INTERVIEW WITH RAY ERICKSON AND
DAVE MARSHALL BY
DONNA STOBALL AND MARK MADISON
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MR. MADISON: I think we'll begin with you Ray. We've talked with Dave some in the past about his background. What did you study before you became a refuge person?

MR. ERICKSON: I went to Gustavis-Adolphus College in Minnesota.

MR, MADISON: I know it well. I went to McAllister!

MR. ERICKSON: Then, I was a graduate student at Iowa State University. That was in 1941. I has an assistantship there working on identification of food materials of mammals. This included identification of the feathers, fur, hairs, bones and teeth of consumed animals. There, I majored in Biology and minored in Entomology. I got my Masters Degree there in 1942 and my Ph.D. in 1948. Towards those [goals] I studied the canvasback at Malhuer Refuge. Those studies included fieldwork during April through August all three years. After that, I signed on Malhuer Refuge as Refuge Manager. They did not have a Biologist position.

MR. MADISON: What that in 1948?

MR. ERICKSON: Yes, 1948. I stayed there a year as Refuge Manager, but actually doing biological work. Then, they established the civil service position for Biologist for the refuge I was there until 1955. From there I went to Washington. I was transferred to the Division of Wildlife Refuges. There I was chief of the section for habitat improvement. It was later called the Section of Wildlife Management. In about 1957 I had an offer to come in to the Division of Wildlife Research, which was really my fist love. I transferred in the spring of 1947 to that division as Chief of Wetland Ecology in Washington. In 1965, as a result of setting up the Endangered Species Program, I transferred to Patuxent Wildlife Research Center and headed the Endangered Wildlife Research program of the Bureau. I retired in 1980 and moved to Salem, Oregon. I was able to pursue a lot of the pastimes that time didn't allow earlier in my professional career, such as toying with an orchard, grapes, wine making, some travel, and that brings us up pretty much to date.

MR. MARSHALL: He didn't cover it, but in the 1940's he had a spell with the Navy during World War II.

MR. ERICKSON: Should I go ahead with that?

MR. MADISON: Yes, definitely!

MR. ERICKSON: After I got my masters degree at Iowa State University I signed up for the Navy in the B-7 Officer's Training Program. I finished up there in June of 1943 and requested

duty in a light cruiser. I got a 36-foot ramp boat called an LCDP. That's why I was with landing craft operations through the war. I mainly spent the war in the South Pacific at a very remote and little known atoll called Ulithi. I lived on the island of Sorolin, one of about two- dozen islands in the archipelago. It became a well known, but supposedly secret fleet anchorage. At times we had as many as sixteen battlewagons and thirty-six carriers, plus many lighter craft out in the lagoon. That's about it.

MR. MADISON: Okay, well let's go back then to the wildlife biology. You said you went up to Malhuer studying canvasbacks; what were you studying specifically?

MR. ERICKSON: The ecology and life history of the canvasback. It was an item of interest to me from childhood. I had read about canvasbacks in the Athabascan Delta of Canada and everywhere else I could read about them. The opportunity to study canvasback was made available to the unit leader at Iowa SU, Tom Scott, by a friend of his who was the biologist at Malhuer Refuge who felt there was an opportunity to get thesis material from the canvasback. So that led to my coming out to do the canvasback studies.

MR. MADISON: What did the refuge look like in 1948. You just came back there in 2006 I am sure it's a lot different.

MR. ERICKSON: To a person who is interested in waterfowl management it had a lake, which really wasn't a lake at all. It was a beautiful, huge marsh. The marsh area was about nineteen miles long and about nine miles across. It has hosts of waterfowl. I ended up there in the spring at the peak of migration. I made some trips out to the marsh with its immense stands of [sic] Hart's Nimbol Rush, broken up by areas of water. It had a great variety of waterfowl. I also found a large rookery of various Ibis, Heron and Egrets and other wildlife species. The muskrat population was fantastic. There were muskrat's houses everywhere. A lot of them were occupied by nesting Canada Geese. Unfortunately, about midway into spring, because of heavy run off from snow pack from the Blue mountains in the north and the Stein's Mountain to the south Malhuer Lake was flooded much more deeply than it had in quiet a few years. In fact, it was the deepest in twenty years. This of course, played havoc with the muskrat houses because of the [sic] eatouts by the great muskrat population and the strong winds and the high water caused wave action that tore many of the houses apart. It also removed last years dead vegetation from the stands, which nesting substrates for the current years use. It piled all of that on a mile long dike on the east side of Malhuer Lake. A great wind rose and wide expanses of drifted bull rush and other vegetation [were damaged].

MR. MADISON: Give me a sense of what it was like to work on the refuge then. Did you actually live on the refuge? What was the day-to-day like?

MR. ERICKSON: The CCC camp was just being disbanded. It was disbanded about a month and a half after I got here. The building that they utilized remained. It consisted of a large mess hall, a number of other buildings like bachelor officer's quarters that is where I was quartered. They provided meals until they left. After they left it was a case of "baching", which I had to

learn because I hadn't been "baching" previously. Reception was a little bit cool at first for reasons that I learned about later. It had nothing to do with my own behavior. It was bit of warfare between Wildlife Research represented by Dr. Clarence Suiter who was also an Iowa State graduate. He was sending in reports to the Denver Wildlife Research Center where his supervisor was stationed. When I came in of course, I appeared to be one of the enemy. But reasonable people quickly overlook something like that. It didn't last long. I met John Sharp, a very remarkable individual.

MR. MARSHALL: He was the Refuge Manager.

MR. ERICKSON: He was tall, bald headed and very friendly after you got to know him. He was very dedicated to his work. Malhuer Refuge was his life next to his wife Florence. He made available to me what transportation he had. I had gotten Ford V-8 1939 model from Clarence Suiter. He really gave me minimal supervision, which I really enjoyed. There was nothing against Clarence, but I just really liked the independence in research like most researchers do. That's usually where they operate best. I learned great deal from John, and the ranchers around the area. I had never been exposed to ranching before. I felt that since there were quite a number of ranching permitees for grazing rights and gaining use of the refuge, and since those operations would have an impact on the studies of wildlife that they were people that I could learn from. I had a pretty good foundation in wildlife studies from college, but until you begin to apply them they are good background, and good background only.

MR. MADISON: Tell us how you met this character. [Mr. Marshall]

MR. MARSHALL: Well I can tell that.

