Oral History Cover Sheet

Name: Marcus C. Nelson

Date of Interview: July 15, 1988

Interviewer: Kevin Kilcullen

Approximate years worked for Fish and Wildlife Service: 1944-?

Offices and Field Stations Worked, Positions Held: Student positions: Medicine Lake National Refuge, Montana; at Bear River Research Station, Utah; Permanent positions: Bear River National Wildlife Refuge, Utah; sent to Oklahoma and Texas to help establish Tishomingo National Wildlife Refuge and Hagerman National Wildlife Refuge; Refuge Manager at Hagerman National Wildlife Refuge, Texas; Regional Assistant Supervisor for Region 2, Albuquerque, New Mexico; Regional Supervisor for Region 2, Albuquerque, New Mexico; Chief of the Refuge Division, Washington D.C

Most Important Projects: establishing Tishomingo and Hagerman National Wildlife Refuges; writing a New Refuge Manual with Forrest Carpenter

Colleagues and Mentors: Dr. D.I. Rasmussen (Director of the Wildlife Unit at Utah State College), Kenneth MacDonald, Forrest Carpenter, Phil Dupont, J. Clark Salyer II, Dick Griffith, Harvey Nelson, Lynn Greenwalt, Harold Regan, Bill Ackernecht, Cecil Williams, E.R. Kalmbach, George Barclay

Most Important Issues: waterfowl botulism outbreak during his summer work at Medicine Lake National Wildlife Refuge; opposition to Tishomingo National Wildlife Refuge

Brief Summary of Interview: Mr. Nelson discusses being a student hire for the Fish and Wildlife Service and working a number of summers before graduating and obtaining full-time work permanent work with the Fish and Wildlife Service after working four years with the Utah Fish and Game Department. He discusses the various refuges and offices he worked throughout this career, major projects he worked on including establishing two refuges and writing a new refuge manual with Forrest Carpenter. He shares several stories of J. Clark Salyer II, being audited by the Civil Service while a Regional Supervisor in Albuquerque, and talks some about Alaska Native Claims Settlement Act and Alaska Native Interest Land Conservation Act.

Keywords: employee, history, biography, wildlife refuges, management, work of the Service, waterfowl, legislation, policies, Alaska Native Interest Land Conservation Act, Alaska Native Claims Settlement Act, diseases, wildlife management

Kevin: If you could state your name and we'll start the discussion. Give a little background on you education and your career with the Fish and Wildlife Service.

Marcus: My name is Marcus C. Nelson. I was born and raised in Brigham, Utah. I attended college at Utah State University--it was called Utah State College then. The largest number of students we had while I was there was 3,000 and we thought that was a lot. I got my B.S. degree there.

I worked with the Wildlife Research Unit which was located at Utah State. It was headed up in those days by Dr. D.I. Rasmussen who was pretty well known in his field. He later became Chief of Wildlife for the Forest Service here in Washington.

I started working for the Fish and Wildlife Service in the summer or 1937 while still in school. I graduated in 1938 and continued graduate work for a couple of years after that, until I could find a job. In the summer of 1937, as a student aide I worked on Medicine Lake Refuge in Montana.

At Medicine Lake Refuge in the summer of 1937, which was during the drought years up there, they had their first ever waterfowl botulism outbreak. I was a little familiar with botulism, western duck sickness, having lived in the vicinity of Bear River Refuge all my life. All we knew to do then was to put the ducks on fresh water. That was the first time I observed mallards that had to learn to eat corn. The penned up birds that we had brought in sick with botulism were fed corn and they wouldn't eat it. They soon learned and eventually they would hit it as soon as we threw it in.

I was a student intern on a WAE base at the Bear River Research Station in Utah from '38 through '39. I worked there full-time in the summers and part-time during the school season. I worked at Bear River for Cecil Williams, research biologist, on this part-time basis. For a couple of summers I worked at Bear River Refuge for the Denver Research Lab, under its director Mr. E.R. Kalmbach. He was the man who discovered that clostridium botulinum was the bacterial disease responsible for "western duck sickness". He isolated the botulism bacteria in waterfowl way back in the early 1900's.

Kalmbach told me a story about finding the clostridium botulinum bacteria. This is kind of a unique story, and only a few of us know it, it's never been published. I got to know Kalmbach pretty well working for him at Bear River Refuge. He used to come

over from Denver. I was doing waterfowl nesting studies for him that first several years of my career, but Kalmbach used to come over and go out in the field with me a couple of times in the summer. He would get out and let the mosquitoes eat him--and believe me there were mosquitoes! Would you believe we wore head nets and gloves and leather jackets in the summer!

He told me this story of his discovery of botulism. He had been assigned as a biologist to a crew to work on "western duck sickness" of course, they had been "posting" ducks and trying to find something concrete and the disease. In 1913 it killed more than 300,000 ducks on Bear River Marshes alone. For a number of years it was taking upwards of 100,000. You could walk on dead ducks. There are old pictures of that happening. But he was working in the laboratory and had put some liver from dead ducks in a petri dish and had put them on a window sill and forgotten about them. As he told me, they finally began to smell enough to get his attention. They had putrefied. He thought, well what the heck. So, he took some of the liquid and vaccinated a duck with it. The duck got sick. This gave him a whole new clue. They went through their laboratory procedures and produced a refined toxin and began to experiment with ducks, and found that it was the lethal factor that had been responsible for the loss of the ducks. Until that time they had thought it was slat water poisoning or selenium or something like that. In fact, Bear River Refuge was built on a contour to try and separate the fresh water from the salt. The Bear River Refuge was authorized by Congress to try to overcome the botulism problem in the Bear River Bay. Kalmbach laughed about it then, but it was a very important discovery. They soon isolated the bacteria, Clostridium botulinum, a food poison. Well I was working for research with Cecil Williams who was head of Bear River Research Lab, we travelled. We saw all the refuges in southern Idaho, all of them in Utah, we went to Malheur Refuge in Oregon, and a number of other places. Everything that was within two or three days travel in a "Ford/60" with a 30 hp engine, we went to see. I didn't have any per diem, but he did, so we'd share his per diem to eat and we'd sleep in sleeping bags out in the field beside the road while we were traveling.

