

INTERVIEW WITH GEORGE GAVUTIS, JR. AND TOMMY STUBBS
BY THOMAS GOETTEL, AUGUST 30, 2000

MR. GOETTEL: Today is August 30, 2000 and we are in Kensington, New Hampshire with George Gavutis. We are at George's house and we're also talking to Tommy Stubbs. Tommy worked at Parker River for quite some time on the Maintenance staff?

MR. STUBBS: Yes, on the Maintenance staff.

MR. GOETTEL: He was the head of the Maintenance department. We thought we'd get together here today and talk a bit about their careers with the Fish and Wildlife Service, in the Division of Refuges. George, you are from right around this area aren't you? Aren't you from New Hampshire?

MR. GAVUTIS: Massachusetts.

MR. GOETTEL: Lawrence, Massachusetts?

MR. GAVUTIS: Lowell.

MR. GOETTEL: Oh, ok, Lowell, Mass. How did you get started with your career with the Division of Refuges?

MR. GAVUTIS: I was a student at the University of Massachusetts in the back in the late 1950s and 1960s and I got hired as a student assistant, which was a summer program at Parker River. The manager of it was J. C. Apple at the time, and that's when I met Tom. And Woody Sears, and Harry Sears were all there then I believe. Tom was the maintenance foreman, either then or thereafter at some point, and ran that part of the program. I worked there for three summers, and went back to school in the fall. When I graduated worked there during the fall, and then I went in the Military for a while.

MR. GOETTEL: In what branch?

MR. GAVUTIS: I went into the Army Reserves for six months. I was down at Fort Dix for eight weeks of basic training, and then went to meetings on weekends and summers for about eight years thereafter, because I jumped around a lot in the Army.

MR. GOETTEL: So, did you go to UMASS in wildlife, was what your major?

MR. GAVUTIS: Yes, Wildlife Management. I was under Professor Tripanzi, and Dr. Sheldon, who was the woodcock person.

MR. GOETTEL: What a character!

MR. GAVUTIS: What a guy! And then, Fred Greeley, I believe took over up there. I kept coming back to Parker River. J. C. Apple had me doing the cratering charge, you

know, blowing potholes with Army. And then he tried to make the regional blasting expert. In fact, I still have my Blaster's Handbook, and all this. I went up to Montezuma, which was my first assignment. We started mixing ammonium nitrate and fuel oil, which is the cause of the demise of some buildings as you may recall recently out in Kansas City [referring to Oklahoma City Federal Building]. My father used to talk about the Texas City fire on the coast of Texas, when a big ship caught fire, and exploded. It was like an atomic bomb had gone off down there. So when I was working with this stuff, he was nervous. I was nervous too. We used blasting caps and detonating cord, which you could wrap around a tree and cut the tree right off! We used that to blow these potholes. We'd mix fifty pound bags, in plastic, of ammonium nitrate fertilizer and diesel fuel. Then we'd stick a blasting cap in, or "det cord" in and dig a hole and throw it in, and blow holes. In the marsh, basically it was kind of a prelude to open marsh water management. It was basically putting deep-water sumps in the upland edge, or the high part of the marsh, where the mosquitos breed, and the minnows couldn't get, except during extreme tides, and they couldn't stay there. They'd come out with the tides, and couldn't eat the mosquitoes. So that's why the mosquito breeding was so bad. We went over the Nelson's Island.

MR. STUMP: We've got pictures of those.

MR. GAVUTIS: Yeah, I've got all that.

MR. GOETTEL: We just had a battery failure. So George you were talking about blasting. Doing your blasting. Tommy, you mentioned having pictures. And there were some narrative reports?

MR. GAVUTIS: There was actually a Cratering Charge Report filed, and I have that on file. With the black and white photos of the geysers, and maybe some colored photos too. If again, you can't find it at the Refuge, or it isn't available, I have all that stuff. I have a lot of the narrative reports too.

MR. GOETTEL: I'll look into the Narratives, because they are supposed to be archived. So, if they are archived somewhere in the official government archives we'll be all set. Maybe we can at least take a copy of some of your other stuff. And maybe sometime this winter when you're looking through your memorabilia, and if you think of it, just set some stuff aside, and I would be glad to make copies of it. We certainly don't want to take the original copies from you guys. Whatever, you'd like to see put in the archives. Because that's the type of stuff that will mean a lot. So much of the time we are always reinventing the wheel, and so much of this stuff gets lost. You started talking George, about going to the different stations, you were the regional blasting guy?

MR. GAVUTIS: Yeah.

MR. GOETTEL: You went to a whole bunch of different stations?

MR. GAVUTIS: J.C. Apple said, “you are a new employee, and the best way to fame and fortune is to be an expert in something. You would get to see the whole region, I think we should designate you the regional blasting expert”. I guess I knew as much about ammonium nitrate as anybody, or more. The military came out with the crater charges first, from Fort Dix. And they did them at Parker River during the first stage. After that we just built our own components. We’d get heavy-duty plastic bags, and you’d buy ammonium nitrate fertilizer at Agway, or wherever, I guess they had Agway then. And then a certain proportion of diesel fuel was added. We used to stir it up. We actually did it in the bags. They were very tough bags. I can’t remember what we’d use for a paddle. We would pour the diesel fuel on the “pril” ammonium nitrate. It looked like little beads, or circles. It would soak up the diesel in just the right proportion. It would soak down through and as I recall, we either sloshed the bags around, or stirred it. Then you insert a piece of the detonating cord or a blasting cap into the bag. Then you just tied the end, or taped the bag shut. We’d dig a hole, two or three feet deep with a posthole digger. Usually it was in organic soils, there in the marsh, so it was pretty easy digging once you got through the sod. Then you’d bury this thing, and you’d do a whole series of them. Then you would evacuate the area, and touch it off with a detonator, electrically, or you’d light the detonating cord. I really was nervous about all of that! Thinking that you could get blown up here you know! This was serious stuff! [laughing] But it was very exciting and interesting and scary when that stuff went off! You wanted to be well away. Chunks of mud, and pieces of clams shells, and rocks went way up in the air. The narrative pictures, and that report that I did were replete with pictures of these blasts, and the craters that resulted.

MR. STUBBS: We even got some aerial views.

MR. GAVUTIS: We had aerial views, like Tom said, that looked like a moonscape right afterwards. But the stuff kind of melts down, and you end up with these fairly clean looking areas.

MR. GOETTEL: It would be interesting to see what it looks like now from the air.

MR. GAVUTIS: Yeah. We took pictures when I went back to Parker River as the manager, many years later. We did a survey there. They were still there. You could see the rings. They were on the latest aerials that the SCS would take every few years.

MR. STUBBS: But they had filled in some.

MR. GAVUTIS: They filled in depth wise. That happened pretty quickly, within a year or two. Because the tides would come in and out, the debris around the edges kind of melts down, and they may have been more than four feet. But they ended up around three or four feet deep. But then they didn’t change. I was the manager in the early 1970s and they were blasted in the early 1960s, around 1962, right around the time I was graduating from the University of Massachusetts, before I went into the Army for a while. They had already mellowed by then, and had re-vegetated. But the rings, the circles are still there.

I don't know how they are now. It's been fifteen or twenty years since I was at Parker River as the manager.

MR. GOETTEL: But they were there then?

MR. GUVATIS: Oh, they were. That was the interesting thing. It was kind of like killing a fly with a sledgehammer, but the basic premise was to super-saturate the upland edges to keep the mosquitoes from breeding, where the minnows can't live and linger long enough to control the population of mosquito larvae with these sumps and reservoirs that will hold these minnows. And every time it rains hard or a tide seeps in a little bit, they immediately go out from these reservoirs and then they can retreat back into them. They aren't picked off by birds, or stranded, or have to go back to sea, where ever they have to go to keep up with the water, because they have a little sump there that they live in.

MR. STUBBS: Now, was it done mostly for mosquitoes?

MR. GUVATIS: Yeah. I always felt that it was. When we did it some of the marches, we did it in dense areas. When we did it in Montezuma it was actually more for habitat interspersation. Habitat improvement, because we went into dense cattail stands. There was some mosquito problem, but it was really to break up the marsh, and breeding ponds. That's a good question Tom. But at Parker River, it was. At least, I felt it was. Because I studied the mosquitoes as part of my student assistant duties for the summer before we did it. I logged, and basically marked all of the breeding spots with stakes. I remember having lathe, or construction stakes. And we dug a hole underneath each one of those stakes and blew a big hole. In some places there were like four or five in a row that almost touched each other. And then there would be a big gap, because there would be no breeding there. Then there would be one here, and one there. I could dig out those photos, it wouldn't take long, before you left today, although, my house is upside down with the renovations here. So I shouldn't say that. I know about where they are.

MR. GOETTEL: You say that it was overkill. But, these days we've got all of that ultra low ground pressure equipment that you didn't have back then. So it was probably the best way to get the job done.

MR. GAVUTIS: We did other things, too. Tom had an "OC-6" and an "OC-3" at Parker River with cleat tracks, old crawlers. They don't even make that stuff any more. That stuff could practically run over your foot in the marsh, and not hurt you. But, when I was the manager there, with Bill Faller there as the biologist, we bought a backhoe unit for that "OC-6". The problem was that it didn't have enough reach. It wasn't a big enough machine. The ones that they are using now are much bigger machines with some reach to them. You can do the same thing with these very low ground pressure excavators now, much faster. What are you talking about for a price tag on one of those things, a hundred and fifty thousand dollars?

MR. STUPPS: One hundred and fifty, to two hundred thousand dollars.

MR. GAVUTIS: So, still there still may be some application for the blasting technique. I wrote up a paper on it. Like I said for this study. A report. And it went on. After that I oversaw at Montezuma and Bombay Hook, and Brigantine, I did Brigantine too, off the north dike at Brigantine. Mostly salt marsh stuff though, except for Montezuma. Then other Refuges, more and more, picked up on it. It wasn't that complicated a technique. And they either had the National Guard, like up at Iroquois, and Great Meadows got into it too.

MR. STUPPS: The reason why I think Parker River got into mosquito control was when the land was taken, Fish and Wildlife Service went on record, saying that we would contribute toward mosquito abatement.

MR. GUVATIS: We were committed.

MR. STUPPS: As a matter of fact, we used to buy DDT. I think we had one thousand dollars, which was a lot of money back then, each year for DDT. We'd buy as many as ten, fifty-five gallon barrels of 25% DDT. We would give it to the State and they would aerial spray around the perimeter of the refuge.

MR. GUVATIS: I can remember the last time they did that. I was a student there. And there was an encephalitis scare that year. It was in August or early September and they sprayed. They weren't supposed to spray in the impoundments but they did that year. In fact, I don't think we gave them that DDT. I think the Governor mobilized the National Guard and everything else because there was such a health crisis. A couple of people had died. So, they were going up in these big transport planes. They were *big* planes, I remember seeing them, flying wing-to-wing, going right up Plum Island sound. But they also sprayed the impoundment, so it killed all of the white perch. We had a big white perch die off that year.

MR. STUPPS: I remember that year.