MR. ERICKSON: Why don't you tell him.

MR. MARSHALL: I was a biologist starting out on my first assignment with the FWS at Stillwater Refuge in Nevada. I came up here a couple of times on some kind of details. In those days we didn't have much of any training programs. The way you got around to see a refuge was this; if a dump truck has to be transported from Stillwater to Malhuer or something like that, they'd assign a biologist of a junior refuge manager to transport the dump truck from place to place. That was one way you could get to see some other refuge. I met Ray then but I really didn't get to know him. Then, in 1953 I got transferred to Sacramento Refuge to do a study on the Ross's Goose. Being just a beginning, green biologist they thought I should have somebody, a more experienced biologist to look over my work and help design the study. So they sent Ray down to Sacramento Refuge. Ray and I worked together on the Ross's Goose. Then I got to know Ray really well. That was in 1953-54. Then in 1955 it came time for Ray to move out. I found out that he recommended that I replace him at Malhuer. That went through.

MR. ERICKSON: I couldn't find a better one. And there were a lot of good applicants.

MR. MARSHALL: Doesn't that explain it?

MS. STOBALL: Would share the story that you shared with me this morning about what you were able to teach John Sharp?
MR. ERICKSON: With a lot of people who are very capable in their fields, which John was, they become quite skeptical or at least questioning of any suggested changes if they are already running a pretty tight operation. Also out of respect to John, I hadn't known him but for a couple of years and I wasn't about to try to force any idea on him. I'd always talked to him about the possibility of trying to create better water cover interspersion. Because it's well known in biological texts, back to some of the early pioneers, that wildlife including waterfowl use is often related to edge of vegetation, more so than most other factors. I had indicated that several times, just what a wonderful vegetation interspersion we had in Buena Vista Pond, which is midway up the Blitzin Valley. He agreed that it was a very good interspersion. I said that there were a lot of good cattails back behind that don't enhance the pond except for maybe marsh rats. I felt that we had to try get less water and more vegetation, but in insular, island like patterns. I don't think that he grasped quite what I was getting at that time. I obtained seven 55-gallon oil drums. I cut the ends out of them and cleaned them thoroughly with detergent to get rid of any oil traces. I suspended them in a series above a small irrigation dam not far from refuge headquarters. I filled them with water and then dropped in a block of vegetation cut from [sic] hart's nimbol rush, cattails, and broad fruited bur reed. Then I left the seventh one with just open water. I but these to fit the drums and dropped them right in on the water and pushed them down to the level that they would have occupied in nature. I let this sit for about six weeks. During that time I was measuring the amount of water it took to replace that lost by respiration and transpiration by plants. I was getting the results that I had hoped for. One day we were down at a nearby storage area, and I suggested that we go over. I showed him the little experiment I was doing. I let him pour the water while I measured it. He kept dipping the dipper in until he could fill it up to the place where about three days of evaporation and transpiration had taken place. He found that the bull rush was loosing almost four times much water as the open water. At about that time he said, "I think I know what you're heading at!" His name of course, "Sharp" is well earned.

MR. MARSHALL: Ray told me when I was to come here that I wasn't going to be able to tell John anything but I would have to show him in some way and let him see the conclusions.

MR. ERICKSON: That's called induction.

MR. MADISON: I do it with my college students too!

MR. ERICKSON: But it worked. John was a very sharp and reasonable person. He was an excellent supervisor. He could manage the control of a fire like nobody I'd ever seen. I had fought fires in northern Minnesota with CCC way back in 1936-37.

MR. MADISON: I didn't know you were in CCC.

MR. ERICKSON: That's why coming to Malhuer to a CCC camp wasn't a new experience for me.

MR. MADISON: Why don't you tell us a little about that. We only have three or four interviews with people who were in CCC in the whole oral history collection.

MR. ERICKSON: Well, when I got out of high school I knew I didn't have enough money to go to college. I was sort of an average student. So I took the college entrance exams mainly as a way of getting out of class, I think. I should be ashamed to say. So I went into CCC hoping to get enough money to buy some mink. I intended to start a fur farm. Of course, fortunately for me, I never became a fur farmer. I think that the bottom fell out of the fur market early in the war. So, while I was in CCC I started out by lifting out heavy chunks of lime. We were grinding lime to treat farmer's fields for soil improvement down around Winona, Minnesota. I wasn't especially entranced by that kind of work, although I did learn how to lift heavy things. And invitation came through that if you wanted to go to northern Minnesota there were two positions open. Two of us volunteered and we ended up north of Two Harbors at a place called Brimson. There, I worked fighting forest fires for a period of time, and doing other tasks. One of those was to help decommission a camp out near Grand Murray, north of Lake Superior. When I got back, the wildlife technician for the State had a position open for an assistant to do work such as running transects, identify forest trees in the under story and also the floor species.
I was also carrying out transects by removing sphagnum moss to find out if germination of white cedar could be speeded up. I was censusing beaver lodges, counting deer, elk, and moose droppings and just all of the things I loved to do. They also sounded pretty good on my resume in later years. While I was there a biologist named Francis Uhler who I had known from the time I was six years old, was surprised that I had gone into CCC. He had expected that I would be in college. He said that there was no reason I shouldn't go to college, with my interested. He paid my tuition, which was $75.00 a semester, believe it or not. He paid $150.00 a year plus books. He didn't expect any return, although when I got into the Navy I paid him back in the first year. I could never really pay him for his kindness.

MR. MADSION: Was he still as Patuxent when you got there?

MR. ERICKSON: Yes, I'm sure you've got…he wrote *Food of Game Ducks*.

MR. MADISON: Yes, and we've got some archives of his.

MR. ERICKSON: He was a wonderful person.

MR. MADISON: I didn't know you were connected with him.