We had a CC Camp at Bear River Refuge in those days and we had a crew assigned to the lab. We would take some of those boys along with us from time to time, to give them a little R&R away from the CC Camp.

I was still going to school in 1938 & '39 and was working with Dr. D.I. Rasmussen, Director of the Wildlife Research Unit at Utah State College. He had been trying to sell the State of Utah on establishing a waterfowl research project under the newly formed Pittman-Robertson section of the Utah Game and Fish Department. The Pittman-Robertson Act had only passed a few years before, but most of the states that got financing under the Pittman-Robertson Act had gone into big game projects. The state of Utah was influenced to set up their first research project on migratory birds. It was the fourth in the United States. I helped draft the project, and subsequently went to work for the State of Utah Fish and Game Department to carry it out, starting in 1940. My job was doing research on the state's six migratory bird refuges. Some were refuges and some were called areas. They were protected and developed and provided with water. I worked for the State of Utah for four years doing research on waterfowl and various other wildlife on the six waterfowl refuges, culminating in the development of management plans for those areas. After completing management plans for the state areas, I accepted a job with the Fish and Wildlife Service and my first station was Bear River Refuge in Utah. I went to work there on July 1, 1944.

I started out then with federal wildlife refuges at Bear River Refuge in 1944. I was familiar with the refuge because I had been working there part-time in research for a number of years. The duck nesting studies that I had done in previous summers were all turned over to the refuge and used for their records and information.

One thing we did turn up...We did have a pretty terrific predator loss on Bear River Refuge and our year study there in the summer pretty well proved that it was skunks that were doing it. The high river banks within the flooded units were great concentration areas for ducks and skunks. I recall my earlier study there, I found a concentration of 43 duck nests on a quarter of an acre. They were so close you could hardly move among them without stepping on them. Bear River Refuge and the rest of northern Utah was a fantastic nesting area in those days. The high river bank with all the flooded marshes around them were a real concentration for the upland nesting birds, and then of course, the we marshes were full of red heads. It was very rare that you'd find a canvas back. Their outstanding nester was the gadwall. There were a lot of red heads in the Great Basin in those days. I hadn't been at Bear River Refuge very long when I got a

request from Washington to go down to Oklahoma and Texas to Lake Texoma where they were trying to establish two new waterfowl refuges on the Texas and Oklahoma arms of Lake Texoma. So, although I was barely moved in, I lived on the refuge there, and the word came down from Mr. Salyer who at that time I'd never met, here in Washington to pack my bags and plan to go for 2 or 3 months to Oklahoma and Texas. Well, I was quite willing to do that because it was a new experience for me and beside, Mr. Salyer was the Chief of Refuges.

Kevin: Were you married at the time?

Marcus: Yes, I was married.

Kevin: And how did your wife adjust to all of this moving around?

Marcus: I was married and had a baby daughter as a matter of fact, she couldn't have been more than a year or a year and a half old at that time. Both my wife's family and my family were nearby and my wife stayed behind with them while I was gone. I was at Tishomingo, Oklahoma and Dennison, Texas for the two proposed refuges. We set up grazing permits and talked with people. We had trouble getting the Tishomingo Refuge. The local state representative didn't want to let us have it. So we politicked around. For guys that knew as little as I did--I had to rely on the regional supervisor, Kenneth MacDonald. He was the regional supervisor at Albuquerque at that time. My detail to Oklahoma and Texas was a real experience because I had never in that country. I didn't know how humid it was; I didn't know about chiggers.

Kevin: Had you never seen chiggers before?

Marcus: I had never seen chiggers and my first experience was a horrendous one. I was staying in a hotel. I had been out in grass, talking to farmers in the vicinity of the proposed Hagerman Refuge out in the Black Lands of North Texas, and I didn't know they were full of chiggers. I hadn't believed a little bug like that could give you that

much trouble. I came into the hotel that night, took a shower, and went to bed and in the middle of the evening, I started itching. By midnight I was up and covered with welts from my belt down. I thought I was going through something; I thought I had caught a horrible disease. I couldn't believe it was chiggers. Anyway, be that as it may, I learned about chiggers. I later learned how to live with them some but I never learned how to avoid them completely.

I spent two terms down there. After my first three months, I went back to work on Bear River Refuge and was glad to get back to family, the Bear River Marshes, and away from chiggers.

I had no sooner gotten back home when they called and wanted to go down again. So, I did. This time the Fish and Wildlife Service was trying to actually set up the new refuges, and get things going. But, they were still having difficulties with the local congressman and others on the Tishomingo, Oklahoma side of the lake. We set up grazing permits and talked with farmland owners, and even through the Tishomingo Refuge hadn't been really processed yet, we proceeded on the basis that it would be. The Hagerman Refuge as okay and nothing was impeding it becoming reality. Finally someone came out form Washington and sat down with the governor and the Corps of Engineers, whose property it was, and rapped out a decision. The decision was that Tishomingo would be a refuge.

