainly, removing dangerous and unsightly limbs from trees in important locations, at headquarters and public use areas. You recall, Herb, that in many of the areas which had been rather recently established in the East the trees had

not been given much care by their former owners. The usual situation was that they were in very bad shape and needed considerable attention. Also, many of them properly needed to be removed. I'm speaking now of ornamental trees, trees planted in the vicinity of buildings and centers of public use, trees in campgrounds and picnic areas. We had a limited number of trees of historical significance which required more than the usual and careful attention. We had also accomplished a tremendous amount of landscape planting during the emergency years and these trees had reached the stage where there was much care called for. Many of the older trees, not the more recently planted ones, were declining in growth and were reaching advanced age and needed feeding. Many of them in important locations required cabling to make them safe and to protect buildings. Some of them required lightning protection installation. Then there were situations like Vanderbilt Mansion and the Home of FDR, and these were rather exceptional situations, where the trees had been given some pretty good care before the areas were established for administration by the Service. It was a challenge to us to keep this up and give proper and adequate attention to those trees. So this is why we had to either develop and operate a traveling tree crew or to do this work by contract. Now a considerable amount of it had been done in the past by contract. Even with the tree crew we continued to do some of it by contract. But by and large, after the crew was re-established in 1946 following the war, the important individual trees in the areas from Maine to Florida where this type of work is appropriate, were pretty well attended to by the tree crew until that crew was discontinued several years ago.

Herbert Evison: I'd like to ask you now, have you felt that the system that was adopted to take the place of operating a tree crew, that is by having the work done locally in most cases was a good move?

Fred Arnold: I think you have a similar comparison between commercial tree work versus tree work done by our own trained crew as you do in commercial forestry practices compared with what we call park forestry practices, not to such a complete extent, but to a degree. For example, many of the commercial tree people are accustomed to doing utility line clearance. As a result you see trees "dehorned" as we say, not pruned so that they retain essentially their normal shape and habit of growth. This is particularly what I'm referring to. With the crew trained to do the work the way we think it properly should be done in parks and recreation areas, I think there is no question but what our own crew can and did do it better than by contract work. Now when we come to the question of cost this work didn't come cheap by our own tree crew. It's a question of whether you want to pay for the quality and standard of work that you expect and is probably

deserving in a park, or whether you're going to do the next best thing and get it done commercially, sometimes at less cost, not always.

Herbert Evison: As I remember it, one forester was given general supervision over the work of that crew, the forester up in the Northeast Region.

Fred Arnold: Bill Savage. Bill worked with me at the time the crew was reorganized, reestablished in '46. And then in the Service reorganization, the reorganization of the regions resulting in the split of former Region One and the establishment of the Northeast Region and Southeast Region, Bill was transferred to Philadelphia. The tree crew was transferred up there also and Bill continued general supervision of the crew, including the work done in the Southeast Region after 1955.

Herbert Evison: I would take it that in the matter of scheduling, which would have been his responsibility, that he would do that in close conjunction with you or in consultation with you.

Fred Arnold: That's right, Herb. I would determine our needs, the areas where work was needed. I would estimate the amount of work for a five or six-man crew, which was what the crew was then operating at and the priorities and send this list to Bill. From that he would work out an itinerary for the crew and send it to us and I in turn would notify the superintendents concerned. The general plan for work after the 1955 reorganization and the tree crew had been moved to Philadelphia was that they would work in the Northeast most of the summer months and in the Southeast in the cooler months, part of the fall, all winter and early spring.

Herbert Evison: I remember them as having had some rather unusual jobs that maybe you would remember. I think they either had a very bad ice storm or a very bad windstorm down on the battlefield at Chickamauga when there was an unusual job of forest cleanup which the tree crew had a hand in. Do you remember the details of that and am I correct that they were called in for help in that connection?

Fred Arnold: Yes, Herb, I well recall it. The tree crew followed that storm and other storms like it where there was heavy damage and destruction to trees, particularly trees along roads and in important locations in developed areas. In those cases wherever possible we had the tree crew do the work in the trees that were worth saving, particularly pruning work, very often very heavy pruning. The trees that were so badly damaged that they weren't worth trying to salvage we would try to get a contract with some local lumberman to cut down those trees and salvage the lumber, with a return to the federal government where possible. Sometimes trees were partially uprooted and threatened buildings or utilities or other improvements of value. We would have the tree crew take care of

situations like that even though the tree could not be salvaged. We had the confidence in our tree crew to be able to do it safely and without damage. We didn't have the confidence in outside outfits to do this.