MR. ERICKSON: So, I went to Gustavis and enjoyed the wonderful curriculum there except there were some courses I didn't care too much for of course. Those were things like Medieval History and Radio Speech but that was something I should have taken anyway. I graduated in 1941. After my second year of college, I was asked whether I would like have a job with the

then, U.S. Biological Survey. I also had an offer from Seney Refuge as a summer assistant. But this was for a six-month appointment, which would mean I'd miss a half of a year of school. But I jumped at the chance because it meant cavorting with professionals in the field that I hoped to get into some day. So we were quartered in an office in the AG annex it was called; the USDA annex. I was there until late March. I missed the first six weeks of my semester. So I played catch up. That's why I hated Medieval History and Radio Speech! But anyway, I was also able to take night school at George Washington University in Washington, D.C. every evening after work. I went back to Gustavis. I came back again because apparently the unit leader at Atlanta who I was working with as a collaborator with the FWS studying the food habits of quail, turkey, red and gray foxes. This included the identification of seed and plant parts. I had experts all around me coaching me on it to start with so I could learn. I was right there with Fran Uhler on one side and Clarence Smith, a mammalogist on the other side. He was another real sharp chap. I learned from both of them but mainly from Fran though. Fran had a kind of a funny experience while I was there. Fran was assembling a herpetological collection. Is it all right to go off like this?

MR. MADISON: Yes, because part of that collection has come to NCTC.

MR. ERICKSON: I'm just off on a tangent.

MR. MADISON: No, I'm very interested in this.

MR. ERICKSON: Fran had a habit of mounting snakes and lizards and various other cold-blooded vertebrates in fairly life like positions. He'd get them from above and from the side in photographs. He'd set them up like that and carry them down on trays and the Photo Lab would take the pictures. He got a fantastic collection of these. I wonder just where they are and whether they are still at Patuxent.

MR. MADISON: They've come over to NCTC Archives. Most of Patuxent's stuff has.

MR. ERICKSON: That's good. Well, he had a very large snake. I'm not sure what kind, but I think it was a Pilot Black. He had it all coiled up in the sink there. He had put a lot moisture around there so it would have nice glistening skin for the photograph the next day. During the night one of the ladies who did janitorial work came in there. He had laid newspaper all over it to hold in the moisture. Well, curiosity got the better of her and the next morning we found a bucket with water all over the floor and the mop dropped. She submitted her resignation the next day! Any way, he and I came to work that morning, and he said, "I forgot to put up a big sign saying SNAKE"! But her curiosity did it. And, just a note on the kind of man that Fran was, he died when he was 89 about twelve or fifteen years ago, he and I would walk across the mall from the south AG building and we'd end up at a restaurant that we liked to go to. It was a sort of self-serve or cafeteria place. On the way over, we'd almost always get nailed by a person begging for money. Fran always stopped to talk with them and ask them just what was their need. There were all sorts of stories. But he'd say, "Well, you're certainly hungry, so come along with us, and I'll pay for your dinner". Most of them turned him down. They didn't want money. Well,

they wanted money, but they didn't want food. One day one young man did come. He looked like he was really hard up for it. He came along with us and asked Fran what he could have. Fran told him he could have whatever he wanted [to eat]. So he took his tray and was going over to a table and Fran said, "Aren't you going to have any dessert?" He said, "I didn't know that was included!" And Fran told him, "Go ahead and have your dessert". So he had pie a la mode.

MR. MADISON: That's a good story!

MS. STOBALL: Would you tell your rounding up the geese stories?

MR. MARSHALL: Before we get to that I wanted to mention about the CCCs and John Sharp. During my time at Malhuer, I don't know how often formed CCC boys would show up with families to talk with John Sharp and have a family meeting. He was quite a mentor to the CCC boys.

MR. MADISON: That's great! Are any of those structures still up at Malhuer?

MS. STOBALL: Oh, a lot of the structures. In fact, they built most of the infrastructure of Malhuer.

MR. MADISON: Really!? I've got to get up there! I've gone to look at the ones at Seney and other places.

MR. ERICKSON: I remember a story from the CCC period, just as we were folding it up. We were eating over at a Mess that was sponsored by the Army. Army paid for uniforms, food and certain other personal things like salaries. The state provided supervisors for work and equipment and so forth to get the job done. I ate at their mess and there was an orderly who served us. At the end of each month, he would send in a statement of the names of the people and how much they owed. That's when we had to settle up. We found that he had a whole bunch of "DNs" in front of some of them. The officer asked what that meant. He said, "Don't Know"! There was an empty space where the amount should have been! John was full of those stories. John has a lot of stories. He used to milk a cow in a barn that's no longer there, but it was close to headquarters. There was a log type corral that reached up about seven or seven and a half feet high. I was coming up there from the CCC camp where I had a room. I was kind of sleepy; it was about six-fifteen in the morning. I was still a bit drowsy but I was going up to get to my jeep and go to work. I just barely saw it soon enough but there was a snake crossing my path in the dirt, which was about the color of the snake. I remember jumping up and letting out a yip. John came out to see what was happening. I was telling the story later at a party we were attending, and I said how I really went up as high as the fence. And he said, "That was Ray on the way down"!

About the great Goose round up… Clarence Suiter the biologist I mentioned early had a goose study going, including banding. He wanted to band a large number of them. So he organized a goose posse. They moved through ponds to move the geese out from all of the upper valley

from P Ranch on down to Boca Lake, which is where they were going to end up capturing them. I joined in the group. This was in 1942. We had thousands of geese ahead of us. I don't know how many, but there were at least maybe 2,500. They were adults and flightless goslings. And this was the flightless period when you could move an awful lot of geese. Of course the parents were with the goslings, so it was a mixed group. As we got closer and closer to Boca Lake, I got to worrying about whether they had sufficiently sized holding pens to hold that number of geese. I think it probably surprised Dr. Suiter too, because we had an awful lot of geese from up there. As we approached the pen that was circular with two wings that went out to it, they narrowed down to an entrance that was about eight feet across. I wish I could have counted the number but there was a whole host of them. They began piling up against these lead fences. At about that time, George Benson, who was one of the original game protectors for Malhuer Refuge, was teed off about something. I don't remember what it was.
But he stood up in the direction that the geese were going up above the sagebrush with his glistening sun helmet and all bedlam took place. The geese just flapped up against that fence. It went down on both sides. We ended up with about 212 geese, I think it was, for banding. Fortunately, the others got away. But, oh, there could have been mayhem in that pen because it was made with very stout wire and it had stool fences inside to keep them from sticking their heads through. That was fortunate what we lost most of them.

MS. STOBALL: You mentioned George Benson. Would you about your experiences him?