MR. GUVATIS: That was my recollection. I wasn't in charge of the Refuge or anything else then. I was just a student, but I reported on my findings. I remember that "J.C." [Apple] was pretty concerned or upset that they had sprayed the impoundment, and that they hadn't really talked to us, or got our permission, or coordinated the spraying of the marsh. It was about the time that DDT banned. Rachel Carson's studies were coming out in her books and everything, and we had lost all of our ospreys and eagles nesting on the east coast. So it was about that time that it shut down. I think it was 1960 or 1959 I would guess, that I was there as a student. And that was probably the end of it, the end of DDT. I am surprised that it went that long. When you think now, that wasn't that long ago. When you think of it, it was one hundred years ago when they sprayed 100% DDT, and agent orange. When I was at Iroquois Refuge, which was my third assignment, which would have made it in the mid 1960s, for a month, I sprayed agent orange on boundaries with a pumper unit. I was in an old command car, just going along spraying boundaries with agent orange. Then, a few years later, I was at another Refuge, and

Larry Smith was still at Iroquois, everything refuge did it, it was what we did. When I was at Parker River, they had me experimenting with bait. No, it wasn't bait. It was "urea" soil sterilant that I was doing. They said the side effects would be equivalent to taking an aspirin. You didn't have to wear a mask or anything. I was going into these cattail stands with a cyclone seeder and it would just bounce back at you after hitting this wall of cattails. For quite a few years, that strip of cattails staid there. We used to take pictures of them. If we had put it on by plane, it probably would have been better. It was a soil sterilant.

MR. STUPPS: It worked pretty well too.

MR. GUVATIS: Yeah, it kept in open. We were trying to make openings in the cattail, because it was a very shallow marsh. Cattail then, was like "loostripe, and fragmities" is now it was kind of a noxious weed in that concentration.

MR. STUPPS: I remember that you had the "cattail crusher" when you were a student, I've got a picture of that.

MR. GUVATIS: Yeah, but you made it. Oh had it stuck in a hole. Those picture are all in the narratives with the big OC-6 stuck up in the air and you guys trying to pull me out, because I had fallen into one of the holes with it. These were some interesting photos of personnel in action!

MR. STUPPS: The narrative reports were really good back then.

MR. GUVATIS: They were.

MR. STUPPS: Do they still have the Refuge report?

MR. GOETTEL: Well, we do. We're supposed to, but for five or so years there wasn't a lot of ...stations just didn't do them. But we're getting back into doing them now. I'll tell you, it was the biggest tragedy, not to do the narrative reports.

MR. GUVATIS: There are some gaps there now. Some of the stations are backed up a couple of years. Some years will never get done, with personnel changes and things like that.

MR. GOETTEL: And all of that is lost. I remember the first thing you used to do when you got to a new station was to sit down and read the narratives.

MR. STUPPS: Absolutely, absolutely!

MR. GUVATIS: What a wealth of information! And you wouldn't have to reinvent the wheel at the field level anyways. I think that a lot of the "reinventing the wheel" stuff that you talked about was budgetary stuff. We went through budgetary crisis and exercises. They call it "ZBB" and all these names. Every administration that came in

had a new idea about how to track your finances and get budgeted for funding, and going to Congress. That, and the political change in the Service, every time the administration changes, or there is an election, it changes. There has been a lot of stability at the refuge level, except on the supervisory end of things kind of fell apart at some point along the way. There was no guidance from Washington down. It used to be, in the days of Jay Cox Salyer and the early days, there was a real Service hierarchy just like there would be in the military, all the way down through. That pride kind of filtered up and down the tree. I can remember that even in my tenure the Washington office was just basically emasculated. And even the regions! It became almost like the refuge managers had total control of the programs. And sometimes that was fine and good, and sometimes it wasn't. Some managers needed or wanted some guidance. They weren't all experienced in every area. And I would hope that someday that this turns around again.

MR. STUPPS: One thing I remember from when I first started to work was that the regional refuge supervisor would come out and did inspections. Each vehicle was inspected, and they even went as far and to inspect the residents.

MR. GUVATIS: They inspected the logbooks.

MR. STUPPS: I remember George Spinner. I guess his wife didn't keep a very clean house. Erase that, I guess I shouldn't say that! They used to inspect *everything*!

MR. GUVATIS: Even the quarters. They'd tell you that they needed to see the quarters, and "what would be the best time?" And they would come and look at it. The log books, the vehicles and the tractors, everything. That's the way it was when I started. Mert Radway was the assistant supervisor, and Tom Horne was the supervisor. But that kind of thing would come and go a bit. I remember when Tom McKantor, Ed Moses, and I were the three supervisors for the region. We did conduct some inspections of that type. We would bring a person from CGS sometimes, on the team when we did the station inspections. Every five years we'd do every station. So it would go in a five-year cycle. Someone would concentrate on the books, some on budget and finance. Someone from personnel would concentrate on the personnel actions and interview all of the staff. I don't know if you ever got called into one of those, but they'd actually bring each staff member in by themselves and talk to you. That was probably in the early 1980s when I was still around. Then it kind of went away after that.

MR. STUPPS: Oh yeah, I remember those! When Arthur Miller was the Regional Refuge Supervisor, his big thing was that all of the tracks had to be tight on all of the dozers. We didn't really believe that it was that important. And I remember that one time when he came out I took wood on a sprocket and backed a machine up to tighten the tracks. If he had ever looked to see how those tracks were tight, but they *were* tight!

MR. GUVATIS: But *how* were they tight? [all laughing]

MR. GOETTEL: Tommy, where are you from originally? How did you get involved in the Fish and Wildlife Service?

MR. STUPPS: Delaware was where I got involved in the government. I was looking for a job. I had just gotten out of the military.

MR. GOETTEL: What branch were you in?

MR. STUPPS: The Navy.

MR. GOETTEL: How long were you in?

MR. STUPPS: A year and a half.

MR. GOETTEL: That must have been after World War II.

MR. STUPPS: No, I was in World War II. I was in the Philippines when the war ended. I came out, and I was looking for a job, and I went over to see the Refuge Manager, and I got hired.

MR. GAVUTIS: This was in Maryland?

MR. STUPPS: Delaware, at Bombay Hook.

MR. GAVUTIS: You're from Maryland or Delaware?

MR. STUPPS: I was born in Maryland. And George Spinner was the Refuge Manager, he asked me to fill out a form. "Key" Wallace was at Blackwater then, he would come over and help us on a job, and he was going to loose a maintenance man. He said he would hire me if I could get on the list. I filled out the application and sent it in, and they offered me the job up at Parker River. So in 1947, I went to Parker River.

MR. GAVUTIS: But you started down there, you actually worked down there?

MR. STUPPS: Yeah, I worked at Bombay Hook as a laborer for seventy-one cents an hour.

MR. GAVUTIS: As a temporary?

MR. STUPPS: Yeah, ok. When I came up here I earned twenty-two hundred dollars a year. I was a CTC-5 for some reason. Then in 1951, I got on permanent. But I got my law enforcement authority in 1949. It don't seem that they would have given it to me, but I looked at it just recently.

MR. GAVUTIS: Well, they were pretty casual. The further back you go, the more casual it was! "Here's your badge. Do good things for wildlife. Don't shoot anybody, and don't hurt anybody"!

MR. STUPPS: "Don't do anything!"

MR. GUVATIS: "Protect the wildlife!" They would assign me to Agent Browney for a couple of days, or any new people on my staff, when I was Great Swamp. Browney was the agent for the State, and he would come in and he would take the trainee manager, or the assistant manager, or whoever, the maintenance man, 'cause we had a maintenance man then at Great Swamp and they would go with him for a day or two during the duck season or during the open deer season in New Jersey. They would look for people jack lighting deer and so on. They would get involved in some cases and get a pep talk and the agent would then write a letter and say that this person is ready for authority. He would get them their credentials.

MR. STUPPS: The first training got was up at Moosehorn, the agents put it on. I think it was in the early 1960s.

MR. GOETTEL: So you got your badge in 1949, but you didn't get your training until ten or fifteen years later?

MR. GUVATIS: That was like a workshop. They started do these workshops around the nation.

MR. GOETTEL: Was it like a refresher class?

MR. GUVATIS: Well, it was both. It was an attempt at giving some training. But people like Tom, and a lot of us had been around, and doing these things for years. We had been rubbing elbows with the agents and other staff. We had learned, and gone to court and witnessed testimony and stuff like that. We were somewhat proficient, obviously at that point.

MR. GOETTEL: You were assuming that the agents had training. You have to wonder what kind of training they had.

MR. STUPPS: I can't remember if it was at this session or not, but I remember talking to Orin Steele or Duke White, and they said they didn't have any training either. And they said they could remember shooting over people heads that wouldn't come out of a blind. And they were shooting.

MR. GUVATIS: Those were the good old day. [joking]

MR. STUPPS: Imagine doing that today! This was probably in the 1960s. I don't know what year they started.

MR. GUVATIS: There were wild stories then, about poachers shooting, and not over your head either, you know, between your legs and by your ear!

MR. STUPPS: I can remember out on Pine Island they would actually search, go right down a guys legs and the whole works. Physically search each person if they were just walking through the marsh. They didn't even see them hunting!

MR. GUVATIS: Yeah, things have changed.

MR. STUPPS: It certainly has!

MR. GOETTEL: You were saying earlier that they gave you your handcuffs, and your "45"?

MR. STUPPS: That was just a joke.

MR. GUVATIS: They did that as a joke. They laid it out on the table.

MR. STUPPS: On my bed!

MR. GUVATIS: And you thought that this was what you were going to be into! Handcuffs and "45s" ! Actually they never issued guns early on. And most stations didn't even have them. Parker River was probably one of the first ones to have them because of their serious law enforcement problems. With a couple hundred thousand or half a million visitors there, or however many it was they actually had guns issued. I can remember having a "22" pistol that I paid twenty-two dollars for. It was a German Burgo revolver, and that was my sidearm for years. Then I went to a station that had a gun. Or you carried a shotgun in the vehicle during the hunting season to dispatch a wounded deer, or to make you feel a little more comfortable striding up to guys with guns in their hands! It was pretty casual!

MR. STUPPS: It certainly was!

MR. GUVATIS: We always marveled, and thought it was a credit to the Service employees that nobody ever got shot. And nobody ever shot anyone.

MR. STUPPS: There would have been some lawsuits!

MR. GUVATIS: Yeah! I think that overall, with these jack-of-all-trades refuge people, all the way from maintenance staff, to Refuge Manager to biologist, whatever they were, handled all these duties with no training.

MR. STUPPS: With no training.

MR. GUVATIS: With no training and to their credit. They used good judgment. And you never heard of anybody getting shot, or shooting somebody unnecessarily, or any of that kind of stuff. They used remarkable restraint, and tact and diplomacy. Obviously we had some people who were better than others on the staffs but we went for a long time, and it's a miracle almost, that something bad didn't happen. If you look at the fire program where people actually died, this never really happened, as I can remember, in

the law enforcement. If it did it was very rare. And nobody that I can remember at the stations that I was involved with ever had a problem. They used to routinely shoot dogs that were killing deer, running deer, but again, I think that the public accepted the authority then too. It wasn't abused, and it was respected. Now, everybody questions authority. That's been going on since the 1960s and 1970s.

MR. STUPPS: That was a big change.

MR. GUVATIS: The image has changed too.

MR. STUPPS: I think it was the late 1940s or early 1950s that they brought in a tractor trailer, and left it full of creosote lumber, there at the airport. We were supposed to unload it there, because the bridge was only ten ton, and haul it down to the refuge.

MR. GUVATIS: This was at Parker River Refuge.