Herbert Evison: I can't even remember the name of the man who headed that tree crew for so long, but he struck me as a very competent person.

Fred Arnold: Barney Kolb.

Herbert Evison: Yes, he not only was apparently a competent person, but he was pretty articulate. I remember him having described orally and then having written for me a pretty good account of the operation of this crew.

Fred Arnold: Yes, Barney was a very capable, competent foreman for that crew and along with it a fine fellow. He's still on the staff of the Northeast Region.

Herbert Evison: Oh, is he?

Fred Arnold: Yes. Barney is not just a tree man. He's a graduate forester. He also took some time after he had been engaged as foreman of the tree crew to do some graduate work in pathology and entomology at Cornell University. He did not get a graduate degree, but he felt the need for more knowledge and capability in those fields.

Herbert Evison: Speaking of the tree crew reminds me that you failed to mention one product of a forester that was actually a CCC project and that's the tree preservation series. We mentioned it, but I don't think you've said anything on tape about it.

Fred Arnold: No I didn't mention A. Robert Thompson, Bob Thompson as we called him. Bob was recruited by John Coffman in 1934. I had suggested Bob's name to John Coffman having known him at the New York State College of Forestry and having worked under him at the Maurice L. Condon Tree Expert Company, which I had previously mentioned. Knowing of Bob's very good background in this field and when with the reorganization of 1933 the national cemeteries and many national military parks and historical areas were transferred to the administration of the Department of the Interior from the War Department, the National Park Service, or what was then the Office of National Parks, Buildings and Reservations, found itself suddenly saddled with a big program of tree work, a situation requiring high-quality capability in this field.

Herbert Evison: And was work which in the circumstances would almost certainly be largely performed by CCC people.

Fred Arnold: Yes. So, Bob Thompson was employed, and his specialty was tree preservation as it was then called. As you mentioned, he, seeing the need, prepared a series of so-called tree preservation bulletins. There was one on

pruning, one on rope knots and climbing, tree feeding, tree spraying, tree bracing, moving and transplanting. There may have been one other. I think that's about it, don't you?

Herbert Evison: Yes.

Fred Arnold: Unfortunately, Bob died before his work with the Service was completed. These tree preservation bulletins are still available from the Superintendent of Documents and they have made a tremendous contribution to the know-how and expertise of tree care work.

Herbert Evison: I might add this, that those bulletins were prepared primarily as teaching materials for CCC crews.

Fred Arnold: That is right.

Herbert Evison: But if I remember rightly, they were hardly off the press before park people and people who were responsible for the protection of trees all over the United States began buying them. And they still buy the very slightly revised items in that tree series. They are in a nicer looking format than was possible to bring them out in in Bob Thompson's day, but essentially those bulletins are still Bob Thompson's work.

Fred Arnold: Yes, I agree with that, Herb, fully. Two other men who played quite a part, particularly in the earlier development of the tree preservation program in the Service, were Jerry Baker, who headed up the tree crew just before the war, when it had to be discontinued, and Jim Rosenberger, who was a CCC foreman in Vicksburg. That was his first assignment and he had had experience in this field. He trained and supervised tree crews at Vicksburg National Military Park and served as foreman of the traveling tree crew before the war also for a time.

Herbert Evison: I think it ought to be put on the record that this tree preservation work before the war was a CCC project always with men I think whose funds came from the CCC.

Fred Arnold: That's correct, the crew was on CCC funds.

Herbert Evison: Some of them were enrollees taken for this job but directed by highly skilled tree preservation people. I'm glad you brought in those names. I think they're a nice part of the history of Park Service concern for trees as trees rather than as trees as parts of forests. I wonder if you think of any other brief item that we might have before I turn this tape.

Fred Arnold: Another item in the postwar period that I had a hand in, and I'm very pleased that I did and with the outcome of it, was working with then Superintendent Dan Beard of Everglades National Park, in the development of a program for the preservation and perpetuation of the

pine type along Pine Key. When we set out to administer and protect Everglades National Park one of our big objectives was to control fires to the fullest extent possible in pine land as well as in grassland. Dan was keen enough to observe that with protection the pine land was losing its character. The ecological nature of it was being upset.