MR. ERICKSON: I met him a little after I got to Malhuer. I had heard that he had been there since about the start of World War I as the game protector. So I wanted to talk to him and pick his brain to see what I could learn about the early history of the refuge. He was very willing to sit down and tell me all about it. He was a very kindly person. He had a cute little grin. You know, the kind where his nose would kind of pinch up. He was kind of a cute man, if you say that about a man. He was a small fellow. He was just very kind, and always very willing to tell you what he knew. He always felt a little regretful that he didn't become Refuge Manager. He never realized all of the pressures that a Refuge Manager would face, as well as some of the intellectual challenges that one faces. He was just a nice person. He was a taxidermist. He was not a lazy person. He also had a "one notch" style of driving. He got up to fifteen and sometimes twenty miles an hour and used the same speed whether he was going on a flat surface or on a cow hoof marked road. He always complained that the refuge mechanic was at fault. What he needed was "snubbers". I wondered that snubbers were. I had never heard of them. Finally, I learned that they were shock absorbers. He said he needed better shock absorbers. But for the country that he sometimes drove through and the way he drove through it, he did a lot of protection.

MR. MARSHALL: I first met him in 1939 when I came down here with a group of Auduboners for a week. I was thirteen years old. He led quite a bit of the group. I remember he had a gray 1934 Ford pickup. Stanley G. Jewett was also a collier that trip and he kind of turned a lot of over to George Benson. He did a good job. He had in his house a lot of mounted birds. He had one shelf up high with just mounted owls. One of the owls started blinking. I soon caught on to the fact this owl was not a specimen. It was a pet.

MS. STOBALL: This collection is the one that we still show on display in the museum.

MR. ERICKSON: On one occasion, George came over to my room; he was on the way home from town after doing some shopping. I was going to have a beer, and invited him to have one too. I said, "George, would you like to have a beer"? He said, "Well, I think I'd better not." I asked him if he would "like" a beer. And he said he would, but his wife might not approve. I told him that I didn't see any wife here. But he said, "Okay, I guess I'll have it." We talked on and on. It was just a great discussion. George had a little bridge that you had to cross to get to his residence. He was looking up the stream with his binoculars. He had a habit of leaving the strap over his shoulders. But this time he was just holding them. He would drop the binoculars down on his chest when he was going to write something down in his little notebook. Of course they went right down into the canal. John has to send the in for reconditioning.

There's another little story involving John that I remember too. John has gone up to the station to discuss something with George. I went along. In the mean time, Mrs. Benson came over to me and said that she had a nest to look at. Apparently the last time she had looked at it, it had little birds or eggs something in there. So we went over there and I was peeking in. There was nothing in the nest. About that time, John (who was always out to get something on somebody)… he used to like to tell this story later; he'd say, "…and there wasn't even eggs in the nest!" He and Mrs. Benson were huddled over the nest and there wasn't even an egg in it.

MS. STOBALL: Could you tell about a little bit about where he lived and that location right there at Benson Pond?

MR. ERICKSON: He lived right east of Benson Pond. He had a stone well house, and a little frame cottage.

MR. MARSHALL: Wasn't there a little corral out in the back? It seems like there was a little corral back there.

MR. ERICKSON: I don't remember that. It could be. They also had the little shed where he had his bird specimen. That was on the road that we traveled going in there. They had a Russian olive tree on one side. That was about it. There was also a beautiful gold willow right near, just at that little bridge that we crossed, where he dropped the binoculars. I admired that. In fact right now, at the golf club where I am working, and am a member of the tree committee; we've identified and labeled all of the trees; I had to have some golden willows. I harkened back to George Benson. I went down to a very steep ravine where a lot of tress had been cut and felled. It was very slippery. My wife tried to keep me from going down there, but I did. I finally got down to this yellow willow tree at the bottom. I got a whole bunch of "starts" with stems about that long. The tree keeps golden colored twigs for three or four years. You keep cutting them back and you have a tree that's quite pretty. We're trying to inject a little more color into the landscape around the course. Right now I've got about six of them growing in pots nearby in my back yard. There are nine that placed out in a marsh became tasty to a nutria. He just nibbled

the bark off of each one. He didn't cut through a twig or anything, but cleaned the bark off of each one of them. But I put those in reserve in the buckets. Boy, we're way off the subject. Anything else.

MS. STOBALL: Talk about the P Ranch and what you saw there where the foundation of the old house was. Can you describe that area and what that house was?

MR. ERICKSON: It's pretty. There were a lot more tress there today than there were when I first went there. A lot of the cottonwoods are much bigger.

MR. MARSHALL: There was an orchard there too.

MR. ERICKSON: A lot of the orchard trees are gone now that were there. We even had some apples from them. But I don't think many of them are producing much in the way of apples any more. The house was a two-story and I think it had an attic. They had a tall chimney on the outside of the building with a fireplace inside. It wasn't a fireplace, but it was heaters. I think this place dated back to 1800 so it must have been heaters that they had. I never did see a fireplace there. It was just a white frame building with wood siding. Inside it had wooden floors. At the time that I first came there they had biologist Clarence Suite and his wife living there.

MS. STOBALL: Who built the house?

MR. ERICKSON: I don't know who built it. Well, Pete French. It was built for him.

MS. STOBALL: Yes, it was Peter French's house. Well, what happened to the house?

MR. ERICKSON: [Asking Mr. Marshall] didn't it burn down while you were there? No, it must have burned down somewhere between 1941 and 1945. I imagine that's in the refuge annals. It went completely. There was really no defense against it. It went so fast. Those old buildings are so very dry so long as the roof is sound. They go up awfully fast. They didn't have such things as barriers between the studs to try to prevent fire from going up the walls, so it goes very fast.

MR. MARSHALL: Ray, as some point don't you want to talk about your work with endangered species research?

MR. MADISON: Yeah, I wanted to get to that, but I didn't want to preclude Donna's questions.

MS. STOBALL: Well, I've got one more question. You talked about the trapping 23,000.