MR. STUPPS: The stuff was just leaching the creosote, and I said, "We're not going to do this. We're going to take the truck down over the bridge."

MR. GUVATIS: Over that rickety little bridge!

MR. STUPPS: Over the bridge, and I bet you there was thirty or forty tons total.

MR. GUVATIS: But it was long, and it was distributed over a big area! Two wheels on the bridge, and two wheels on the other side!

MR. STUPPS: But I had never driven a tractor-trailer in my life! But I got on it, and drove it across the bridge and took it down there.

MR. GUVATIS: You didn't know any better! [laughing]

MR. STUPPS: No, and I got away with it.

MR. GUVATIS: Hey, I was a student out of UMASS, a city boy out of Lawrence, and this guy, before I knew it, had me in a dump truck hauling gravel from Rowley. He says, "You're going to get experience from all levels, you know!" And you had me running the dozer, the "D-4" I can remember that. Then, down at Brigantine, literally, they turned me loose with that road grader on that seven-mile auto tour route. God forbid, and I was a nervous wreck, running these levers, and pulling these things and going by cars! It was open to the public. Holy crapes! I made it around with killing anybody or without going into the marsh! When I think about the things that we did, it's amazing. But we all got through it. We all understood the whole program that way. I thought it was healthy. You did, everybody did. That every refuge manager trainee got to run the dump truck, the dozer, the grader, and then had to maintain it. To know where the grease fittings were. And then, if you ever became a manager, you had some appreciation, respect and

understanding of the needs. And if you had a maintenance man who wasn't greasing the tractor, you'd know it. We had these inspections then that would mean something then! We had to take care of airboats too.

MR. STUPPS: Yeah airboats too. I believe "Key" Wallace was the first one that had an airboat.

MR. GUVATIS: I think it was a Blackwater.

MR. STUPPS: I think he built it himself.

MR. GUVATIS: Yeah, they were all built early. The one I had at Montezuma, I took to Canada for two months, Lake Appatibby, on the Quebec, Ontario border with an agent assigned. We lived in tents, and trapper's cabins for two months. We night lighted at night and bait trapped during the day, and slept a little bit in between. We were there until early September, when the frost came in. And we banded thousands of ducks. But we used to work with the agents. They called it management enforcement then. That was their title. They were game management agents. And they were part of the division of management enforcement I guess. But they did a lot of other things besides law enforcement then, surveys and banding, and all kinds of things. And we used to go with them sometimes as Refuge employees.

MR. STUPPS: They went up into Canada. But we had no training back then.

MR. GUVATIS: It was all on the job training. I learned more on the refuges. I think J.C. Apple who I never considered a real biologist, but he was a refuge manager. I think he was the one who showed me how to age and sex waterfowl. If he wasn't the one, I don't know who was, because Bill Farb wasn't even there when started as a student. He came just after that, maybe my second or third year there. There aren't many people around now who know how to age and sex waterfowl, internally, and knowing how to use the wind characteristics. Its incredible, identifying ducklings that are six weeks old, and don't even have all of their plumage. When you get up in Canada, we were banding golden eyes, bald pates, pintails, ringtails, and I defy 99% of the people who are in the Service now to even begin to tell me what species they are, let alone what age are or what sex they are! It's amazing, the skills that we developed just with very little training. But somebody showed me how to sex a duck or a goose and I started with that, and became very proficient at it, obviously.

MR. STUPPS: Ed Addy, he was the biologist when I first went up there.

MR. GUVATIS: He was at Patuxent when I was there. Ed used to help me, but I think J.C. was the one who showed me. He had enough experience. Everybody did. I mean when you shot the cannon over black ducks, the whole staff was there. Even the secretary was probably even there, all the guys were there at least. Secretaries were usually women in those days. There were a few men. Howard Jung was a male secretary when he started. He started as a GS-2 at Fort Niobrara I believe it was in region six, now.

He always talked about starting as a GS-2, and ending up as a GS-14 or the equivalent of an assistant Regional Director type position, like Don Young would have been in. We had a male secretary at Iroquois, Bob Wolfe. He was a wonderful secretary for "Smitty".

MR. GOETTEL: Some of those guys had law enforcement authority too, right?

MR. GUVATIS: Yeah, they did. Right. Everybody did, even the Biologists did. Well, you needed it then, at least we thought we did. We were kind of groping our way along on some of this stuff. The rapport that we now have with the local police and the game warden came along later. I remember Norm Marble used to always be at Parker River helping out.

MR. STUPPS: And Mark Tollomio.

MR. GUVATIS: Yes, Mark Tollomio and other guys whose names I can't remember.

MR. GOETTEL: [to Mr. Stupps], So basically, you spent your whole career at Parker River. When did you retire?

MR. STUPPS: 1987.

MR. GUVATIS: Yes sir, a lot of managers come and go. It was the continuity that we had then, and probably still do. The secretaries like Mrs. Welch, could basically run those stations between managers, and did. Then they trained the new manager. A greenhorn, came in and they taught them how to run the maintenance and operations programs. And a lot of the other parts the program too. They would do the candidate sites for waterfowl, and doing patrols in the whalers during the waterfowl season. I came remember Woody running me around on biological surveys. You needed two people to be jumping in and out of the boat into the marsh, taking samples or making cases or whatever.

MR. STUPPS: Yeah, the maintenance people used to do the surveys.

MR. GUVATIS: Yeah, I remember that. When I was a student, I think you or somebody took me down and showed me how to do the waterfowl survey. The shorebird or wading bird survey, were done once a week. Somebody did, it wasn't J. C., it must have been you or ...

MR. STUPPS: Was Stanwood still working there?

MR. GUVATIS: No. Well if he was, I never... He was working at sub headquarters I think when I first started. But I never really met the guy. Or if I did, I don't remember him. I think he was sick then, or something. Didn't he die on the job?

MR. STUPPS: He retired and didn't live very long afterwards.

MR. GUVATIS: I think I knew Moe Stanwood's name, and I knew where he lived, but I don't think I ever met the guy. I think he was already gone when I got there. Maybe he was doing it before I got there. We used to have a weekly survey that we drove.

MR. GOETTEL: You were saying that the Manager at Parker River when you started was a GS-7?

MR. STUPPS: A GS-7, or a P-2 whatever that was.

MR. GOETTEL: Oh that's right. That was before the GS ratings.

MR. GUVATIS: [to Mr. Stupps], You were a WG?

MR. STUPPS: I was a CPC-5.

MR. GUVATIS: Then what did you go to?

MR. STUPPS: A GS-5. I was a refuge assistant. I was a refuge assistant until they changed me to a Foreman-3.

MR. GUVATIS: And that was to your advantage. I can remember discussions at some point when we were going to put you into GS, or leave you at WG. And you were far ahead. You were making more money there, than the managers for a while I think!

MR. STUPPS: No I was pretty close.

MR. GUVATIS: There were times when they did these wage surveys, and you'd jump ahead because the GS didn't keep up with the current surveys. They had these wage rate surveys every year, or every couple of years.

MR. STUPPS: Every year. We used to do them for the local area. We would try to go to the places that would pay the most. But our people did so many variable jobs that it was hard to get someone to compare to.

MR. GUVATIS: They'd pick the electrical duties or the mechanical duties to compare to.

MR. STUPPS: The mechanics would go to the equipment operators. And I don't think we could get into the plumbing and electrical, because that would be above where we were. But it was hard for us to justify the wages to where we could keep people.

MR. GUVATIS: But we expected people to do all of these things. They had to know electrical, and plumbing, and be able to do it. That's the thing, they were all jacks-of-all-trades.

MR. STUPPS: And law enforcement too. There were so many things doing on, that finally we had to follow the lead agency, which was up in Portsmouth. I don't know if it was the Air Base or the Naval Shipyard. Everybody got a big raise. As a matter of fact, I was a GS-5, and they went ahead of me.

MR. GUVATIS: And you were supervising them. I think I remember some of that.

MR. STUPPS: I don't know who was there as refuge manager, but they'd have to write a letter each year to justify giving me a step increase before it was time. So I was in that part of all that. I think it was Bill French who talked me into going into the wage grade supervisor. So I went into that, which was a much better paying job. I got quite a raise.

MR. GUVATIS: Well you deserved it! [then to Mr. Goettel] He ran the whole program. We had a farming program back in those days. We plowed and planted what seemed like acres and acres, maybe it wasn't, but it was in the . . .

MR. STUPPS: We used to plant about one hundred acres, over one hundred acres of upland, and one hundred acres in the marsh.

MR. GUVATIS: There was winter rye. And in the marsh you'd put millet. There was rye too, along the edges. We were really into farming in the Service back then. In this region and probably all regions. That kind of got phased out. Then they went to permanent pastures and we used to and they still do cattail crushing and spraying and mowing of vegetation. But we didn't really get into the planting of marsh vegetation. I can remember at Montezuma, they used to go out... there's pictures and movies . . . Larry Smith would be a good contact for this region, even though he's not here... he was at Monomoy and then at Iroquois forever...he's got documentation. If you want documentation, he's the guy. He's got the films on the night lighting. I can remember seeing pictures of Vern Dewey who was a clerk at Montezuma when Larry Smith was the manager there, walking on the mudflats with snowshoes, seeding Walter's millet, or Jiff millet, one or the other, during the draw down. And one hundred thousand ducks would come into that impoundment. They would show the pictures of the timber area right next to these mudflats having one hundred thousand mallards. And in this region that was a lot of ducks. It was a one thousand acre impoundment. Vern Dewey planted the whole edge of it in millet. He did it with his hand-cranked seeder.

MR. GEOTTEL: Yes, he is a legend.

MR. STUPPS: It must have been in the early 1950s, that I built a carrying cage on one of the trucks. I used to go down to Bombay Hook and Blackwater, and bring up mallards, and Canada geese. I still have a picture of cage I built. I don't know how many mallards I could bring back. It was a two tiered for Canada geese, and four or five tiered for duck.

[battery failure]

Mr. GUVATIS: When's the last time you looked?

MR. GOETTEL: Just a minute ago.

MR. GUVATIS: Oh really? Now he's getting proficient with his equipment here. [to Mr. Stupps] You know what you gotta do? You've gotta get one of those from the other regions, that aren't using them, and run to them! [talking about tape recorder]

MR. GOETTEL: Yeah, you're right.

MR. GUVATIS: Run them parallel and then just erase one of them later, and reuse it.

MR. GOETTEL: I might have to bum a couple of batteries off of you later, George, if this goes out again. [Mr. Guvatis tries to get them] No, sit tight, we'll see how it goes.

MR. GUVATIS: Well, I should get them out of the freezer. What kind are they "AA"?

MR. GOETTEL: Yeah.

MR. GUVATIS: Let me pull a couple out.

MR. GOETTEL: [to Mr. Stupps] did you build the impoundments at Parker River?

MR. STUPPS: Yeah, I was there when they were built. They had a yard and a half dragline. A guy by the name of Jody Katren from Missouri, he was the operator. He was the second operator. The first operator came from Amesbury, Ed Valley.

MR. GOETTEL: Were they Service employees?

MR. STUPPS: Yeah. Well, they were hired and put on the payroll.

MR. GUVATIS: [returning with batteries] I've got more downstairs. I don't have my glasses on, is that an "AA"?

MR. GOETTEL: Yeah, that's the right size, thanks.