(Tape #44 - Side 2)

Fred Arnold:

Dan observed the so-called rough, the understory of the broadleaf evergreens in the pine stands, was developing more dense and towering height. The saw palmetto was becoming more heavily developed. Some of the species of wildlife typical of the pine land were disappearing presumably moving somewhere else or even perhaps in some cases dying. The whole picture of the South Florida slash pine ecological association was passing away with the development of this so-called rough, the high understory of primarily broadleaf evergreen species. And this was as a result of fire exclusion, or attempts at it, where fires had gotten away and covered some area before we got them under control, and some did. The pine land was retaining its natural characteristics along with the whole ecological association of plants and animals. So, Dan and I discussed this and we observed it on my various trips down there. I agreed that something should be done about it and we worked up a proposal on it and Connie Wirth approved it on an experimental basis. It amounted to making use of existing former woods roads, roads that had been built and used before the park was established and firebreaks that we had built with bulldozers in the control of fires subsequent to park protection. We used the combination of those roads and firebreaks to define prescribed burning units. And we worked out a system of burning these blocks by approximately five-year intervals. We used the roads surrounding the respective blocks to contain the intentionally set fire within the blocks. And we would select the time of the year when lightning fires normally occurred, which was the natural time for fires in the pine land, a time when the weather conditions were favorable for crews to control fires and when the fires wouldn't burn so hot that they would do undue damage to the pine. Now the South Florida slash pine is a very highly resistant species to fire, unusually so. And this is why that even in some of those burning blocks where the rough had built up a tremendous amount of fuel, most of the pines when we started this burning program survived. So under the experimental systematic burning we year by year burned one or two blocks. And as of the time I retired all of the blocks had been burned at least once and the system was working. I know there's abundant evidence and I think there's much valid argument and good sense to consider applying a similar system if a practicable means of carrying it out, a methodology, and so forth, can be worked out, to apply a similar

thing to the grassland because with fire exclusion some undesirable things ecologically speaking are happening there. Willows are coming in. Tree species are entering the picture where they don't belong, didn't occur, where periodic natural or Indian-set fires occurred before the days of the park establishment, or in more recent years before park establishment by white people. The open glade is perhaps losing its former character.

Herbert Evison: Because of lack of fires?

Fred Arnold: Because of fire exclusion.

Herbert Evison: I would suppose that once that situation had gone on for a very long time that it would be very difficult to bring it back because of the fact you'd almost certainly get an undesirably intense fire.

Fred Arnold: This is one of the things that you'd have to seek to accomplish to initiate this. In the tall saw grass stand, for example, you'd have a tremendous buildup of fuel, but I'm certain that if the burning time were selected in proper relation to the season of year and to the height of the surface water and the weather conditions, that even there it could be done.

Herbert Evison: Do it without destroying the soil itself.

Fred Arnold: Right. You see we can burn not only the saw grass stands, but some of the other grass types can be burned with standing water. The fire can burn right over the surface of the water.

Herbert Evison: By the heat.

Fred Arnold: The water would protect the tremendous animal and plant associations occurring within. One thing I might mention further, referring to my tenure following the discontinuance of the CCC and other emergency programs, is that in the beginning of my work here in the Regional Office my work was concentrated largely upon forest protection, forestry, tree maintenance, and related matters. Gradually, as the years passed by, my sphere of responsibilities and my functions were broadened, first to include employee and visitor safety. I was chairman of the Regional Office safety committee for a good many years and gradually included wildlife management, and so on, until in my last years I was concerned with all of the functions and responsibilities of the rangers in the parks, which the title of Regional Chief, Division of Resource Management and Visitor Protection is intended to imply and which the previous titles, Regional Chief of Ranger Activities and Regional Chief of Ranger Services signified also. Whereas in my earlier years here in Richmond I was concerned with the responsibilities in my sphere of activities of the superintendents of the areas administered, the superintendents of the CCC camps and the supervisory personnel under them and with the passing out

of the CCC program, gradually I became more and more concerned with and I dealt more and more with the superintendents and the chief rangers and the specialists in wildlife management and the specialists in safety, and so forth, in the parks.

Herbert Evison: Do you feel that in recent years there has been generally better wildlife management, more expert attention given to the wildlife of the parks?