MR. ERICKSON: Yes, we used to run airplane transects over the muskrat houses and count the muskrat houses. We used a figure of five per rat house. It could probably vary from four to six per house. That's the standard we used, and until we could find something better that had to

serve. On one of the transects one year, I was up with Rosailius Hansen, Ross Hansen we called him. He was a great Scandinavian from Minnesota. He was flying an L-5 trainer from World War II. It was a very heavy plane and under powered. Ross is a big guy, and he filled the front cockpit. You could not look around him. He was there, and you'd have to stand up to see past him. On the second leg of the transect over the muskrat habitat we were starting to loose altitude. There was sputtering by the engine. He was furiously working the controls to get some change. Apparently he eventually the pre-heater button and shot a flame and apparently thawed out the carburetor from the ice that was collecting on the screen to it. There was about an inch of ice on there and it would have prevented swimming if you could. But you would never have made it because it was four or five miles from shore. We were saved from ditching it. He brought us up in the air and right around. We hit that leg of the transect over again and finished the last one back to River Mount. We had our count for the day. We'd apply that number to the amount of acreage to the total muskrat area and that would give us the figure for determining how many muskrats per trapper. We usually had six or seven permitees in those days. They came from as far as Gold Hill on the coast and elsewhere. There was a Finnish fellow from there who was our best trapper. We also had a couple from Burns who came out. It was a man and his son. I would go out and check both their traps and also divide the rat hides up after they were dried. I'd make several visits because they had limited space where they had them hanging.
It was quite smelly. The heat would make the fat rancid on the hide. I'd also strap on my skates so I could go out actually to where they were doing the trapping. It was a little dicey at times, especially during the first freeze up because the muskrats are able to keep lanes open. Sometimes there was ice that looked good but it could have muskrat runs right underneath it. You always had to look ahead. Usually you could see a little bit of a different color on the ice there. There was also a tract called the Gibson Tract. It was owned by a fellow who eventually ended up in the prison for calf rustling. His permittee, the fellow who was paying him to trap the tract, which jutted out into Malhuer Lake from the south, was out there one day. I heard someone out there. I was on my skates. He heard me coming because I was making quite a bit of noise. I heard him drop the traps. He had them in a gunnysack. He tossed them into the brush. But I heard them. He was out of sight by the time a got there. I went up and checked the traps. I knew he couldn't get away because he had gone down a blind path that went down about 150 yards. But he wasn't acquainted with that yet. He was definitely on refuge land, or water. I just took my time. I knew he'd be there. I checked the traps but there wasn't any brand on the traps, which they are legally required to do when trapping in the state. I put the traps back and then just skated on down. There he was. He had the funniest look on his face. "Beautiful day for skating?" is the first thing I said to him. He agreed, it was a nice clear day in January. So I asked him if he knew he was on federal property. He said that he really didn't know where the Gibson property ended. It was true. There were no markers out there. I showed him how to line up the Gibson property out into the Lake. I said, "You start there, and go straight out". "Stay on your side well". He seemed like a nice fellow, and there was no point in… He hadn't really done anything bad accept a little bit of trespass. He claimed he didn't know about the brand business, even though it should have been indicated in his license that he got. So I said, "Tell you what, you get your bags and go back to your truck. Go and mark those traps and bring them by headquarters. I'll be back there in about three hours." I wanted to examine the traps. I wished him well in his trapping expertise. At that time, I was a deputy Game Warden for the

state. Fortunately since that time, FWS has used professionals for this job. Biologists are not trained to be enforcement people.

MR. MARSHALL: And don't want to be either!

End of tape A

Tape B

MR. ERICKSON: ….issues. I was told to find out just what the situation was….and that…I wanted to inject water…..

Tape is skipping, sounds similar to bad CB radio transmission.

MR. ERICKSON: [To Mr. Marshall] So did I call you?

MR. MARSHALL: The Regional Director sent me down there to look at the situation. There was a united water district there. And when I got off the airliner there they were with a small plane. They wanted to wine and dine me. That was putting me on the spot right there.

MR. ERICKSON: Richard said that we should get out there. I don't know how we hooked up then. I think we talked about it over the phone, didn't we?

MR. MARSHALL: Could be.

MR. ERICKSON: I think I called the Regional Office and Dave and I got together. We'd go down there and meet. I got down there and Dave met me at the airport. He was in a very sporty…I think it was a first year Mustang. I said, "Gosh Dave, you sure look sporty!" He said, "You don't really mean that do you?" I said, "Oh yes I do!" It was a real sharp little auto. Dave had arranged for a hotel while we were there. The visit was going to take about a week or there abouts. So we found out that inadvertently we were right across the street from the United Water Conservation District. The first thing they wanted to do was give us each a box of oranges. We unfortunately had to turn that down.

MR. MARSHALL: That was not my Mustang. That's what the rental company gave me. And it was not a very good car to go up that hill. The back would go up and down in the rocks.

MR. ERICKSON: But you sure cut a sporty figure! That was when we both had…I had more hair and he had curlier hair!

MR. MADISON: Well now that you brought up endangered species, can you tell us a little bit about your pioneering work?

MR. ERICKSON: In Refuges, when I first got the germ of the idea that we ought to be doing more. I went down and met the Refuge Manager, Howard. I can't remember … no his first name was Julian. Julian Howard. He was at Aransas Refuge. I talked to him about it and he told me that he had been keeping census records. They usually did it by airplane down there except when fuel was too costly. They did it by boat then. He had the figures there and turned them over to me. I also had figures in the Refuge Reports that he had sent it. I took them back to Washington and reviewed them. It appeared that there were 33 or 34 at that time. I saw that there was a fluctuation in rise, but only at a rate of about half a bird per year. I felt that considering gene direct, there would be genetic values lost to the population if something wasn't done to save what remaining stock we had. Perhaps by captive propagation we'd be able to augment the flock, or perhaps start new ones. I got together a report on this and brought it in to Lance Parker who was Associate Director of the Bureau at that time. He said it was interesting but for whatever reason he didn't feel that it merited consideration at the time. I came back another time with a little bit improved presentation, and Dan Levy, who was my boss in Research at the time, subscribed to it and thought that it should be given consideration. Again, he said, "No, there's a lot of antipathy against keeping wildlife under wire." This came from the Audubon Society and other societies. He said that the public would be very resistant to any such thing at the current time. It was becoming quite a hot issue. The propagationists wanted to go out… Johnny Lynch was a very good friend of mine from way back, and a real character. He was a fun person to be with.

MR. MADISON: We interviewed widow actually.