Interesting thing on Tishomingo. While we were playing politics, getting data from Washington, and calling and calling the regional office, the politicians where were trying to keep us from having a refuge always knew what we were going to do. It wasn't until a year or two later that we found out that the woman who operated the telephone exchange was a sister-in-law of the politician who was keeping us out. There was never a phone call went through that office that wasn't monitored.

I stayed at Bear River Refuge just long enough to get packed and in 1945 in the fall, I was appointed refuge manager at Hagerman Refuge and proceeded to move down there. We carved it out of the woods. It was a conglomerate of small parcels of land that we had to bring into one management system.

The Corps of Engineers established an economic use with the farmers and it fit pretty well with the FWS priorities of that time.

We had on that refuge something like 42 individual units, which we permitted former owner were who living in the vicinity to use for farming, grazing, and other things. We fenced and posted the boundary and started building small impoundments above the lake.

We built a service building and an oil house. Two years later we got a little more money and built an equipment building, and several years later, a residence. Of course, the residence was completed after I had moved.

Hagerman Refuge was quite an experience. It was an instant success and a terrific place for snow geese and ducks. I stayed at Hagerman Refuge for six years with some details elsewhere.

In 1950 I was asked by Regional Supervisor George Barclay about going into the Albuquerque Regional Office as his assistant. My only concern was at that time was that I was a bit younger than a lot of the refuges managers that I would be supervising. I went into the regional office in Albuquerque on January 2, 1951 and became regional assistant for George Barclay who had been supervisor for several years there in Albuquerque.

Barclay decided to first acquaint me with the rest of the refuges that I hadn't seen in the region. He and I took off in our car--in those days you used a government car or train. We had a Pontiac and we would drive all the way to the Lower Valley of Texas. He and I would leave the office together and let our secretary run the office. She would call us or we would call her daily, and she held down the office while we were gone for a week or more at a time until he had shown me completely around the region. In those days, Region 2 had eight southwestern states. We had all the refuges from Jackson, Wyoming to the Texas coast. It took us a while to see them all. In those days things were done mostly by letter so things went along smoothly because you had time to work out problems. That also gave you opportunities to be out of the office once in a while.

So I got acquainted with the rest of the refuges in Region 2. I hadn't seen many of them up to then. I continued to work with older refuge managers. Most of them were older than I was but we got along fine because they recognized the fact that I had had quite a lot of experience in migratory birds particularly and in wildlife refuges elsewhere. Then, too, I took the position of trying to learn from these well-educated, older refuge managers who had been doing that for quite a while. I didn't have any problem working

from the level of the position I was in with the various other refuge managers around the region. I considered it a learning experience for me.

Things began to grow in responsibility in the region. They overcame the problem of transportation. They cleared people for using airplanes. They cleared the use of the telephone. Things began to hum and immediately the stepped up timing changed. It became necessary, too, for Fish and Wildlife and Refuges to recognize a great deal broader scope of laws and regulations because new things had come into the picture. The Duck Stamp Act had been passed in the '30's; this brought about a lot of new things. This brought about a requirement and a responsibility for refuge selection at regional level. We had to add people for this purpose. With increased regulatory procedures an increased number of people were necessary.

The River Basin Program became very active and we were involved with them. Refuge selection under the Coordination Act became into being. We had to keep adding people because or responsibilities seemed to grow and multiply. The paperwork and the regulatory devices also multiplied. In the '50's and early '60's in the regional office, we used to go out and recruit people from the schools. Later on, this was taken over by administration.

Several of the early wildlife management schools were in our region, including Colorado State, Utah State, and Arizona State. Civil Service examinations were of the unassembled type where a person was graded on basis of experience and education, so we could go out and recruit early. We were pretty successful at getting what we thought were some of the best qualified people.

Kevin: How did that differ from back in the '30's, '40's, and early '50's in the types of people that were recruited? How were things done then and who were the types of employees? What were their backgrounds versus going to universities and actually going into the departments and trying to recruit the kind of people with wildlife backgrounds? Was there a big difference?

Marcus: Do you mean, was it done differently before we started?

Kevin: Yes, how was it different?

Marcus: A lot of the recruiting was done in the early days by Washington personnel because many of the regions had only small or no regional office supervisory people. This will give you some idea, my supervisor was a graduate engineer form the University of Idaho. J. Clark Salyer's assistant, Krummes, was a graduate of the University of Idaho of Forestry. So, you've got an engineer and a forester who later became--Krummes later became a regional director. The people in reality were either engineers or in many cases foresters. There weren't wildlife managers with a college degree in those days. What brought this all about was, way back there in the '30's, after the passage of the Duck Stamp Act and after the great waterfowls low of the mid-30's, attention was given acquiring many lands for migratory birds. "Ding" Darling, the Director, obtained like \$10 million to buy land. They grabbed everybody they could find to set up realty teams to go out and buy these lands. A lot of them were people with forestry and engineering degrees because they had to survey land and do a lot of physical ground work. They had to select lands that were okay. They didn't get very many people in those early cadres who had a wildlife management background because wildlife management was just beginning in the '30's. Dick Griffith who succeeded Bill Krummes as Clark Salyer's assistant here in Washington is also a forestry major.

Kevin: Is there a point that you can remember when the schools started turning out more people with wildlife backgrounds, specifically in wildlife? Is there a date or a period that you can think of?

Marcus: Well, just about the year I started school. What brought that on, in a way, was some of the early pioneering in wildlife management schooling. Utah State started giving a degree about the same time I started college, probably in 1954.