MR. GOETTEL: O.K. we'll try it again here, Tommy. You started to say that you started working on the dikes in 1948?

MR. STUPPS: In 1948. And the north and south pool was completed in I believe it was 1950.

MR. GOETTEL: Those are *huge* dikes.

MR. STUPPS: I think they are 1.8, but the base, I forget the size of the base, but the top was ten foot. And I think it had a three to one slope. It seems to me that they were sixty to seventy feet at the base.

MR. GOETTEL: I wouldn't doubt it.

MR. STUPPS: A lot of material went out there.

MR. GOETTEL: Did you haul the material out there?

MR. STUPPS: No, we took the material out of what they called the “barrow pit”. We took it out of one part of the marsh, and poured it up on top of the marsh. Joe Hager, who was the state Ornithologist, said we would never be successful. In, number one, getting black ducks up on our fields, in which he was proven wrong. And he said that the dikes would never work either, they would never hold water. He was partially right on that one. We held water in the spring. But we were not successful in holding water other times.

MR. GUVATIS: The dikes didn’t leak. It seemed like the ground water would go down, and the impoundment would go down with it.

MR. STUPPS: There was nothing running in.

MR. GUVATIS: No, there was nothing running in, and it was sand. Probably, when it was clean sand, before it got covered with organic material and vegetation, and stuff, it probably did drain even faster than it did after it silted up. Or where there was still peat underneath.

MR. STUPPS: The north pool would hold more water than the south pool would.

MR. GUVATIS: I remember that.

MR. STUPPS: When Nightingale was there, we used to try to put dye in it to try and see where it was going. We’d go out and look at the creek, and see if we could see any dye coming out.

MR. GUVATIS: I think it was just the water table.

MR. STUPPS: But it held more in one than the other.

MR. GUVATIS: The south pool had more sand. And it has less organics in it. That was part of it too. There are a lot of theories on what did it. Do you guys want a drink? Are you thirsty? Would you like some lemonade or something?

MR. GOETTEL AND MR. STUPPS: No thanks.

MR. GUVATIS: [referring to tape recorder] is it working again?

MR. GOETTEL: Yeah, we’re all set.

MR. GUVATIS: Do you know how much you lost?

MR. GOETTEL: We didn't lose that much. I had just glanced at it. And I have been glancing at it regularly.

MR. GUVATIS: You have become a professional interviewer. You need a checklist.

MR. GOETTEL: Two tape recorders!

MR. GUVATIS: That's what I would have! That's the reason, I keep saying when I'm out in the field taking notes, and I keep saying that I should get a tape recorder. But boy, if you lose that whole day's worth of talking. As long as you keep checking it, and knew that it was working and know what happened to it. Even when my pad gets wet, or my pencil stops writing, at least I know it.

MR. GUVATIS: [to Mr. Stupps] did you say that you brought some pictures and things to show to Tom?

MR. STUPPS: Yeah. Sure, I'll show them to Tom later.

MR. GOETTEL: Good, I appreciate that.

MR. STUPPS: Now, the "stageamen" pool, which is about a one hundred acre pool, the National Guard brought in two D-7s. And I don't know who was there then.

MR. GUVATIS: Those were big machines. That was down when Nightingale was there, I was told. It was done before I got there.

MR. STUPPS: Yeah, it was. That's right. I went down there with no engineering. No nothing and I just started pushing dirt. There was a creek, that was probably sixty or seventy feet wide, a tidal creek. There was a footbridge that went across there from Plum Island to Stage Island. I built out from this side, as far as I could with what material I had. Just sand. Then I went on the other side, and I pushed up a great big pile of dirt.

MR. GUVATIS: How did you get on the other side?

MR. STUPPS: You could go around Bar Head.

MR. GUVATIS: So it wasn't really, totally an island?

MR. STUPPS: No. And I thought I had enough dirt that I could close it off on one tide. And I did. I closed it off on one tide. But there was a lot of dirt out there. I remember...

MR. GUVATIS: And it's held? It held to this day?

MR. STUPPS: Oh yeah!

MR. GOETTEL: It must have been mostly muck, wasn't it though?

MR. STUPPS: It was mostly sand.

MR. GUVATIS: It was glacial till. And the first part was probably all sand though.

MR. STUPPS: Yeah, it was all sand.

MR. GUVATIS: From the other side, from the dunes. Where did you get that fill, out of the sand pits there?

MR. STUPPS: No, there was a little dune to the north of it. So I used that. And it wasn't very wide, just enough to hold the machine up. We didn't get another machine in there until a few years later so we could build it the right way when we had enough material.

MR. GUVATIS: I can remember my student report, just being new to the Service, and knowing that Nightingale just built that dike, and the other dikes had been built before him I guess, that I was recommending impoundment using Grape Island and Cross Farm.

MR. STUPPS: I remember you talking about that.

MR. GUVATIS: That's how we operated in those days. That should make a nice impoundment! Connect Grape Island with this one, and that one! [laughing] No feat too big!

MR. STUPPS: And nobody asked anyone.

MR. GUVATIS: No, we just did it!

MR. STUPPS: I can remember on Stage Island, Arthur Miller, who was regional supervisor, I was up in Maine, at Moosehorn, and I was staying in the same hotel he was, and we were talking. And he said it would be nice if we had a dike across Stage Island. He probably talked to some people.

MR. GUVATIS: He probably had talked to some engineers or something.

MR. STUPPS: No, we had no engineers then.

MR. GUVATIS: That's before they got in the way.

MR. STUPPS: He probably discussed it with Gordon.

MR. GUVATIS: Or maybe Salyer in Washington.

MR. STUPPS: I bet you not, because I had started and I didn't have any level or anything, so I took and drove a post in the ground, and took a level, and leveled a stick

across it and pull my hand level on it. And we'd sight down that to see what height I was at. And it worked!

MR. GOETTEL: No laser levels then? [all laughing]

MR. GUVATIS: Well, when I started, we had these dumpy levels. We had the tripods. My supervisor Tom Horne at Montezuma came out and gave me a two-hour lesson on how to run a dumpy level. Hell, we made six hundred acres of impoundment, and six miles of dike, with just this dumpy level and some stakes. We got patted on the back for a nice straight dike with good slope, three to one, or five to one. It was interesting, we were surveyors, and we were everything. And firefighters too!

MR. STUPPS: That's another thing that Arthur Miller would do. He'd come out, and he would set the marsh on fire. The Georgetown fire tower, they threatened finally, that they were going to put us in jail. He would come out and do it.

MR. GUVATIS: We were the "Feds" you couldn't do that to us. People really accepted that in those days to a large degree. A lot of it was Federal sovereignty, it's the federal government, and "they can do whatever the hell they want"!

MR. STUPPS: Well heck, Moe Stanley, when I first came up here, he didn't even think we had to stop for red lights! He came up the Merrick Parkway in a truck, right after the Second World War, or during it, I'm not sure which, and he drove all the way up the Merrick Parkway in this government truck.

MR. GOETTEL: No kidding?

MR. GUVATIS: It was a "no trucks" road. I can remember we used to waive through the New Hampshire tolls, the Portsmouth tolls, because we were government. They just waived us through. Just took your horn and say, "look at the plate", and away we go!

MR. STUPPS: I think the worst trip I ever made, I don't know what year it was, I was sent up to bring back a dozer, and I got a picture of that trailer, it was a homemade trailer, it was a GMC dump truck, probably a ton and half. It didn't have no doors on it, and it was right hand drive. And it didn't have nothing from the engine, back. No mufflers, no *nothing*! Moe Stanley's boy went with me, and we could even hear ourselves talk! The people would go by, and they would be holding their ears. Why we didn't get [in trouble, I'll never know.]

MR. GUVATIS: Only in those days could you have done that! What year was that?

MR. STUPPS: This had to be in 1948, or 1949. One time, when I was coming through one town, and there was a hill, back then the old trucks didn't have much power, and a cop ran up, and jumped up on the running board, and said, "*Where you from?*" So I told him I was with the government, and he jumped off and left!

MR. GUVATIS: [joking] “This is government business boy, step aside!”

MR. STUPPS: It’s just amazing that someone didn’t get killed. Because we had no training, we just got in the truck, and drove! In this truck I was driving, the trailer was nine foot, six. Eight foot is the law. We used it right up into the 1950s. I’ve got a picture of it.

MR. GOETTEL: What was that “cattail crusher” that you were talking about? You said you made that Tommy? What was that like? I’ve never heard of that.

MR. GUVATIS: We’ve got pictures of that. We’ve got pictures of all of that stuff. Those narrative reports, and what Tom’s got, it’s probably easier to find in Tom’s files, and a lot of that stuff is in the narrative reports.

MR. STUPPS: I think the Refuge got rid of all their files. That’s where I got most of these pictures, because the Refuge was throwing them away.

MR. GOETTEL: Oh no! No kidding?

MR. GUVATIS: You wouldn’t believe the stuff that gets “chucked” out of the files!

MR. STUPPS: Tom Horne didn’t like to keep nothing!

MR. GUVATIS: When I was doing the “sick sea” stuff at Parker River, I saw narrative reports that I had written when I was there, or my staff had written. There were four copies, Washington copy, regional copy, circulating copy for the country, and the station copy. With the circulating copy, the tradition was that when it came back, it would be sent to whoever the station manager was at the time. That kind of fell apart. But all four copies were still in the file!

MR. GOETTEL: No kidding?

MR. GUVATIS: I can remember the regional office saying “We don’t want these anymore, we’ve read them, and we’re sending them back”. And Washington sent them back, at some point, whether they had them archived or not. I’ll bet you they didn’t. So there was four copies. And they said just take them, rather than taking notes out of them. We don’t need them. Everything that had more than two copies, I left. I mean, when there was less than two copies, I left. When there was three and four, I just took a copy. So I’ve got some of those. With the blessing of the Refuge, they said they didn’t want all these copies of these reports. They have the original color photos in them.

MR. STUPPS: I heard that Parker River got rid of theirs.

MR. GUVATIS: Well, when I was down there they had most of them. There were one or two years missing from when they actually changed the narrative report period, to fit the program management, or some other such foolishness. There was overlap in some,

and gaps in some. Almost every station had a gap for about six months. But they [Parker River] still have them there, Tom.

MR. STUPPS: They do?

MR. GUVATIS: Yeah, in fact I've got a few that should go back to them. They are ones where there was a second copy that I barrowed.

MR. STUPPS: I thought sure that they had gotten rid of them.

MR. GUVATIS: No, they still have them. That's what I did last winter. Moses and I were down there. They are almost all there. What the heck were we talking about? I know we started on something else and drifted off.

MR. GOETTEL: I mentioned the "cattail crusher".

MR. GUVATIS: Oh, the "cattail crusher". That was welded, Tom, and these other guys welded angle iron braces on drums that would roll.

MR. STUPPS: They were fifty-five gallon drums, we would put three together, and weld angle iron so that the angle iron would stand up and cut the cattail as we put weight on it.

MR. GUVATIS: Did you have water in the drums?

MR. STUPPS: Yeah.

MR. GUVATIS: So they'd fill these drums with water for more weight. It actually did more damage to the plant, than cutting it off. It injured the plant. It put world of hurt on that plant! It's like tatting hay, you know? And somehow, I think it locks up the nutrients or something, and they can't get back into the roots. That's what they do with hay. They tat it, or knick it, and it makes it dry quicker but it also holds the nutrients in. But that's all they did. You could pull a bank of those that was ten or fifteen feet wide. I remember it being quite wide.