MR. ERICKSON: He was a rare one. Instead of calling it a Whooping Crane, he always called it a "GWB", a great white bird. He also called it a "LST", a large slow target. He wrote some things that were right impertinent to write to Headquarters. He didn't care. And he was funny at it. He always mixed in some humor. That's the thing; it kind of carried it through. He was real sharp that way. He and I were very good friends, and thought a great deal of each other. But I didn't agree with his proposal to go up and take Whooping Cranes. First of all, the most zoos with one exception at San Diego Zoo…

…K. C. Lindt was there, he was a good friend too, I talked things over with him at times and saw him at conferences and so forth, he and I were really on the same wavelength as to what we ought to do. He was a little on he conservative side but he felt that propagation had a very important place in saving wildlife, or endangered species. He had successfully bred Sand Hill Cranes at the Zoo. So there's nothing like proof in the pudding, and having done it.

The zoos usually got stock from the wild as young birds. There was a Whooping Crane that lived at the National Zoo for over 40 years I believe. It hadn't been productive. But I don't think it had a mate, so that's a good reason for that. But I called a friend Jim Conway at New York Zoological Gardens. He and I served on a number of panels together. I asked him," What's

with crane propagation?" He said that there was just not much in it. He said that most of the stock they got were from the wild, and from captivity, the record was not good. I also talked with Curator of Birds at the Philadelphia Zoo. And I spent a lot of time with K.C. Lindt too. We tried to look through the literature, but it was just barren of success. Although a lot of zoos had cranes. I felt that before we started out with Whooping Cranes, why not start out with a species that is more abundant and in which losses would done be as calamitous. I recommended that we start dealing with all subspecies of Sand Hill Crane; the Florida Sand Hill, the Greater Sand Hill at Malhuer, the Lesser Sand Hill that wintered in west Texas and New Mexico and the Mississippi Sand Hill. With the Mississippi Sand Hill; we got that right from the start for it's own salvation. By that time we had dispossession with the Sand Hills. It was still within our prescribed limitations. I proposed this long before it appeared in the letter that Fred Lincoln sent out after this meeting where everybody… they had a meeting in Washington and I had prepared the statement for Dick Griffith, the Assistant Chief of the Branch of Wildlife Refuges was to give. He agreed with it. At the meeting, everybody was at each other's throats. People that were against propagation just couldn't see going out and getting Whooping Cranes and hazarding an already troubled population. The Propagationist's said that we didn't have any choice; we either do it or we're going to loose them. They had a meeting in Vancouver, British Columbia in which John Lynch made his presentation. I looked over it and thought it was very good, except for the procedures for how to capture them and take them into captivity. I agreed that they should eventually be taken into captivity. But I said, "Only after we prove that we can do it with Sand Hill Cranes." In fact, I got a letter from the fellow with the Audubon Society; a biologist who studied the Whooping Crane in Kansas. I can't remember his name. He sent me a letter of support on this proposal, even though his boss…. He and I used to talk about these things.

MR. MADISON: Audubon was usually skeptical about capturing things.

MR. ERICKSON: Well, Audubon wasn't as skeptical as just certain people in it. It was Carl Buckhister. He was against it at that time. He came out to Patuxent and saw what we were doing and said that he wished he had come out and seen us before he had made his remarks. He said that this work should definitely be done. He was silver haired then so he was a little long in years then. There was a little short guy, with a short hair cut…oh what was his name… he was President of the Audubon Society in the early 1960's. You could probably find it. He always used to attend all of the flyway conferences in Washington and so forth. We had invited him to come and see what we were doing. He said, "No, I am against that." Ed Carlson asked him, "Why not come with an open mind?" He said, "I always have an open mind!" That's in a letter in a file somewhere. But he was totally against it. He was funny that way.

We had the meeting where everybody was at each other's throats. Lincoln got back. He was a very thoughtful person and a real gentleman. He was really the father of the bird banding system. He wrote a very dispassionate appraisal of the situation, with each line of thought. He presented it very fairly. In the mean time, I was working on my presentation. This was in January entered office. One of the first memos that he got… and if you can ever find a copy it with your contacts, I would sure appreciate a copy. Because it turned the whole thing loose. I

had refined my proposal, and in the transmittal memo to the Director I said, "In keeping with President Kennedy's instruction that all department heads should encourage new thinking and new ideas from their staffs, I am submitting this proposal." I felt that I had them at this point. I prepared this letter, which encapsulated the whole proposal in one page. I always felt that it you couldn't get it on one page, it wouldn't be read. I sent that up through Dan Leddie and he okayed it. He said 'You might find this a little bit strong', but that he supported the idea. As a result of that and all of the pressure from outside, Janssen called another meeting out at Patuxent. The response from this meeting where everyone was at each other's throats was excellent, except for one. The Director of the Missouri Fish and Game Commission said that he didn't think much about propagation. They had tried to release turkeys and it hadn't worked too well. They had used captive stock and they hadn't conditioned them for life in the wild. In defense of Lance Parker, I was told later that he worked with Pittman-Robertson Program in Indiana. They had tried to release pen reared Pheasants. It had been a total calamity. So he had reason for his disbelief of captive propagation working. With all of this the question was 'when do you do it?' Lance was still against the program. He did not believe in it. He wrote a news release that we were going to ahead with the [sic] reads. This isn't what I wanted because we wanted to talk about how we were going to get eggs from the wild. We wanted to break it easily that we were going to carry out this Sand Hill research. It was only 1961 and we never did pick eggs until 1967. Why not develop all of this knowledge and then see if we're ready. I wrote back to Johnny Lynch that I agreed with everything he said except the timing of it. I asked, "What about using these surrogate Sand Hill Cranes for experimental subjects?"

So we had the meeting at Patuxent. I don't know if he was called this at the time but he was head of the Navy Wildlife Service. I had known him at wildlife conferences as a fellow biologist. He hadn't risen to that height yet, and I certainly hadn't risen. He dropped in and asked what we were going to talking about at this meeting. I said, "Well, you'll find out when we get there." And he asked me what I thought about it. He told said that he has been told we were going to talk about a proposal that I had come up with. I told him that it was something I had been working with for quite a while and I explained the basics of it. He told be that it sounded reasonable. He said, "Well, I'll see you out there". I didn't see him again until we got to Patuxent for the meeting. I had the floor there and was talking on the progress of the population. I showed that although the total population varied widely from year to year, there seemed to be a productive component that was in the heart of the program; that we kept producing. Some years there was great surveillance. I figured that there must be some pre adult mortality that was wiping out recruitment, and that eventually we'd be loosing the golden stock. I went through all of this, and it's a long story so I won't go into that. But at the end, Lance Parker said, "Well, this provides a good basis for further research with the Sand Hill Cranes. Now, let's go ahead with that. But as far as any Whooping Cranes…' David Monroe got up and used a couple of cuss words. He said, "Lance, we've been marking time here for years! We need to do something! The population isn't doing it by itself. It needs help!" After we got back to the office, I asked Lance about the money. He asked if we didn't already have a research budget. I said, "You know we don't have that kind of discretionary money!" Research never does. I told him, "I thought we were en cinque out there." He said, "No if you can't get the money for it…."