Colorado State started giving degrees about that time. Arizona was a little bit later coming along. So, we got a lot of people from Utah State and Colorado State in Region 2 because those were the principle produces of early degrees in wildlife management. Also along about 1938 the Civil Service Commission started to require a

B.S. degree. Along in the drought years, the bad years of the '30's, I think the people of the United States began to realize that they had to do something about their resources. I know many of the students that I went to school with went into range management and were picked up and employed by BLM or the Forest Service. A lot of people flooded the schools too because the depression was on and there wasn't any work. Many of them went into the natural resources field.

It wasn't until 1936 that they held the first North American Wildlife Conference. The first one I went to was in 1943. It was held in Denver and there again you have to give credit to the school, again the unit leader gathered up a bunch of us--I was doing graduate work then--and talked up into paying our won way and got us special rates in Denver and we went to the Wildlife Conference.

Wildlife management as a field was very attractive. A lot of guys came in off the farm and went into wildlife management. Some people that I went to school with went back and took another year and went on into education because they couldn't find a job in wildlife management. All of a sudden you had more applicants than there were jobs. It hit us that far back. And that was one reason why I went back a couple of years. There was a high output from schools in say the late '30's and for some reason there was a freeze up in jobs. Then jobs began to open up in the field of wildlife management, particularly in refuges, during the war. So many people had been drafted and had gone into the armed services and at the same time there was quite an expansion that went on in wildlife refuges as a result of the \$10 million fund.

Kevin: Let's get off onto this point about World War II a little bit. During that period while the war was on, how did that affect the Fish and Wildlife Service and the refuge system? Were there any direct effects that you can think of that affected the direction that it took after the war?

Marcus: I don't think there was much effect on the refuge themselves. I know there must have been a few areas where military use may have infringed on refuges but not where I was. In the Great Basin area, there was no real problem, but there may have been in the West Coast area. Some of the game ranges were overlaid by military use that has

not yet gone away. Some refuges have been hard pressed to avoid being taken over by military.

Physically or any other way, I don't think there was much effect on the wildlife. Of course, after World War II, we were in an economic rebound that was fantastic. Inflation set in quickly. The cost of refuge management increased.

I worked in Albuquerque as assistant regional supervisor until 1963 and in 1963 my boss retired and went to work for the state of Colorado. Of course, I put in for his job. Washington decided that this would be a good time for me to come to Washington. We had a little problem over that, but it was finally decided that I would be given the supervisor job in Albuquerque.

I became the regional supervisor in 1963 and remained that until 1967 when I accepted an offer to come to Washington as Chief of the Refuge Division. But the job as supervisor in Albuquerque had gotten a whole lot more complicated by then. Comparted to two men and as secretary in 1951, we now had a staff of 15 men and about 5 women. Throughout the whole Fish and Wildlife Service that period marks a turning point in your freedom to conduct business at regional level.

Kevin: How so?

Marcus: Well the reason we had such a big staff is primarily because we had to check more things out in Washington. By then we had environmental impact statements. By the we had multiplicity of new regulatory requirements. All actions had become more complicated. I was in the job for several years, as supervisor of refuges in Albuquerque, where we got notification that Civil Service was going to audit us. They were going to audit a bunch of positions in the Albuquerque Regional Office and one of them was going to be mine. So at that time I was a GS 13. Well I had known that Region 3, Minneapolis, was seeking a GS 14 for their Regional Supervisor of Refuges at that time. It had been put on hold because the Civil Service came along to make an audit of my job along with the others. So Civil Service came along and they said, "Well, we can spend about two hours with you" and I told them, "Well, if you're going to learn about my job it probably should take longer than that." And they said, "Well, let's give it a whirl." So

they started asking questions. They had arrived right after lunch and they stayed until closing time and we'd just gotten started. So, they said, "Well, we'll come back tomorrow if it's okay." And they came back the next day and spent three or four hours with me again and even the third day a couple more hours before they got tired and I got tired and by then they had some idea of the ramifications of a refuge supervisor job. And I think frankly they didn't realize that our spectrum of responsibility was a broad as it was.

Anyway, to let you know how quickly things happen, it had been a couple of weeks since they had audited me and the Chief of Personnel from Washington Ted Krell was out there with them. He was making a tour of the regions and had gone on to Minneapolis. So I got a phone call from my counterpart in Minneapolis, and he said "Congratulations." I said "For what?" He said, "You broke the ice down there. We've just been told by Ted Krell that you're going to get boosted to a GS 14." I said, "You're kidding."

Well, of course, I raised some cain to find out why I hadn't been told in my own office and was told that it was not unusual to wait for more definite information. So that Civil Service audit broke the ice on GS 14's nationwide in the Regional Offices. I'm always amused when I think back that the auditors thought they could find out what I did in about two hours. But be that as it may, I saw things change from being pretty simple and probably too loose because there was so much responsibility and authority. There was so much authority given to the Regional Directors and Refuge Supervisors that Washington was sort of left out of what really happens and what it being done in the field. Then the controls on travel and communication, kept the Washington office in the dark. Let me give you a for instance on that. In 1959 Forrest Carpenter, who was then in Minneapolis, and I from Albuquerque were brought into Washington to write a new refuge manual.

Kevin: What was the explanation why that was needed?

Marcus: The old refuge manual was completely outdated. The comparison that I'm coming to is that Forrest Carpenter and I did stay here and we did write a new refuge

manual. It took us about six weeks straight through time and some Saturday and Sunday work but we did draft one. Phil Dupont coordinated all the chapters. The point I want to make is when we would go to other staff people here in the Washington and ask them what they thought about things was we started to move into the manual, we most often got "Hey you guys know what's going on out there. You're the ones who are aware of all the problems and all of the things you have to manipulate all the time at the field level. We don't know about that stuff."