MR. STUPPS: Yeah, it was. I don't remember if it was three or four barrels wide, maybe twelve feet wide.

MR. GAVUTIS: Like discs, gang discs. Just knock that stuff down. And underneath all that cattail was all this dormant seed. There was hundreds of years of seed, and muck, and peat there. It was all salt march. Even a dozen years of millets and smart weeds, a nut grasses and sedges, and all kinds of stuff would grow up fast. And you'd have waterfowl food suddenly.

MR. STUPPS: It would open it up.

MR. GUVATIS: It would open it up, and you'd have nesting and you'd have waterfowl feeding. Basically what they were doing was interspersing feed, and open water, and everything in one hundred acres of cattail. Was fragmities the problem then?

MR. STUPPS: It was just beginning.

MR. GUVATIS: And loostrike was just beginning too. So cattail was the big villain. At Montezuma, they used to burn it. And they used to mow it and crush it. They had a one thousand acre impoundment with mostly cattail in it. Where ever you had a too shallow impoundment were the muskrats couldn't work the roots in the winter, which was the case at Parker River and at Montezuma, they would end up with a cattail monotype.

MR. STUPPS: That probably helped the loostrike to get started too.

MR. GUVATIS: Yeah, the disturbance. A lot of the things we did. The draw downs," and flooding would bring in loostrike. We didn't understand that loostrike would be such a problem. And now, I've used, and I know the Refuges have too, used millet seeding at a critical time during the draw down to smother out any loostrike reproduction.

MR. STUPPS: Oh, is that right?

MR. GUVATIS: Yeah, because you know how fast that stuff grows, it's like buckwheat. If you put buckwheat on it, it's good. That's buckwheat in two thirds of my garden. Now that the kids have left home, I don't need it. I put that stuff on, and that will out run any weed going. And that's on very light. [pointing out the window] If you put it on real heavy, like you have to sometimes when the weeds are heavy, it will just kill everything. Plus, the buckwheat goes way down to the nutrients.

MR. STUPPS: We used to aerial seed millet in the south pool. We'd draw in down and used to get some good stands.

MR. GUVATIS: Well, I do it out here when we have dry season, and the pond goes down fast, I put millet on it. But that's a good way to keep out loostrike encroachment. If you go into a drought suddenly, in July, just walk around it once a week with a crank seeder, and put millet seed on it. You won't get any loostrike seedlings surviving. It will just smother them out, because they grow so fast, and loostrike seedlings grow relatively slow the first year. In New York they used to do that in some of the State management areas, Oak Orchard, and the one named Montezuma, and Helen's Island.

MR. GOETTEL: So Montezuma was your first station George? Was it your first permanent station?

MR. GUVATIS: Right, it was my first permanent station as a trainee. I went there mainly to. . . Tom Horne made me a construction foreman. I knew nothing about it! He taught me how to run levels and I ended up with a twenty-man crew there. I had three chainsaw operators, three dragline operators, and three oilers. There were several bull

dozer operators and several laborers and actually, near the end, I had a foreman. Still, I was responsible for that whole program. Finally, I hired the foreman after about the first six months or so, because the crew was twenty people.

MR. GOETTEL: What was to build the dikes?

MR. GUVATIS: We were building the dikes below Routes 5, and 20. There were six hundred acres of impoundment, and five miles of dike. We had to clear the swamp timber, which was mostly white oak, red maple, silver maple, elm, and stuff like that. We cleared for five miles of dike, one hundred yards wide so we could run dragline. And the upland parts we built with dozers and then when we got down to the deep parts with the muck and peat we ran draglines on mats. We had a huge Lima dragline. We had a "22-B" and a "15-B" which were smaller draglines. They had like a three quarter yard buckets, and five-eighths buckets. The Lima had a yard bucket I guess, or a yard and a quarter. They would go maybe one hundred feet a day. It was all staked out. You had the centerline of the dike, and toes of the five and one slope and the three and one slope, and then the twenty feet of a berm to run on with the machine. The barrow pits were like thirty feet wide on each side. We'd push the stumps and the trees back in. There was no salvaging or anything. Tom Horne wanted us to burn the stuff. Some of the guys on the staff said that the peat would burn. But he wanted it burnt, "there will be predators and stuff living in there". And he was right. So we started burning. That was my first permanent year with the Service. I didn't have any law enforcement authority, but believe me, that first year and a half, we spent a lot of time on fires. We had multiple chain reaction collisions because in the swamp, at night, the peat would be burning. The people would come down off of the hills into this fog band where the cold air and the smoke would settle, and they couldn't see the road. No body was killed on the Refuge, except for on the through way. There were other peat fires burning off the Refuge. Somebody was killed there. But we had two serious, twenty or twenty-five car multiple collisions. We were out there digging trenches with the backhoes and bringing water from the canal and the lake in to the fires. We were surrounding the fires with ditches, and pumping and digging with the dozers. You'd be walking along, and you'd drop in up to at least your waist, or your chest into a fire pit because it would be hollow. And you'd think that the fire would be out and you'd find it burning on tree roots. It would pop up somewhere else, and the wind would fan it and it would get up on top and run and go down, it was a nightmare! We fought those fires for months, and months, and months. It took two summers to get them out. Tom Horne finally stopped saying, "burn the windrows." Some of them were still there!

MR. STUPPS: You didn't get them all burned?

MR. GUVATIS: That was *five* miles of dike on two sides. So that was ten miles of windrows to burn. And a lot of it was organic soil and it burned out like it did at Stage Island. I guess you guys had some fires there. It made wonderful habitat. The fire would go down to the water table. And until it hit the water table, it would just keep burning. Those roots would burn.

MR. STUPPS: You didn't even know that they were burning!

MR. GUVATIS: No! And you could smell it, but you couldn't even see the smoke unless you really looked. We found that the only way to really get them out was to get a dozer right in the fire hole and dig it out, and sort it, and wet it down as you did it. We had these pumps. We had no fire training whatsoever and it was fairly hazardous. We had people fall into fire pits and scramble out and jump in the ditch to get wet real quick! Their feet would be burning, or their hip boots would be melting, that kind of thing. It was kind of interesting there. That was my primary job. I also worked with the agent and got my law enforcement authority when I was there. We did controlled burns on the cattail marshes there, like Tom was talking about. We used to fire them up every couple of years and burn them off, and get rid of the biomass, and actually extend the life expectancy of the impoundments by getting rid of some of that biomass. Again, you'd get a regeneration of the millets, and the "smart weeds" and a really nice response for the first year or two until the cattail would come back in again.

MR. GOETTEL: So, you were there for a couple of years?

MR. GUVATIS: I was there a year and a half. From there I went to Iroquois Refuge for a couple of years, under Henry Whitley. "Nook" Wilson was the maintenance man there, and Rudy "somebody" was a laborer, and Joanne Smith was the secretary. Henry Whitley was a remarkable man in his day. He had built these dikes that you had [to Mr. Stupps] but he built seven miles of dike, half way out to Atlantic City! It had a sand core, no clay. Just sand dikes, and he vegetated them with sprigs of dune grass. He was a remarkable man, he probably never got due credit for what he did. He kind of fell apart at the end of his career. He took up heavy drinking. I ended up having to run that station during his last year. It was sort of a sad way to go. In fact, that whole area is bad when it comes to alcohol. It's depressed with it. There's a bar on every corner, and people down in that country were depressed. They were all drinkers. The whole staff was heavy drinkers. His last year, he never got the fanfare that he deserved. He did an incredible feat, building that dike. They had carryall scrapers and draglines and dozers.

MR. STUPPS: I think he got *so* much excess material.

MR. GUVATIS: Yeah, he did! That's how he got all of his equipment. And he supplied the whole region, like Eddie French is trying to do now, with his brother-in-law. Equipment from all over the region probably came from Whitley. There's a guy that did single handedly, he only had two maintenance people, and a patrolman, almost all of the work. But down there, I kind of ran the operations program, because he left while I was there. He retired. People from all over the region came. Larry Smith was there, taking pictures.

MR. GOETTEL: This was down at Brigantine?

MR. GUVATIS: This was Brigantine.

MR. GOETTEL: I thought you said "Iroquois".

MR. GUVATIS: No, then went...

MR. GOETTEL: You went from Iroquois to Brigantine?

MR. GUVATIS: No. I went to Brigantine, and then I swapped. . . the order was Montezuma, Brigantine, then Iroquois. Ed Moses was at Iroquois when I was at Brigantine, he had started Erie with "Smitty". And Moses went to Great Meadows or someplace, maybe Parker River. I moved in there for a year at Iroquois under Larry Smith. That's where I sprayed Agent Orange for a month. And we did all kinds of things.

I also built one thousand acres of impoundment there. We had three pans, and a couple of big dozers. We also had a couple of draglines too. I remember one day, after we were done with the project. We built a dike, and they had estimates of one hundred thousand dollars to build it. The lowest estimate bid to build this dike was around two hundred thousand. So Tom Horne, having used me at Great Swamp, and knowing my capabilities, and having had me work with Whitley at Brigantine, and knowing that I knew how to do these things said, "we'll do a force account". And we went out and hired contractors. Dick Murphy was one of them. He would say, "all right, just tell us what you want". There was people back then that would work for you. He'd write up the "specs". We would put service recorder clocks on the machines, so we could track them. I still have some of the old discs and the keys.

MR. STUPPS: Do you?

MR. GUVATIS: Oh yeah. It's amazing. But it worked.

MR. STUPPS: You couldn't beat it.

MR. GUVATIS: We went out and got the equipment and the operators and paid them by the clock. We changed the clocks every day, changed the discs, and kept them for the records. When we were all done, we built that dike for forty thousand dollars. They only had one hundred and twenty and we built it for forty. Then I found an old dike in the woods that split the impoundment in half and made two impoundments, a four hundred and a six hundred acre one. We renovated that dike. The last day was almost like a salute. We marched all that equipment in rows. We had all these pans and dozers. Everywhere I went, we built a pond at the residence I was living at. They just went around and around, all day. And that pond went down. It's there right now. It's a beautiful farm pond, probably twenty-five feet deep, at Iroquois.

MR. GOETTEL: How many acres?