I tell you, talk about feeling bleak. I went back to my office with my chin on the floor. So then I got to thinking. I thought I'd go see J. Clark Salyer. He's my boss anyway; I'll see what he says. So I went in there and told him. "It looks like this project is off, because Lance said there's no money he'll put into it. Is there any chance of any Refuge money?" We talked about it for a while. He told me that he had not ever thought very much about wildlife under water. But he said, "I faith in you and your judgment, what do you need?" I told him I needed $30,000.00 to buy fence posts and wire and get the Refuge help from Monte Vista where they had a captive Canada Goose program going; and we can hopefully hired a biologist with part of that money." He said, "You've got it." He told be to go see the lady who was in charge of his budgeting. So that's what I did.

MR. MADISON: Wow, that's a great story!

MR. ERICKSON: So we're underway. But that's only underway with Sand Hills out at Monte Vista. In 1963 there was a budget hearing. And this is in the Congressional Record, that Senator Munt asked Jantzen if money should be made available for work on behalf of the Whooping Crane. This was because Rod Kreger who was the Appropriations Assistant for Munt who at that time was the minority party leader in the appropriation hearing for FWS. He was really behind it, but it was spoken by Munt. Jantzen kind of stammered a bit, and referred it to Lance Parker. He said "No, I think we are doing enough presently to do what needs to be done." So they turned down a chance to get some money there. I think it was 1964 or 1965 and by that time we'd produced Sand Hills in captivity and we'd experimented a lot with egg carrying. My work at Malhuer has applications with endangered species in a number of ways. One of them was in the choice of stock to be taken out of the wild. I never did think much of trying to capture Whooping Cranes. We tried with Sand Hills and the people that did it caught some in New Mexico and west Texas. There was some fear of injury, but fortunately they didn't at those places. There was since been some injuries in cranes that have been captured because the leading edge of the net goes out real fast. If some birds happen to be in the air when it goes out it will break a leg, or break wings. You couldn't do that with Whooping Cranes it just isn't permitted. I didn't even want to do it with Sand Hills. Then, I thought about the young birds. That led us to Malhuer. We got six birds from Malhuer and everything cleared for that. Irv Boeker came out first. He arranged with Carol Littlefield probably at the time. He got six young cranes. I think the biggest one was about that high. The youngest looked to me about eight days old. It turned out that four of them had [sic] aspergillous infections. We found that out because I went out there to talk with them to see what should we do. Should we get more cranes and what should we do with these sick ones. I called E. M. Dickinson who was a poultry pathologist at Oregon State University. He told me to bring the specimen right over and he would run autopsies right away. So we drove over and he confirmed that it was what was called a "colorful form" of aspergillous infections. The two older ones were healthy and we needed those for controls anyway, for this test. That came back to me when I was thinking about possible sources of these pathogens, was this. Our haying practices in the late summer and early fall consisted of rake bunching hay in part. Some of it is left in the field stacked. Some of it is fed. I had seen the cranes out there going after mice and beetles or whatever that they would find in those moist

areas where mold occurs too. The geese were throwing the hay up in the air. The mice of course would become exposed and they would feed on them. Aspergillous organisms are everywhere. They are universal. So just where they become a problem is where you have moisture and some organic material combined. It seems to me that would be a perfect culture. I think in the future management of Malhuer; much consideration should be given to that particular ranching practice.

I think in 1964 Rod Kreger wanted a picture of cranes on the wintering ground for Munt's office. Kreger wanted it. Munt couldn't care less. That should be off the record. I hope it will be. Munt was very sincere in wanting to help with things and he had a lot of confidence in Rod Kreger and believed in what he was saying. Lance was on the phone when the call came in form Rod that they wanted this picture. Lance was on another line. I happened to be in there; I don't know what I was doing. Maybe I was bringing another version of my proposal. I was up there for some reason and he said, "Ray, why don't you go ahead and take that call from Senator Munt's office?" So I did, and Rod got on the phone, and said something like this, "This is Rod Kreger. Are you going to be able to bring that picture up?" I told him sure. So they took it up and Lance brought me along. We got into the office and while Lance was talking to Munt, I was talking to Rod. He said, "What gives on this crane program? Each year we try to get money for you guys and your Director says you don't need it. Is that true?" I told him that he'd have to talk to the Directors; they were the ones who made those decisions, not me. He asked me what I thought of it and I said, "I have to think as the Directors do." He said that he wanted to talk to me about it. And I told him I'd have to get permission. He told me I would get it. So we got on the phone. I don't know what kind of threats they used, or even if they used any…
About that time Lance Parker died on a turkey hunt. Jantzen retired. John Gottschalk was an old pal. He was a Fishery man, but I had known him for years back to when he was a biologist. He was a very open minded person.

MR. MARSHALL: He was quite a birder too.

MR. ERICKSON: Oh yeah. He was just a nice guy in every way, and not just because he looked kindly towards some of my ideas.

MR. MADISON: His son donated some of his birding diaries and things to NCTC.