Fred Arnold: Herb, I know the concept of wildlife and place of various wildlife species in the parks has been greatly enlightened during the period from the '30's to the '60's. This is not only limited to people working in the Service, but people in general have a more enlightened understanding of wildlife. There isn't the emphasis upon predator control for example, that there used to be. You mentioned, with respect to forest trees, weed species. In the '30's too many people and many so-called sportsmen thought all hawks and all coyotes and wolves should be killed, all predators should be killed. They had no place in the picture. Well we've come a long, long way in the concept of our Service people. And as I say, people outside the parks have too in that respect. We've come a long, long way in our understanding of what the respective species of wildlife need in relation to habitat in order to survive and thrive and reproduce. I daresay that even at the close of CCC we were probably still doing some of the things I would say in ignorance rather than by intent that were detrimental to wildlife which we wouldn't think of doing now, or we certainly would recommend against if we saw it happening. Yes, I think there's been a tremendous change for the better in our understanding of wildlife and our protection of wildlife in creating if not maintaining or perpetuating conditions favorable to the various species native to an area.

Herbert Evison: You remember, I think it was in 1961, the Director, then Conrad L. Wirth, opened up the subject of the possible desirability of permitting hunters to participate in necessary reductions of certain overabundant species of wildlife, deer, elk, in some places I guess bear, but principally deer and elk. You remember that he canvassed a large number of people both in and outside of the Service as to whether they considered that desirable. And he got quite a variety of answers to it, a number of people thought it would be a good idea, a number of people not only didn't think it would be a good idea but were strongly opposed to it. I wonder if you, on the basis of your responsibilities in the wildlife field, would care to venture an opinion about hunting as a desirable or undesirable method of wildlife control as far as the parks are concerned.

Fred Arnold: Before I would agree to such a method, I would rather try what we did in Smokies and also in Mammoth Cave in wildlife management. In Smokies we had and still have nuisance bears, panhandlers along the highways,

bears which eat campers' food and tear up their tents and even get into their cars, and so forth. The first approach was to trap the bears and move them to more remote areas and release them, but too many of these nuisance bears found their way back to the campground road.

Herbert Evison: They knew the country.

Fred Arnold: Right. Then the tranquilizer gun came into the picture and that was used to help move them and we were still getting roving bears. So we worked out, and this was something that I was happy I had a part in, an arrangement with the State of Tennessee on the one side and the State of North Carolina on the other, for them to take these nuisance bears, which we trapped along the road and in campgrounds and they would use them for restocking. They would remove them a good distance from the park on the respective sides, whichever state it was, and release them. As of my last information on the subject it was working all right. Then in Mammoth Cave for years the deer herd had been building up, largely as a result of abandonment of agriculture, well more as a result of discontinuing hunting with the establishment of the park. An overabundance of deer had developed quite a number of years before we took steps to do something about it. There, with the cooperation of the State of Kentucky and with the help of Fish and Wildlife Service people, we embarked upon a trapping program. We would determine in advance how many deer we would strive to live-trap in a given year. Then with the cooperation of the State of Kentucky fish and game people we would turn over the deer once trapped to them and they would take the deer and release them on state lands well beyond the park. Now some years we didn't attain the number that we aimed to and in that respect it wasn't an entirely successful program. However, my own thought would be to pursue this to the point that it's proven ineffective before I went to a controlled hunting proposition. If in any area in the East, the Service should resort to controlled hunting I would think it very important to be strongly and strictly selective in the kind of people we allow to do this.

Herbert Evison: Would you extend that also to being highly selective the kind of animal they could kill?

Fred Arnold: Absolutely. It would have to be related to the management's program for the species under consideration.

Herbert Evison: I was thinking of the hunter's desire, if he's killing elk for instance, or deer, to kill the biggest and finest deer with the biggest rack who presumably would also be the best of the male breeding stock.

Fred Arnold: Right. This would have to be defined in the wildlife management plan and the kind of animal to be taken, not only as to species, but roughly as to age

and condition, should be very much a part of the program. Now we shouldn't leave this subject of wildlife management I think, Herb, without mentioning the controlled hunting that the Service has conducted at Cape Hatteras National Seashore for 12 to 15 years now. This, of course, is in accordance with the legislation establishing that error which requires that public hunting shall be permitted. So far it has been construed to be confined to waterfowl hunting. Up until the time I retired there had been some pressures to include rabbit and other species than waterfowl, but it had been confined rather successfully to waterfowl. Then, of course, there was the annual fox hunt that that Nags Head people sponsored which overflowed onto Cape Hatteras Seashore land. The hounds were turned loose to run down the foxes. In addition to running down the foxes they ran down rabbits, raccoons and other species as well and also to the disturbance of visitors in the area. There were inhumane aspects of it, aspects which as Service people we shouldn't tolerate. A very strong effort was made with quite some success to stop it a few years ago, but I understand that it has gotten out of hand again.