MR. GUVATIS: It's about an acre. They just, all day, dug, dug, dug. Then they still weren't out of money. That's when they went over to the Job Corps, and started on another project, and I transferred. They were still spending that one hundred and twenty thousand when I left. We built miles and miles of dike. And we built what we called

little “dikelettes” which were little organic dikes. They weren’t hauled in clay material with stone riprap and all that. But they were twenty to one slopes so that they could over top every spring, and not wash out. They were maybe twenty-five to one, very long slopes. They lasted for years. The muskrats raised hell with them, as they do with any dike. But they were so long, and so wide that they never got through them for years. They had to keep eating in on the pool sides for years to get the dike riddled. From there I went to Great Swamp. Tom [Horne] wanted me to go the Great Swamp. When we moved in to the house at Iroquois, we couldn’t get our queen-size mattress in the door. And “Smitty” says, “I’ll put another window in there at the top of the stairs, so we can get your queen-sized mattress in. But you have to promise me you’re going to stay for two years”! I said, “O.K., I promise”. And I’m there a year, and Tom Horne says he wants me to go to Great Swamp, and “Smitty” says, “What do you mean? We got a two year commitment out of this thing”! Whose boss here? You know Horne! And I said, “Geez, I thought you thought more of me than to send me to a place like Great Swamp”. I was kind of his “pet” boy. I really didn’t think he’d do that to me. It had such an awful reputation. It was a new station in *New Jersey* no less. It was in north Jersey, near Times Square. It was only twenty or twenty-five miles from Times Square. I thought, “God, what are they doing to me”? I went there, and when I got there we walked all of the wetlands on the refuge. It was coming out of long, long drought. We walked along these little brooks, like Black Brook and Grey Brook, and we found three duck broods on the whole refuge. And there were probably not a total of two or three acres of water, mostly in stream channels and ditch bottoms. There were huge ditches that went on for miles. And Tom wanted to start pumping money in. And again, we hired *one* guy, with his machines. He had a pay loader and he had a little dozer. He would jump back and forth from one to the other. And we had those clocks. Tom Horne started pouring money in. And the first year we had no water. We had two or three old wood duck boxes, and one had a nest that nobody even knew about. We started increasing wood duck boxes, and increasing water. The second year we had one thousand acres of water, just from plugging ditches. When I left there, in five years, we had *three* thousand acres of water on less than six thousand acres. Standing water. We had built two or three hundred ditch plugs. And some dikes like the Stage Island dike, because Tom Horne just kept pumping money in. All the other managers were wondering and complaining, “Great Swamp took all our money”! And at the end of the year if there was any money lying around, instead of buying new vehicles, it all went to Great Swamp. I had like four assistants. I had an assistant for public use. I had an assistant biologist. I had an assistant that ran the construction program with “Dailey”. They buried thirty or forty homesteads. These were the days when I left there, Tom McAndrews had paid like, twenty thousand dollars, just before I got there to get one house put into a dumpster, and hauled away properly. Me being still the country boy, and reckless, and getting away with murder, we had that guy with that pay loader come in to these homesteads that were right on the paved road and we’d do it in the off season. In the pouring rain, in the morning he’d come in and dig a pit that would be twenty feet deep in the clay and he’d go over and “munch” that house and push it into that hole. Then we’d burn it. It would burn all day, and at the end of the day we capped it with clay. That was the end of it.

MR. STUPPS: That was it!

MR. GUVATIS: Vehicles, equipment, buildings, everything went in there. Any thing that would burn in the fire pit went. The next day we'd be out there cranking seed on to the little mound that was left of it. We took out paved roads that were in the wilderness. A mile and a half of paved road was taken out because it split the wilderness in half. And Congress told us to go and plug all the ditches so we did. We caught hell from the Mosquito Commission, and from the neighbors and everything. With water everywhere. It's a wet area anyway, beyond what the refuge does.

MR. GOETTEL: But that was a good investment though. It was money well spent.

MR. GUVATIS: People couldn't believe it. I called Tom Horne at home one day I think. I said, "You've got to come down here, in the next couple of weeks, you're not going to believe this, we've put in forty-two ditch plugs. And it started to rain last week". It would back up behind one ditch plug, and run around through the swamp woods to the next ditch plug, and it was just like stepping-stones. And every day I went over there, you could find a new wetland! It was incredible! The duck weed and the trees are starting to die by the second year. So Tom Horne came out, and he couldn't believe it. And Salyer had talked about Great Peace Meadows and Troy Meadows, and Great Swamp. Great Swamp got the lowest ranking in the Service. And the region had kind of "gone after" Great Swamp, but there was a lot of criticism from Washington about having done that, because it was the least desirable of the three. But the potential was there. With Horne's help, we realized that! Nobody ever spoke poorly about Great Swamp after that. They read the narratives with all these pictures. I've got aerial photos showing all of these little ditch plugs with all of the wetlands formed behind them that are there to this day. Roger Tory Peterson came out and was photographing. He found five Least Bitterns in one palmett farm, that's kind of a rare bird these days. I just got a write up from the New Hampshire Audubon about a sighting of a Least Bittern, and they said that every sighting in New Hampshire has to be written up. Parker River and Stage Island had them in these impoundments and on these restored wetlands. Big places, one hundred acres, sometime one thousand acres were full of things like Least Bitterns, and King Rails, and Pied-Billed Grebes and Moorhens. But that's what you get with refuges. And without them you don't get that kind of thing because you don't have these big wetlands restored. They're all drained.

MR. STUPPS: It would be impossible to do it today.

MR. GUVATIS: Oh yeah! And the other thing is...the first year I was out there we put fifty wood duck boxes up. We doubled the boxes every year I was there. And when I left we had five hundred boxes and we had seven thousand eggs in those boxes that year, seven thousand wood duck eggs. The production was in the thousands. And we had roosts in buttonbush that had been drained for decades, if not centuries, and thousands of ducks would pour in for ten or fifteen minutes, right at dark to these roosts. And poachers would find them, and start shooting the hell out of them after dark. And we'd make cases against them. But, talk about gratification, it's just like at any place where

you've built an impoundment or restored the wetlands, it's like that. These were drained wetlands. These were not tidal marshes. Great Swamp was a great ditch with a lot of agriculture. There were barbed wire fences and grazed in fallow meadow hay and all of that stuff. Some of the neighbors almost croaked when the water started coming up, and the cattail came in with the millets and the "smart weeds".

MR. STUPPS: Did you flood any private property?

MR GUVATIS: A *little* but, but not too much. Some of the things we did would run on other people. It was like the Everglades. A lot of it was flowing water; it was very slow flowing sheet water. Basically, what they did in the CCC days in the 1930s, they dug these ditches. And they went in intentionally from peninsula to peninsula in these big swamps, and from island to island, they used the high ground. And when they went through there, they dug these huge ditches in the clay on these islands and peninsulas. And they took the water out of its old channels that meandered, and made them like straight lines connecting all of these dots, the high points. We just came in with the little tiny dozers, like a "D-2" and we could do like one or two a day. It would cost us maybe one hundred bucks to build this thing. The next day a guy comes in with a crank seeder, and would mulch the thing and seed it and boom, you've got a nice dike, or ditch plug. We didn't have to go in the swamp very much. Just to get from island to island. We had a campaign, if you started in the wrong place, you couldn't get back there again, ever. We started *way* the hell up in the headwaters, as far as we could. In some of those places we had trouble getting machinery in because it was organic. We had to go from island to island, and we started way up and started plugging, and working our way out. We kept doing that for two years, three year actually. Then we got into the areas with more clay. You could just plug in there with a little dozer, and make a little barrow pit as part of the impoundment. About one third of the plugs were extremely high, and then in some places you would have a little low island, you would build a plug and it would go right under. It would go right over that plug because the next one down would hold it. Probably ever one hundred yards, or every two or three hundred yards, you had a plug or dam. In some places there were these long, convoluted peninsulas and islands with just this little ditch, as deep as this room going through it. It was a cinch to plug that son of a bitch. But the Mosquito Commission was going crazy because we were flooding all this stuff that they had been keeping drained. Most the flooding was on the Refuge. We could basically tell when we put a plug in, if it was going to flood a guy's sheep farm or something. We didn't do it until we acquired it. There are now, at Great Swamp, hundreds of acres of wetland that have not been reclaimed because of political pressures of killing trees and things like that. But these are vernal pools and good wetlands that some day I hope we will still restore. There was so much water, that they said that we didn't need to plug *every* drainage ditch. To me, if you buy a drained wetland for wildlife, you plug it! I used to argue with "ES" even. Mike Bartlett and I were good friends, but we used to argue about the fact that this big ditch was coming out of this nice shrub swamp, a hummock swamp, and Mike says, "it's a good wetland, why plug the ditch?" and I said, "Because it's supposed to be a deep, freshwater marsh with cattail. It's a Least Bittern habitat, not a frog pond". A frog pond will dry up quick. If we plug this little ditch it will be a frog pond, which will last two months. I was just trying to

bring it back to what it was historically. All of these things had drainages, but they weren't where they dug the ditches. They dug the ditches in the easy access points in the deep clay soil. It was very easy to undo what they did. If they had dug those ditches along the stream channels, through the muck and swamp, then you would have had an awful time plugging in. Then you'd need beavers. We even brought beavers in too.

MR. GOETTEL: You did?

MR. GUVATIS: Yeah, and they got in trouble. They immediately went to backyards and places where they didn't belong. They have been a big disappointment there. When I go down there on my annual deer hunts on the refuge, when it's open for deer hunting, people can't believe I go out with fifteen inch boots way into the wilderness area, and come out with a deer. This is Lou Hines, and Al Lizgowski guys that are swamp rats, just like me. But they can't believe it. "You mean you went in with those boots and you aren't even wet? And you got to Island Pond and Fishhook Island, and you aren't wet?" I said, "Yeah, but I crossed on these plugs that are underwater." The next plug down is holding. If you know where the plug is, and don't step off the edge into six feet of water, it's only this deep. [demonstrating] The deer know where they are. And I know where they are because I built them. It's kind of interesting.

MR. GOETTEL: And you didn't want to go there, but you probably didn't want to leave.

MR. GUVATIS: So I was there five years, and I didn't want to leave. Then they wanted me to go to Parker River. I said I had already been there as a student. You don't send people back to where they have already been. The only thing that is really a challenge would be Rachel Carson, and the law enforcement program. Rachel Carson or Monomoy because they were kind of undeveloped and still growing, and the law enforcement program were interesting to me. And besides, I said that I had always lived in refuge housing, and I had given eighty hours a week. Me and my family, and everybody that works for me have. If I move up here I'm going to have family and friends, and will probably move off of the refuge. The house isn't even on the refuge. It's up on the north end of the island and it's crazy there in the summer. They told me that that was all right, and that they only expected forty hours a week out of you. Howard Moon said that. And I told them that they probably wouldn't get much more than that. Because if I move off of the refuge, I'm will have a homestead. And I'm not going to live down at Plum Island. I don't like too many neighbors around. I like those five thousand acres backyards that I had been in. So anyhow, I went to Plum Island, and everybody who goes to Plum Island, if you check the list of regional managers, ends up in the regional office, next. The only one that broke that tradition was Jack Fillio. I tied the longevity record, which Gordon Nightingale had set for Plum Island with eight years. But every manager from Plum Island ended up in regional, and probably then to Washington offices in some cases. And I didn't like that. I was a field biologist at heart and really wanted to be out in the field. The thing that kept me most interested, and challenged, was the law enforcement program at Parker River. I used to go up to Rachel once a week, if I could, with Maury and go over different units. It was fun looking at new acquisitions where you could see boundary encroachments, and see junk on the refuge, and drainage ditches. You would

find places where you could store wildlife values on a piece of property that they would pay a fortune for to buy. A place like Rachel is expensive. And Great Swamp was very expensive land. It was relatively high end. Now it's cheap in this day and age.

When I got to Parker River, Tom [Stupps] was there. It was very easy. Mrs. Welsh was still there.

MR. STUPPS: She was?

MR. GUVATIS: Yeah! I hired Clara Bell as a secretary. Mrs. Welsh was still there. She retired when I was there. I remember being upset about it. But she had gotten kind of cranky and crotchety in her older days. But going to Parker River was like going home we were all good friends. There were Tom, and Woody, and Don I knew them all. They all helped me get going. They helped me, and trained me and taught me. Here I was, this young whippersnapper and I was their boss! But we got along well.

MR. STUPPS: We sure did!