MR. ERICKSON: I got word from the Director's office that I was go to up and talk to Rod Kreger. I just knew w hat was coming. He was going to raise hell about what FWS wasn't doing and he'd want me to tell what a lousy bunch I was working for. I think he was expecting that. I asked what I was permitted to say. He told me, "As long as you speak as a biologist and express it only as your own opinion, you are free to say whatever you want." This was a new day dawning I can tell you! I can't remember the name of the Director, he was a very reasonable person, very nice, but quiet. I wish I could remember his name. So I went up there and we talked for a while up in his office. Then we jumped on the trolley under the Capital over to the cafeteria for lunch. We talked there for about two or three hours. He asked me just what I thought we needed. I happened to have my proposal, and I explained the whole thing to him. I

showed him the proposal. He said, "This makes sense. Why haven't you been doing this?" I told him that some people didn't believe in taking wildlife into captivity. I said, "They have their good reasons for what they believe, but I think it's time and I don't think we have much time left." Then he said, "Well, tell you what, you go back to your office and write a dialog between Senator Munt and Mr. Gottschalk. Bring it up as a draft; I'd like to look it over first. Put it in as much of a tone of Senator Munt as you can". He have me some news releases and so forth that quoted him. He wanted me to use the Senator's language for his side of the dialog. I went back and did that. My spirits were high. I developed the dialog and ran it by Gottschalk. He chucked with practically everything he read, he told me. He said that this was just exactly what should be done. He said, "I'm going to add one thing; we've been wanting for years to have an Aquarium in Baltimore. Baltimore is right on the water and it need's an Aquarium." He penned something in and we had it typed up. I called Rod and told I as ready and when he was we'd go over it. He told me that there was nothing in it that he would change. He said, "Let's let it go as is." I don't know if I can find a copy of it any more, but it's in the Congressional Record.

Let me tell then what happened, after this was presented at the budget hearing. Munt starts off by talking about all of the good things we were doing at Patuxent with Sand Hill Cranes and the success that we've have. He said, "Isn't it about time that we should start with Whooping Cranes?" They went clear through the whole thing. Munt finished his statement and John [Gottschalk] started rustling through his papers and he couldn't find the sheet. Munt says, "Well, it's almost noon, maybe you can come back after lunch." Well, they never did come back from lunch. They had it read into the Record. It never was discussed! We got $350,000.00. It was enough for I forget how many positions for professionals and others and we were off and running.

MR. MADISON: That's a great story!

MS. STOBALL: So from your idea, to getting that money, how many years was it?

MR. ERICKSON: Well, we got the money in the 1965 appropriation I believe. I moved out to Patuxent after I did some commuting. I had to sell my house in Falls Church. I think it was about six months. I did the directing. I chose a couple of people to work with the stock that we had at Patuxent. Part of the money was for moving all of the Sand Hill Cranes and Canada Geese that we had at Monte Vista Refuge that we had been accumulating. Oh that's a story too. We'd gone to celebrate my birthday with a very good friend whose birthday was on the same day in January. We went over to their place. We had orders for the plane to leave Monte Vista on a special United plane. It was going to sent out from Chicago to I believe Monte Vista. I believe it was a DC-7. They were supposed to load all of the birds and the incubators and biologists and bring it. All of the geese would be crated up and ready to go. They'd haul them in the Refuge truck to Alamossa I think is where they picked them up. That was the largest commercial airport. I went to my birthday party on Friday. They were supposed to take off on Sunday and pick them up on Monday. We had just finished dinner and I looked out and there are some nice, big fleecy snowflakes falling. Pretty soon the wind picked up and we had a blizzard! I looked out of my window in the morning and snow had drifted up against the window! The window

was about four feet off of the ground. I woke up at about four in the morning and the wind was howling. I tried to look out but couldn't see anything. It was still dark. I didn't sleep the rest of the time. I didn't want to wake everybody up, but I finally got up about seven and I could hardly push the storm door open. We were marooned there for three days! So I got in touch with Ed Carlson. He was a Division Chief by that time. I said, "For gosh sakes, get in touch with procurement and tell them to cancel that flight!" He said, "I know why!" The storm was hitting him too, about two miles away. He got it canceled. I told him to call me back when it was canceled because I knew I wouldn't rest until I knew for sure. Then we had to notify Gene Notter that he shouldn't have those birds ready Monday morning. The birds were not shipped that week. We waited two weeks. At that time you couldn't get planes in at BWI. There was nothing landing there at least two or three days. We waited until there was a chance for better weather. That's when they were brought back.

So anyway, Rod Kreger was very happy with all of the developments.

MR. MADISON: I bet he was!
MR. ERICKSON: Maybe his little girls would get to see a Whooping Crane after all one of these days at Aransas.

MR. MADISON: Hey Ray, I'm going to have to stop. I'm out of tape on this one.

MS. STOBALL: It's eight-thirty.

MR. MADISON: Yeah, we may have to wrap it up.

MR. ERICKSON: Is there anything else that any of you?

MR. MARSHALL: Well, you might mention the research program that you had in the field.

MR. ERICKSON: The research program that I envisioned and eventually put into affect was to bring specialists in under three categories; propagation research at Patuxent, studies of biological norms of captive animals as well as animals in the field if any materials were available and, field research on the species in question where they occurred in the wild. Our first three position were a biologist in Puerto Rico. The second was a biologist in Hawaii where most of the endangered species in the United States occurred at that time. The hiring of the scientists at Patuxent consisting of a nutritionist, an animal physiologist, a behaviorist and a research veterinarian. That covered the laboratory aspects of the program. In addition to those there was the support staff of secretaries and personnel experienced with handling animals. For that we got some of the best. Some of them came to us from the National Zoological Park. Other people were very interested in wildlife and seemed very earnest about being willing to take care of them. We started out with chicken wire fence. This was not what I wanted but we had to stretch the money as far as it would go. Instead of still water, we had to locate the pens over flowing water from previous, existing ditches. Although I did not like this idea, we were working with surrogate species that were not endangered so we felt that the risk was worthwhile until we could put in more sanitary

watering facilities, which we did. We developed a reservoir for maintaining supplies of water that would flow through the fence. We had Aleutian Canada Geese in breeding pens and Sand Hill Cranes; eventually four different sub species. We had started even on some work with Snail Kites from South America that would be used as surrogates for the Florida Everglade Kites. Our staff eventually grew with additional appropriations to where we had at one time as many as ten biologists in the wild, plus the four scientists and myself at Patuxent. That pretty much rounded out our program. We had an early start with other species with a few years; including the Blackfooted Ferret, the California Condor, the Eastern Timber wolf, the Masked Bobwhite, the Puerto Rican Parrot and the Florida Everglade Kite in the wild. Our success with a number of these species has been used with a number of other facilities in other locations in this county and elsewhere in the world. Our diets for various species were developed by the nutritionists; starting out with a turkey diet for cranes, which we found caused the bone growth to exceed the musculature. It caused leg problems so alterations were made in the diet and also in the conditioning of the young birds. We'd put in young turkeys with the cranes to induce the cranes to run after the smaller birds which were much more agile and could escape. There were other methods of providing answers to problems that will develop in almost any new program.