And I think it was partly because there was a lack of easy communication. There was a lot of authority given to the field, the regional offices and the regional supervisors could do all kinds of things out there and Washington became more isolated. The chief in here, Salyer, was spending most of his time out in the field finding new refuges.

Dick Griffith was assistant to Salyer at the time we were in here in '59. Dick was newer and younger and had new ideas on a lot of things that we brought up. Carpenter and I were from two different realms and we locked horns a few times. Of course, the refuges types do disagree with each other and if you're from two different climates with two different kinds of supervisory administration, you tend to become a little bit provincial. Anyhow, Dick Griffith was from the east and he couldn't see the west either. So we all would lock horns and then we'd come to some agreement. And that's how the manual got done.

Kevin: When was the first refuge manual actually published, the one that you came into revise?

Marcus: Phil Dupont had a whole lot to do with the first manual already in use and I'm not sure who put it together but there was a refuge manual that had been together in the '30's.

Kevin: In the '30's was the first one then?

Marcus: That had to be the first one. I don't remember when it was done but in the late '30's and early '40's there was a refuge manual at Bear River Refuge.

Kevin: That was a national manual?

Marcus: It was a National Wildlife Refuge Manual in black binding about half the size of the one we wrote and we used that as something of a guide. Phil was the one who kept all the records, all the descriptive headings and everything proper because Carpenter and I weren't very good at that and he was, so he offered to do that for us. But we finally whipped one out and its stood until about 1990.

Kevin: You were in the Regional Office and then you came into Washington, and what year was that that you actually came into Washington?

Marcus: It was in 1967. Harvey Nelson, then Associate Director for Wildlife, called me on the phone and asked if I would consider coming in for the Chief's job.

I was a little more prone to accept coming into Washington then, partly because my family was grown and they were offering me a promotion rather than a lateral transfer.

I was pretty familiar with what went on in refuges because for years they had brought us in at least once a year. And we knew pretty well how things went and having spent six weeks working here in this office in Washington I was a little familiar with things.

I came in at the time when Greenwalt's program system was in effect and probably at its peak. A lot of the responsibility of the Division of Wildlife Refuges had been skimmed off, I felt, and taken up to program level. The program system as initially conceived was probably a whole lot better tool for the Director than it was for the Division. I felt, and I think many refuge people do still feel, that during that intense program system drill, the Refuge Division lost a whole lot of its visibility and a lot of its clout. In some ways it lost and in some ways it gained because there were refuge people at higher levels than in the division working in the programs.

The program system brought about a funding system which cost refuges. There was a high overhead and also the overhead of the area offices was a drain on funds.

Now, I realize form the outside it probably helped the Director a great deal and probably helped the Service and the Service's prospective as view from politicians and other people on the outside.

I was happy in the position here in Washington and when you come in from the region you always chafe a little bit at not having the authority that you had in the region. You come from a position where, sure, you had a Regional Director and under the system now an Associate for Wildlife, but where you lived through the process of being a Regional Supervisor going through a Regional Director who believes in you and says, "I'll sign it but you do it. Go ahead." And who turns you loose and then to come into Washington and find that you have several layers before you cans start calling your own shots. It's a bit of a shock but not something I was not prepared for or familiar with. But I enjoyed my tenure in here. I had the opportunity of seeing things from a new perspective and having a hand in getting answers out to help fight problems and encroachments from the outside.

During the period that I was here nearly everything that related to refuges by way of responses, Congressional and all that stuff was prepared here. I presume that may still be done. But that was the place where the Refuge Chief and the opportunity to get his licks in. The stuff he put out didn't always clear upstairs either in the Service or in the Department but at least he got a chance to say what he thought on paper. Many times I know we were conditioned by the questions or by direction but nonetheless the organization continued to move and to me the most important thing that has happened to Refuges is that it has been able to continue to grow.

At one time we were attempting to produce a slide show on wildlife refuges. It was finally accomplished but not as well as we originally envisioned it, but some of the P.R. people went to talk to leaders of conservation groups. One was Tom Kimball, then President of N.W.F. The question we asked them wall was, "What do you think the future of refuges should be?" We talked to five people, without exception they said refuges should continue to grow on into the future. Now this was done a number of years ago back in the '70's but they, without exception, said the future of refuges lies in continued expansion of the system because you're losing habitat on the one hand and

you'll never, if you get all you can, you'll never be able to compensate for what you're losing.

One thing I learned in Washington was that most conservation organizations love refuges. They might not like the way we manage them and they may not agree with our goals and objectives but in their way, they love refuges.

Kevin: ... Salver a little bit. Any observations or stories you might have on him?

Marcus: Yeah, I had quite a lot of contact with J. Clark Salyer in the time that I was working in refuges. Let me tell you a story that goes back even before I ever got into wildlife refuges. In the 1930's, while I was completing college and trying to find a job and working with Fish and Wildlife Service summers, a friend of mine was doing research on beaver-trout relations in Utah and I discovered that our mutual friend and advisor, Dr. Rasmussen, Unit Leader at that time, was not very happy with some work that had been published by Jake Clark Salyer II, at Michigan State on beaver-trout relations. His criticism was that J. Clark Salyer had not studied beaver-trout relations long enough and since he lived in Michigan and had studied in that area, he was not familiar with the Rocky Mountain area which was supposed to be the heart of the beaver country.