MR. GUVATIS: We had a good time there. It was easy for me to concentrate on other things because I had people like Mrs. Welsh, and Clara who had been the secretary for the under-secretary of the Navy, and the personal secretary of Senator Tidings of Maryland before she came to work as a clerk at Parker River! She had been a GS-9, or higher in Washington, but her husband had retired from the Navy.

MR. STUPPS: He was a Marine. He was a Colonel in the Marine Corps.

MR. GUVATIS: They had moved up here, and she just wanted some work and boy, what a wonderful "find" she was! She was a beautiful woman, she still is. When she walked in all the guys were "gah-gah". They said, "We're going to hire this one, right?" Her credentials were incredible, just incredible, and what a wonderful person she was and is. She was *so* talented. She spoiled me *rotten*. You could dictate to her, she would write your memo for you, and help you with ideas. Everything was done right, everything. She didn't do the bookkeeping. You, [Mr. Stupps] and Kaye Garris did that. But Clara Bell, with the funny name, "Clara belle" being the clown on Howdy Doody, with her name. But what a talent she was! What an asset to the refuge she was. *All* of the secretaries, and clerks were like that. But she was an incredible help to me. She made my job *so* much easier. And she was never compensated adequately, although we got her raises as much as we could. And we were always struggling with "the system" to give her awards and things. And she was so loyal and so dedicated, what a wonderful person. Everybody loved her. She finally left, sometime after I did. She is still working in Newburyport.

MR. STUPPS: She went back to Boston, I thought.

MR. GUVATIS: Yeah, you're right. She did, but she still works in that gift shop, I think. She was part-time, but maybe she's given that up now.

Then of course, they dragged me kicking and screaming into the regional office. The inevitable finally occurred. First I was detailed into the old post office and courthouse building. Then out to Newton Corner, I got transferred out there finally. I was back and forth on details in Washington. There was a fourteen-week detail in Washington.

MR. GOETTEL: Oh really? What did you do there?

MR. GUVATIS: We working on the Refuge System EIS. So I got letters in my file. Don Young was on the task force with me. There was a whole bunch of people. Larry Smith was a detail man. I think there were about twenty of us. We'd spend two or three weeks at a shot in Washington. I would come home every second or third weekend. Some people put in more time that I did. I think I put in fourteen weeks. Some people put in thirty weeks. So finally I went to Newton Corner, and we they moved to Hadley, I had two years to get to age fifty-five, and I had thirty-one and a half years in. I did thirty-three and a half years, and they were offering buyouts. I was commuting back home here to my little sanctuary, which helped me keep my sanity. This is my refuge. If I didn't have this backyard to play in all the years I was working in the regional office it would have been bad. But it got so that I was only getting home on weekends because it was two hours each way. Now I am doing a lot of consulting. They are beating me up this year. I am two months behind trip reports. I am doing wildlife and habitat assessment type work for the National Park Service and the [unintelligible] Watershed Association and the Great Bay Coalition are using my reports. Bob Miller is using them with the Nature Conservancy. They are having me look at three and four hundred acre tracks that have three hundred perk tests on them, and they are getting ready for development. So that's what I'm doing now. And Tom finally retired! I couldn't believe that he would ever retire. And he didn't! Then he went to work for a contractor!

MR. GOETTEL: Did you really?

MR. GUVATIS: But he finally retired from that. I think you kind of retired before, and kept going back.

MR. STUPPS: Yeah, I'd go back.

MR. GUVATIS: He loves running the equipment.

MR. STUPPS: It was a good job, but like anything else you get bored with it.

MR. GUVATIS: *Bored?*

MR. STUPPS: When you're running that equipment all day, every day.

MR. GUVATIS: It wasn't building dikes and farming.

MR. STUPPS: It was good though. I enjoyed it at first.

MR. GUVATIS: Tom has to be busy all of the time.

MR. STUPPS: Not anymore!

MR. GUVATIS: Are you enjoying relaxing a little more?

MR. STUPPS: Yep. I've got to get going. I've got to get home.

MR. GOETTEL: Oh, O.K. Do you want to get your stuff?

MR. GUVATIS: Did you have some pictures to show? Do you want something to eat? I can fix some sandwiches or something.
[pause]

MR. GOETTEL: We're back again. Tommy Stupps has just left. He had to take off. So it's just George and me. George Gavutis and Tom Goettel are here. Tommy gave us a picture of the Essex County Sportsman's Club. And it says "notice, any persons connected with the Federal Fish and Wildlife Service are not welcome on these grounds of the Essex County Sportsman's Association". So I'm going to take a copy of that, and send it down to NCTC. George started talking about how they literally, gave away of Parker River.

MR. GUVATIS: Two thirds of it actually. Tom thought that is was around thirteen thousand acres. I know that it was between ten and twenty thousand acres. A lot if it was proclamation type waters, and condemnation type lands because the title was so clouded as it was in so many areas, especially way back that it was the only way that they could put a boundary together. That sign was on the Plum Island Turnpike near the airport on Plum Island. Everybody that drove out to Plum Island would see that sign. [referring to Mr. Stupps' photo] The north end of the island is all houses, and the south end is refuge. It was before my time there, as a student. It was even before Gordon Nightingale's time I believe, too. Maybe it was during Gordon Nightingale's time. He may be able to shed more light on that. There was a lot of hostility because the government came in there. A Federal presence wasn't relished by a lot of the sportsman's groups. Even though there was hunting on forty percent of the land at some point, maybe it wasn't right off the bat. I can't remember, I don't know the history of that business. But the refuge was a more typical refuge. It went all the way from the sea at Plum Island with the beaches and dunes and the back salt marshes, up the Parker River. That's where it got its name. "Parker River National Wildlife Refuge" doesn't fit this refuge at all. Those Parker River wetlands went on for miles, all the way up into Georgetown, Massachusetts several miles west of route 95, into the Crane Pond area, and across route 95 into West Newbury. It also includes the Artichoke Reservoir area. All of these State Wildlife Management areas that exist there now, were a part of Parker River National Wildlife Refuge. I read the bulk of the Congressional Record with was voluminous. The refuge probably still has a copy of it. It was piled up on top of a cabinet. There were several thick bindings full of Congressional testimony and record. It was one of the saddest things I have ever seen, as part of the Refuge System. An area that could have been protected and preserved was

gone. At least it went to State Fish and Game departments. But it's been totally neglected as such, because they didn't have the funding, or a national mission for it. The wetlands are still drained, and over grazed or over pastured. They are still in relatively poor condition, as far as wetland wildlife goes. Most of it's has gone up in timber and aren't really managed much. If they are it is "put and take" pheasant hunting with two sessions a day. That's when three hundred hunters storm the place. They stock it twice a day, and throw everybody out at noon, and then let another batch in. It's just a kind of a "zoo" kind of area. And the wetlands, like I said, are still mostly drained.

MR. GOETTEL: So they acquired the property in the 1930s? When did they first acquire the land?

MR. GUVATIS: I would say it was the 1940s, but it could have been as early as the late 1930s. I think it was in 1944 as I recall. There are records that will tell you that. Gordon Nightingale would probably know that.

MR. GOETTEL: What lead to the actual change?

MR. GUVATIS: There was a political uproar. It started with the sportsmen. When I was there at Parker River, we were proposing a headquarters down on the island and there were people that were in the Conservation Commission involved. There was a judge in the area which includes the four towns that are part of the refuge, don't quote me on his name. He was in, I believe, Newbury. There is Newburyport, Newbury, Rowley, and another. He went way back in this business. And his comment to me, as Refuge Manager at the time, was that they were fighting a "stonewalling" action by us to put our headquarters and facilities down on the island where we felt that it belonged so that we could manage the refuge properly. He said, "We stopped you then and we're going to stop you now!" And this was said to me at a public meeting! Talk about being an "obstructionist"! And talk about an "attitude" which I hadn't even been aware of. I had been working with people on the commissions that were more current people. But this old guy was still there on that committee having his way with us. And as you know, we never did build the facility down on the island. We had the BLSU money. We had the design for it. We had the mitigation and everything we needed. We were going to tear out goose pens, and restore dunes and do all kinds of things to buffer this thing and put it on the backside of the barrier island. It was going to be right in the middle of the refuge, what's left of the refuge. Actually, Plum Island and the beach would have been a very small and insignificant part of it. If we had held on to the fifteen or twenty thousand acres, or what ever it was, that we had originally, it would have been more like a classic refuge. It would have been similar to Montezuma or maybe even Great Meadows, but on a much grander scale. This tract of a nuisance of a beach probably would have gone to the State somehow. We would have swapped some land, or traded it, or accessed it, because that was the least valuable property for our mission. It turns out now that the beach now, is very important too. We ended up with a real controversial, public battle. We fought with the public all the way to keep that open for picnicking and swimming and having a great outside time on the shore. Unfortunately, that's what has consumed the refuge. And if you read the record, and having been involved with it as a student, and as

a manager as I was, and having been on refuges all over the country, and reading the circulating narratives from all over the country, it's a very unique case. It's a case of a refuge that *almost* was. They lost *two thirds* of that refuge! They gave it back to landowners, and towns. They gave it to the State Fish and Game department, and anybody that they could dump it on. They gave it back to them. In some cases, they couldn't even give it back to whoever claimed it because there was no clear title, so it went to the State. And they have *two* people to manage eight thousand acres. And horseback riders and mini-bikes very intensively use the land, whether legally or illegally. It's just not what it could have been. It could have been another great swamp where you have tens of thousands of wood ducks being produced, and eggs being laid. It could have been a tremendous woodcock area, or an early cessational habitat area. It had a lot of fires. Even today it's fairly scrubby growth, and the ground is very rocky in places. It is also swampy in areas. There are a lot of good places for woodcock to feed there. A lot of the uplands are "shrubby" and mushy. It has a pretty good Rough Grouse population too. We would have had Rails, and waterfowl and a lot of migratory bird use if it had been managed. Two thirds of it was wetland, and probably is still drained. In some places the beaver have helped out. I remember reading the Congressional records with the testimony of the Director of the Fish and Wildlife Service. I also read the testimony of the Director of the Massachusetts Audubon Society, and that of the mayors of the various towns.

MR. GOETELL: How did "MASS" Audubon feel?

MR. GUVATIS: I can't remember exactly. I think they supported us as I recall. But there was the testimony of the Congressional people of the day. There were the Senators, and Representatives from Massachusetts there also. But there were one or two important political figures that were dead set against the refuge. The various groups that were against it were cheering these figures on. It became almost like a crusade, a witch hunt kind of a thing. It was reminiscent of the Salem witch trials. It was *awful*. The sad thing is, it took away that heritage for the rest of us, forever. It's gone! We'll never see it again. Parker River Refuge would have had an entirely different picture if it hadn't happened. What they ended up with was proclamation waters in an open bay, salt marsh, and the barrier island beach, which was a nuisance for the most part. It sucked off millions of dollars of refuge funds that could have gone to habitat and wildlife management. This money went to controlling public use. If you look at the history of it before Mr. Moses was there, and when I was there as a student with J.C. Apple, we had picnic areas and tables with hibachis that we provided. There were lifeguards, and there was trash collection, and all that stuff. It was a multi million-dollar operation practically in those days. Today it would be. It didn't cost that kind of money then. But that's where all of the energy for that refuge went. It drained all of the rest of the refuges in the region, because Parker River always had this big problem. Slowly, Ed Moses and I phased out some of it. I put up a sign that said, "Since there is trash collection, please consider your exit fee to be one full bag of trash from the roads, dunes or beaches", or something like that. We took all of the barrels out. Ed Moses phased out the lifeguards before I got there. I reduced the parking from fifteen cars to seven and oriented it around nature trails. We tried to change the use from just pure beach recreation to bird watching

and things like that. The bird watchers had to compete with the beach users for parking spaces. We tried to encourage fishing and other uses of the area. We put in boardwalks and nature trails and stuff like that in place of the beach use. We cut way back on non-wildlife use, through several managers. But the direction to go from the Land and Water Recreation Fund, and the acts of Congress, was coming from Washington. The refuge basically opened the door and said, "Please select Parker River when you open them." We created a real problem. There were people coming by the tens of thousands, by the hundreds of thousands. There was at least a quarter, to a half a million visits when I was there. Then slowly the composition changed, and it went down, down, down. The visits now are probably around a couple hundred thousand.