Herbert Evison: I hadn't been aware of that before. Of course, it was brought to my attention not very long ago that if Connie Wirth had decided the other way than what he did, that is, that he was going to allow hunting on national parks, he could not legally have done so because there's this international agreement, it's hemispheric, that hunting shall not be permitted on national parks. In other words, it's virtually a treaty requirement that would have prevented him making that decision even if he had wanted to. Were you aware of that?

Fred Arnold: Yes. I assume that there was some hope in making the proposal, or perhaps expectation, that an exception could be obtained in that instance.

Herbert Evison: There would have been an awful lot of countries that would have had to give their consent to this violation of a treaty stipulation.

Fred Arnold: The legislation enacted I think in 1969 protecting rare and vanishing species and the interstate commerce in them and the international commerce in them with other countries has been a tremendous factor in protection of the alligator and the birds in Everglades, the birds which nest in rookeries in Everglades, particularly the plumage birds which had been so heavily disseminated long before the park was established.

Herbert Evison: Fred, while we had this recorder turned off you raised the subject of hobbies, which I took to mean that you had one. I would like to know what it is, and I think it would be interesting to put it on this tape.

Fred Arnold: Now that I'm retired, Herb, I'm very happy to have several hobbies. My wife and I like to travel, and we've done some rather extensive traveling in

foreign countries. We're not intentionally or indefinitely passing up further travel in Continental United States. We're saving that for the time when we'll not be as vigorous and conduct our foreign trips while we're vigorous enough to take it so to speak. We plan this year to go to Alaska and then after that to some Mediterranean countries. I do a lot of vegetable gardening. I let Violet take care of the flower borders which she loves to do. I do quite a lot of fishing, both salt and freshwater fishing, also hunting, mostly deer and squirrel hunting. Although I don't classify myself as an expert I am interested in photography and always bring home a group of slides from our various trips abroad. One thing I would like to mention is that many people ask me, and I think properly so, how come I've been in Richmond, in one place so long. Herb, this was not by plan or intent. I had indicated on my various career plans places that I would like to be transferred. And do you know, except the time when I was offered the transfer from the Washington Office to Richmond, which I accepted gladly, I was never offered another transfer and consequently I had none to turn down. I started in my career in the National Park Service at the wrong end. I am sure this should be admitted. I started at the top and got part way down instead of the conventional way of starting out in the field and then working on up through the regional to the Washington situation. However, this is not to say that I have any regrets as to my career. There were times during this period since '36 when I would have welcomed opportunities to transfer. Even on my more recent career plan papers it shows Alaska as an area that I would be willing to accept transfer to, among others. Another thing is that through my years in the Service I retained some rather old-fashioned work habits. I never developed the coffee break habit. I think some of my good friends thought that I didn't like to associate with them over a cup of coffee, but I never developed the desire for the cup of coffee in the morning and in the afternoon. So consequently I never went in for it. Another thing is that I never applied for or received a payment for any overtime work, and I put in many, many hours of overtime on fires. For example, the fire on the Mount Desert Island, the one which burned much of Bar Harbor, Maine and a large portion of Acadia National Park, I put in between 200 and 300 hours of overtime on that fire, for which I never applied for payment.

Herbert Evison: Which reminds me that very shortly after you came down to the Region you went out on a tremendous big fire in another region, which was Isle Royale didn't you?

Fred Arnold: That's right.

Herbert Evison: I imagine you ran up some overtime there too.

Fred Arnold: It would be difficult to be on a large fire without running up overtime especially in a supervisory capacity. I had been on many large fires in Everglades, also in Smokies, Shenandoah and Blue Ridge Parkway. These involved lots of overtime. This is not to say either, Herb, that I thought I should have been paid. If it had been tendered, me I would not have accepted it because as I say this is one of my old-fashioned working habits. We used to consider that a salaried person shouldn't be interested or entitled to overtime. My job was my job whether it was on a 40-hour work week basis or something more than that.

Herbert Evison: Apparently, we have reached the end of the taping, Fred. I don't want to end it though without telling you this, that I think I got some wonderful stuff on tape from you today. It's been not only a pleasure to sit here and get it on tape, but in the times when we weren't taping it's been just wonderful to sit and talk with you about things that we're both interested in.

Fred Arnold: Thank you, Herb. If you have enjoyed it, I think I have even more.

END OF TAPE