I had in early imprint from that and every time J. Clark Salyer's name was mentioned in my early years with the Service I tended to associate him with this attitude that I had been imprinted with from the research unit there. I guess I had an idea about Salyer before I ever met him and this persisted.

So that was one of my early recollections of the name and then my first direct contact came with Salyer when I was on my first job in Utah at the Bear River Refuge and when he asked for me to go do the special work down at Hagerman and Tishomingo. So I hadn't seen him yet and I guess I was a little bit on edge because I didn't think I was going to like him. Salyer was very blunt but deep down he had more of a jovial spirit than one would realize.

To begin with he was pretty demanding and he was pretty autocratic in the way he did things and yet there was a common saying about him that he had a habit of visiting

refuges and meeting the staff and telling people that when he got back he was going to get them raises. I encountered this at Aransas Refuge. He had gone to Aransas Refuge and told the maintenance foreman and one of the maintenance men that when he got back to Washington he would process their papers for a promotion. Salyer really would have made these commitments good if he could have because he loved the men at field level, but the personnel [word?] usually stymie them.

My first real close encounter with Salyer came soon after I was made refuge manager at Hagerman. My wife at the time was suffering the results of a brain operation and she was pretty helpless. We had a young daughter who was then three and a half or something like that and I did most of the cooking.

We were trying to get by and I was trying to get a refuge started at the same time. Well Salyer drove into town and I had been warned that he was coming so I thought "What the hell, I'll invite him out to the house." So I did. We had a ratty little apartment. We couldn't find much of anything in those days. That was about 1946. He accepted my invitation and came out. He had to hang around while I fried up a batch of chicken and made mashed potatoes and gravy and all that stuff and he loved it. We sat and talked and ate and talked and ate then he left.

I didn't hear from him for quite some time but unbeknownst to me, he had asked about when my daughter's birthday was. And on her birthday, on October 15th, without any fanfare here came a present from J. Clark Salyer to my daughter and I thought that old son of a gun has a heart after all. That sort of changed my opinion of J. Clark. Who would believe, without a word being said, that he would find out the birthday of my daughter and take the time to send her a present.

I had another experience on Hagerman while I was manager there. We had gotten things kind of started and underway and had fencing crews doing all sorts of things. We'd even plowed up a big old field and were planting stuff for geese in the fall. And I was on a plow, we had this one great big old open field that had a high hill in the middle of it. It shouldn't have been farmed really, but it had been before and we continued because there was a point that extended right out into the lake and it was ideal for attracting geese in the fall.

And I'm on a tractor plowing, glad to get out of the office for a while, and I see this black sedan drive up to the road that went by this field. It came from the direction where the road was closed. This sedan had crossed a shaky bridge, come down the road that was supposed to be closed, and here he is parked down there waving at me and I thought, "You turkey" and so he kept on demanding waving and I thought well you know, I had to go.

I didn't know who is was so I just raided the plow and ran over across the field to where the sedan was parked. When I got over closer to it I could see it was a government car. And who's standing out there but J.C. Salyer II. He's waving me down and when I turned the motor off he said, "What the hell are you doing out there on that plow?" And I said, "Well, you know I get tired of the office once in a while so I'm out there on the plow having fun." And he chuckled and said, "Get down off that damn thing and show me around this place."

So, although he had seen it before, he hadn't seen it since we'd got it under operation, and started planting and everything and he was such an interested character that I couldn't help but respond to him because he apparently liked me and although he was gross sometimes. I couldn't help but like him. He could be blatantly outspoken especially to waitresses and people like that. He was embarrassing once in a while. He usually visited Tishomingo Refuge before Hagerman and was always screaming for more money. I had already made up my mind I wasn't going to do that, so he would say, as he said now, "Well, how are things going?" And I'd say, "Fine, just great. Everything's fine." "You mean you don't need any money?" "Oh sure, we could use money but then we're having a lot of good times here without it. We're getting a lot of work done." And he loved it like that.

I took him all over the refuge in the pickup and we ended up driving up on top of this hill and I hadn't finished plowing yet. We drove up on the back of this ridge and out on top of this knoll and he looked all around and said, "There's nobody around is there?" And I said, "No, there's nobody here for miles around." And he urinated on top of this hill and said, "I christen thee Nelson's Point." Well coming from him, I could hardly believe it but it proves he had a lot of fun in him. He loved to give you "the business" but underneath he liked people and that was one experience that I enjoyed having with him.

I had several others. One that really got to me and I've told this to a lot of people, but while I was in the regional office in Albuquerque, we got a call from Salyer. I was assistant supervisor at the time. The call said that Salyer was proceeding from California to Texas and he would be in the lower valley on a certain day and he wanted someone to meet him down at Santa Ana Refuge in the lower valley of Texas and go over the refuges down there: Laguna Atascosa and Santa Ana and the proceed up to Aransas Refuge and he wanted to stay at Corpus Christi in the Princess Jean, which is an old hotel that he liked.

I was delegated to go down and I flew down and met him and we looked at the refuges. He had already been on Laguna Atascosa and so we didn't' spend much time. We looked at Santa Ana a little while and then headed north up through the King Ranch to Corpus Christi for the night. He insisted I drive. He was still driving the Pontiac that I'd seen before and when I got under the wheel on that thing I thought "Oh boy, I hope we make it to Corpus Christi." That car was reamed out, and the farther we went, the worse it got.

Well, you know it's 150 miles or better up from the Lower Valley and the farther we went, the worse that engine sounded. He wanted me to drive 'cause then he could sit back. Salyer was so big in the tummy he had a hard time behind the wheel. And he could look around and wave his arms while he talked, which is what he did. The closer we got to Corpus Christi, the more nervous I was. So I told him, "Look, we've got a bad car. Something is wrong with this engine," and I said, "Let me drop you off. I know there's a repair shop right around the corner from the Princess Jean, a General Motor's shop, a big one. So let me drop you off and if they're still open I'll get it in there and maybe we can get it fixed. While they're fixing the car we'll have Arkansas Refuge come pick us up."

So he said fine and I dropped him off and went over to the garage and talked the manager into looking at the Pontiac. The guy said, "Well, you know it sounds like everything's wrong with it. I can't tell you offhand but we're going to have to tear this motor down a little bit before we can give you and kind of analysis." So, it being in the afternoon I said, "Well, okay, I'll arrange for other transportation and I'll be over here in the morning."

They tore that engine down and the cylinder walls were scarred. The wrist pins were worn out. The bearings were shot and they developed a theory as to what had happened. Sometime, Slayer had had that car overhauled. The only thing the mechanic could tell me was that they must have put undersized rings in it. The "blow by" on the rings and the expanded pistons had heated and scarred the cylinders till some of them had dragged so hard they knocked out the wrist pins and the bearings. They had to rebuild that whole motor, but they did it in two days while we were being chauffeured around the by Arkansas Refuge crew.

When Salyer got ready to go, the car was ready to go. And he took off on his own and left me to catch a flight back to Corpus Christi to go home but afterwards...the next time I saw him it was at a meeting and he said, "I want to introduce you to the best damn mechanic we have in Refuges. It's Marc Nelson." And so from then on he said, "You ain't much of a refuge manager but you're a damn good mechanic."

I chided him one time after he told me how long it took him to go somewhere in Oklahoma and I mentally figured out, because I knew how far it was that he had to be doing 75 or 80 and I said, "How about the 35 mile speed limit?" This was during the period when that was on, and he said, "Oh hell, I just use that as a coefficient."

Kevin: Based on your discussion with him when you met with him, can you just briefly describe his concept and his direction of where he thought the National Wildlife Refuge System should be going? What was his concept, his overall....?

Marcus: I don't think there was any question that Salyer felt the Refuge System was the most important thing in the world for wildlife in the United States. His great objective was to see things happen. He hated the doldrums. He hated not to be busy himself and he wanted to be out in front and he usually was. He was out in front of his whole Washington office and I'm talking about the Director and his staff 'cause he wasn't usually in trouble with the Directorate, because he was out making public statements, meeting the public, and making commitments. And of course, that always creates a little friction in a government operation. He was irrepressible.

He was a hard working guy for all his size. He loved to eat as a lot of us do but I remember him coming into Oklahoma one time and I met him somewhere. I guess I met him in Kansas and we came down to view the new refuges in Kansas. As we came down through a little town in Oklahoma he said, "Let's stop here..." In the middle of the afternoon and it was hot and he said, "Let's stop here. There's a farmer's market right over here." I wasn't very familiar with it but we went over and he bought a watermelon, great big one. I figured we were going to put it in the car and take it with us and go somewhere. But he said, "No, let's see if there aren't some park benches around here somewhere where we can sit down and eat this thing."

Well, there was only him and me and I thought that was a hell of a big watermelon for you and me, sir. We couldn't find a park bench or anything. It was just a little town, I've forgotten the name of it but in some of those towns they have real high sidewalks where the curb is about knee high and we found a deserted place there right on Main Street and he carried a pocket knife with him and he fished it out and cut that melon open and we sat and ate the best of it. I couldn't believe it, right there in the middle of town. But he was given to that spontaneity and it showed in many things. He couldn't resist offering promotions. He'd have been glad to have overpaid everybody who worked in refuges.

He was a cutter when it came to cussing out waitresses. Only one guy ever did it better and that was Buzz Morley, who worked for him here in Washington, but I was rather embarrassed with both of those guys a time or two. That was the only time I ever saw Salyer really discourteous and he was that. But Buzz Morley was worse than Slayer. Buzz Morley would actually give you a fit because he embarrassed all of us who travelled with him sometimes.

Let me tell you a little story about Dr. Buzz Morley, who headed up the Soil and Moisture Program. It seems that there were fewer people involved in refuges and more responsibility around the field areas, they held more educational tour and trips. Maybe it was because they felt we were all too provincial but several times they brought us together. I got in on some of this travel because we had just gotten into Soil and Moisture funding and I was the soil and moisture rep for our region. They brought us all together and we made a tour of the eastern refuges.

Well, back to my Buzz Morley story. We were on this Soil and Moisture tour and we stopped in a little town near Crab Orchard Refuge. We stayed at a motel there that had a really fine steak house. One of those where people come dressed, you know. After we'd been at the refuge all day we came back there for dinner and we all ordered steaks, of course, and they were delicious.

But Buzz Morley had held up our group for quite a while wanting a beer, which was his drinks. They didn't serve beer, but he wanted one so he went somewhere else for it. We finally went ahead and when he came back, he came late and he was grouchy and difficult. He gave the waitress a real bad time. Well, anyway when we left after him being difficult all during the meal, we'd left out of a side door that went to our rooms. We were all embarrassed and ticked off at him by then ,but as we left, one of the older waitresses was standing at the door and as Buzz Morley left, she said something to him. And he turned red in the face and walked out and we couldn't imagine what she had said. He told us that she had said, "I wonder, sir, if you realize how fortunate you are to be able to associate with these gentlemen." And I'd never heard one any better since or before. It really cut him to the quick but nobody ever tried that on Salyer.

The next morning, to the owner at breakfast, we were apologizing for Dr. Morley's attitude and everything. She said, "Don't worry about it, I can get plenty of customers but I have a hard time getting good waitresses."

I traveled with Salyer a number of times. He loved the west because he liked to fish and I met him on time when he came to see Monte Vista Refuge in Colorado soon after we got some of the land purchased and got a refuge established. I met him and we went all over the refuge and discussed ways and means of funding developing it.

He was the man who could visualize, he wasn't the greatest on technical engineering details and how to build an impoundment or what a water control structure had to look like or anything like that. He always used Bill Taylor, his chief engineer who worked with him for years in Washington for that. But he could visualize how that area could be attractive to waterfowl and when he looked at the Monte Vista Refuge he could see it like it actually turned out to be a few years later. He could visualize what that marshy area, with the proper application of water, could be. We went all over the refuge and he asked me about the nesting studies that we were conducting there. He couldn't

quite buy our idea that some grazing would be good for nesting and he never was reconciled to our feeling that some grazing was necessary. He really got upset when he discovered that somebody had proposed that we do some trout stocking on the Monte Vista Refuge in some of the ponds and he said, "No way, no way."

The next morning when I came from my hotel to meet Salyer for the second day on Monte Vista, I came to the refuge office and he was gone. I said, "What happened to him?" We were at different motels and they said, "Well, he left last night." But where did he go? Well, after I had left him yesterday he had gone up to the Rio Grande fishing and I never saw him again on that trip. I leaned after that he was an avid fisherman, that he tied his own flies and everything. He loved to go fishing by himself, I learned. Anyway, he had gone and he was that precipitous. You never knew for sure where his mind was when he was with you but he was quite a guy.

I remember coming to Washington after Salyer had lost his sight. Of course he was a different Salyer than he used to be. He had been so fired up and so "out ahead of the hounds" so to speak and now he'd gone introspective. He was thinking now and remembering rather than forging new pathways, he was going down the old ones and when any of us would come in from the field he would bring us into his office and have us talk about things out at the refuges. He'd bring up the names of the refuges. "What's happened here on this one or that one or the other one" he would ask and then he'd sit very patiently and listen while we talked. He usually did most of the talking but his whole mental attitude had changed, losing his sight may have opened up some brand new avenues for him, because it gave him a chance to remember and think back and he was a totally different responsive person then.

Kevin: Was there one person on the staff there that sort of watched out for him or was his assistant there to help him around and help him do things?

Marcus: Well, I don't know who did the most of it. It might have been Phil Dumont. Because Phil was very close to Salyer as were Bill Ackernecht and Harold Regan. And the other guys in here, but he used to go down on someone's arm to lunch in the cafeteria and more often than not I imagine it might have been Phil Dumont. I wasn't in here a lot

during that period but the brief times when I was and went to the cafeteria with them, as I recall, the staff had lunch together.

Very little had been said about Harold Regan who was someone Salyer recruited from Bismarck, North Dakota. Regan had worked for International Harvester Co. Salyer brought him into the Washington office and Regan was here for years. He really achieved his greatest profile here. He was a smiling Irishman, I remember. We were great friends. He finally was responsible for the YCC Program. Harold had worked in the original CC Program. Harold was the best man they ever had for picking up the loose ends, ordering equipment for the refuge system, and keeping so many things from "falling through the cracks."

Kevin: Over the span of your career are there one or two major milestones or events that have happened that stick out in your mind as having shaped the direction of the refuge system or the Fish and Wildlife Service?

Marcus: There have, of course, been many things that happened that helped shape the refuge system. Salyer's historic efforts to expand refuges was one of the most important. He was helped by the Duck Stamp Act that passed in 1955. As time goes on, we realized how important the continued acquisition of land for refuges is. The passage of the Land and Water Conservation Act in 1966 was also a landmark. Refuges began to be viewed as an system when the Refuge Administration Act was passed in 1966. And when this act was amended in 1976 to protect the game ranges, more security was given to the system. The biggest leap forward in the field of expansion of the system came with the Alaska National Interest Land Conservation Act (ANILCA) in 1980, which established about 56 million acres of new refuge lands in Alaska as authorized by the Native Claims Settlement Act (ANCSA) of 1971.

A few single actions firmed refuge policy over the years, some of these were court suits. An early suit against the F.W.S. was an attempt to stop hunting of deer on Great Swamp. The failure of this suit strengthened refuges stand that hunting was a valid management too. The Ruby Lake court case brought by the Defenders of Wildlife to stop water skiing from dominating refuge water was a winner for wildlife over recreation.

The suit by the cattlemen at Charlie Russell Refuge, which asked to have cattle grazing equal to wildlife on the refuges was defeated in appeals court and management for wildlife prevailed.

Not all that has happened in the past is on the plus side. We have failed to convince our constituents that refuges need more manpower and money to manage them at their highest level of output. We haven't yet gotten people's attention to the point where we are actually able to manage refuges the way we think they should be managed. The solution to part of the program even take an act of Congress to give the Fish and Wildlife Service, and particularly the Division of Refuges, enough muscle to manage for wildlife and rule out uses that mitigate against the program.

To me one of the biggest challenges facing the refuge system of the future is determining by what means and to what extent uses can be definitely controlled and not swayed by political pressure or public pressure, regardless of whether it's good or bad or the basic purpose for which the area was established.

Kevin: That's all I had to ask unless there's any other topics or issues that come to mind that you would like to say something about?

Marcus: I could go on but am afraid I have pretty well said everything I need to talk about. Thanks for the opportunity.