MR. GOETTEL: The law enforcement component that you were talking about earlier, I think that was an important part that was lost.

MR. GUVATIS: Really? There were three full time officers when I was there. Tony Lejay was hired as Don Grover's assistant. He was a full time law enforcement person from Michigan. That's how he got into the Fish and Wildlife Service.

MR. GOETTEL: You were saying that they had rapes, and "B and E" [breaking and entering] rings there.

MR. GUVATIS: In one year, we broke five "B and E" rings. It was unbelievable! We had hundreds and hundreds of cars that were broken into, and smashed. The windshields would be smashed, and whatever valuables left in them, were stolen. People commonly left their valuables, on a beach situation, with sand and salt water, in their vehicles. So it was a perfect setup for these thugs. Every year we would clean them out and new ones would start. There would be a rash of them. We would develop a "M.O" [modus operandi] and go after them, and we would finally catch them. But it took a lot of effort with the help of the local police. When I did my "6-C" write up for Parker River, it was incredible compared to what most refuge managers would be able to put down. We had State Deputy credentials. We had full Massachusetts State Police powers, as deputy "CO". That was the authority that came with that. We had that kind of capability. We didn't go arresting people out on the highways and everything. The State Police do that. But we had the same authority as the State Police of Massachusetts, in addition to our Federal credentials. We were running radar, and doing drug tests, and all of those sophisticated police type stuff. There were hundreds of cases involving drugs ever year. It was nothing to have a thousand cases in a year, and prosecute maybe five hundred. When I did my "6-C" stuff that was the kind of thing that Don Grover was involved in. There was a tremendous caseload, and it was dangerous.

MR. GOETTEL: Mr. Grover had a *whole* closet of weapons that he had taken away from people. One time, I took away a hockey stick with a nail in it. There were pipes and anything that you could imagine would be used as a weapon.

MR. GUVATIS: There were all kinds of drug paraphernalia that you couldn't even imagine, and weapons of all types. There were machetes and bayonets and pistols and

sawed off shotguns found. You name it, and it was there! We had some real harrowing experiences down there, Grover, and Moses, and I. There was no back up for a while. It was just Grover for a while, and then we got him an assistant. There were Tony Lejay, and Chris Shotmeyer. Now Chris works for the Marine Fisheries. Billy Capulious was his assistant for a while also. All of these people did law enforcement full time. We had a public use specialist who for nine months of the year was basically a full time law enforcement person. He did the brochures, and other things, but he did that too. And then, there was me. I can't remember what my estimates were, but it was probably twenty-five to fifty percent during some of my tenure there. I got to a point where I didn't want to be in court all of the time. So whenever I could, I called in the full time law enforcement people to handle the situations that I ran into. Then I would just in as a witness if I had to. They would make the actual arrests. We made real arrests! We had to handcuff people. We had people who were fighting us. We carried mace spray and batons before the Service, before anybody! We were the police down there! It was very easy to make a case. Down at Great Swamp we had a lot of trouble more trouble than normal. There were problems there with vandalism, and drugs there. It wasn't as bad as it was at Parker River but people in this part of the country, that stayed on refuges in the east, especially near the beaches were heavily into law enforcement, especially at Parker River. The Agents were making cases, but they were slowly moving into more investigative work. They were management enforcement agents. They were up there in the summer "banding" too. Our guy was on the beach busting up drunken parties and drug orgies, and that kind of thing. The life threatening part of law enforcement was much more real for Don Grover than it was for most Fish and Wildlife law enforcement agents. Wally Ciroca really went after it. He got into some situations where there were drugs and ivory and other things. And there was some undercover stuff as well. They could have easily gotten killed doing that. Grover this kind of potential, you know how dangerous car stops are at especially at night and alone. He had motorcycle gangs surround him with chains and whips and everything else. Moses would arrive on the scene from his residence up on the island, and the Police would roll in right after that. All kinds of things could have happened. There were murders, and attempted murders and rapes. There were a *lot* of rapes every year reported. And there were probably a lot that were not reported. There were assaults, and all kinds of crazy stuff. Then we had wildlife violations. People would steal goose broods and put them in the back of their hot station wagon to roast. I have pictures in one of my narrative reports of goslings in the back of a station wagon. There was a lot of drug stuff. You would smell marijuana, or see paraphernalia at the gate, or on a routine stop for speeding. We were all trained radar operators. I took a Doppler radar course. We had a guy come up and teach us how to do it. We had people who were driving sixty or seventy miles an hour who said it was the best way to get over. You could just touch the tops of the hills! You can just imagine the cloud of dirt and gravel that they would spew out. Not only was it bad for the environment because of the gravel drifting out over the marsh, and it had to be replaced. Gravel is a non-renewable resource. There would be people run off of the road. There would be hit and run incidents. We had everything! If you read my "6-C" file you would see all this stuff in there, and it not made up! It's true! Moses' and Grover's were the same way.

MR. GOETTEL: It's funny, because when I worked at Great Meadows people used to talk about going to Plum Island. I'd say, "Do you mean Parker River?" they would say "No, we're going to Plum Island".

MR. GUVATIS: They called in the "Park" at Plum Island. They didn't even know what was there. They would call it "the wildlife". They never knew what it was. We had signs everywhere, and uniforms. We are always "the Rangers". We had to get air conditioning for our guys. They would be down on the beach, these "greenheads" and they would be trying to maintain composure in ninety to one hundred degree heat! They had to deal with violations. And they are being chewed out because they had the windows rolled down in those dark green pickups that were like a Venus flytrap. It was interesting.

MR. GOETTEL: You were talking about Jay Clark Salyer going through New Jersey.

MR. GUVATIS: Jay Clark Salyer went to all of these refuges.

MR. GOETTEL: Oh, I know. Did he do Parker River too?

MR. GUVATIS: My understanding was that he hand picked, and selected all of these places himself. It was him and Ding Darling, and maybe other people too. It was such a small outfit then, that everybody knew each other, and they all reported directly to Salyer. Salyer drove all over the country so I am sure that he was at Parker River. I heard that in New Jersey he looked at Great Peace, Meadows, Troy Meadows and Great Swamp. All of this was glacial lake, Passaic, or the basin. He, or somebody with him made the comment that they felt that Great Swamp was the least desirable. Mainly because it has more upland dispersed in it. And it had been more subject to settlement and because it wasn't all pure wetland. Where as Great Peace was kind of in between, and Troy Meadows was mostly deep, freshwater marsh, when restored. It was all deep cattail marsh and it was probably loaded with Rails, and Least Bitterns, and Pied-billed Grebes, and Moorhens, and all of the threatened species you have now in New Jersey and New England. They were all there on their own. Although they had made attempts at drainage, it took very little restoration, if any to see the wildlife values of those places. But looking at Great Swamp, it was a bunch of farms, woodlots, and wet fields. They bedded all of the fields down there. I see it everywhere I go now I put it in all of my reports. They plowed year after year after year, from the same spot, into the middle and then they would come around to the other side. Plowing with a land plow formed those ditches. They'll start plowing to the right, and they'll throw everything to the right, and the last furrow that was left was a ditch. They kept doing this every year. If it were very wet, they would do it every fifteen or twenty feet. On the raised areas, or mounds, they would plant. Every one of these little beds ends up being a swale. It had vegetation and water standing in it. Usually it's done on clay soils. I found a lot of that on Faletts's Brook that flows into Langford River and into the Great Bay estuary system. Then it reverts into brush as they abandon it and it's hard to even detect it in the woods. There are trees and logs that have fallen across it. But basically it is still there. That's what they did at Great Swamp. It just like New England, it was cleared. It was grassland, and

wet grass and tall meadow hay. Great Meadows has at least two or three hundred acres of continuous wetland, maybe four or five hundreds. Real wetlands, with buttonbush and deep, fresh water marsh, were there. There were a lot of marginal areas where one or two inches of relief would make the difference between a hickory tree or a gum tree or a buttonbush plant. The relief was that much. It's so flat. It was like the Everglades as far as the system, when it was all plugged up and restored it was sheet water, in some places a half a mile, or a mile wide. It would just weave through the area, and it slows it down. Going through the saw grass in the Everglades is just like going through the cattails and other stuff here. It impedes the flow, and holds the water level up as long as it rains every few weeks. Then, if you put some dikes or dams like we did at Great Swamp, in addition, to regulate it even further. It's incredible how much water you get there. You would get a puddle on your front lawn because its clay. And if it rains a lot and the water stands you can get mosquitoes hatching out of it. This could happen in a deer hoof print, or a heal print! So Great Swamp ended up being quite a good selection as a refuge. The region has apparently been on the defensive before my time, before I got there. Dick Rigby was the first manager there. Then Tom McAndrews was there briefly as an assistant. Tom came from an education background. He had come from a school. He was a schoolteacher kind of guy. He probably had a biology degree. They were trying to get anybody they could to go there. I was very offended when they asked me to go there because it had a kind of a reputation. It was like the beach at Parker River. I got into this for wildlife management, not people management! And not to do all this draining of wetlands. And Great Swamp was full of homesteads. There were hundreds and hundreds of homesteads that we basically acquired one way or the other. When the wilderness came on, there was a big push to clean up all of these homesteads, and rip out the roads and plug the ditches and pull out all of the pipes. They wanted to dam up all of the ditches too. We did it, and what a wonderful thing it was for a while. We made it kind a jewel. I think Salyer by that time was long dead. But people said that Salyer would reconsider if he sees it as it was today.

MR. GOETTEL: The other ones that you mentioned, like Troy Meadows, have they been protected at all?

MR. GUVATIS: They were all protected. In fact, we had Ralph Andrews, he's another one that you could talk to. He was at Patuxent, and was the manager at Troy Meadows. It was maybe a federal entity then, I think it was one of those areas that we had dual control over. Ralph Andrews could probably tell you more about it. It was actually a satellite, or small refuge for a while under some written agreement, I don't know what. Or it could have been that it was signed over the Service to another agency. I know that Wild Preserves, Inc., a private group, bought most of Troy Meadows, and a good bit of Great Peace Meadows. They didn't have the funding that a federal agency could have brought into it. The condemnation potential to round out the acquisition, even if the title was parleyed, they couldn't go to court and condemn. Even if nobody knew who owned it, they couldn't get it. Then they turned around, and became our enemy up at Great Swamp because people were donating land, or they bought it for a pittance, this Wildlife Preserves, Inc. Miller could fill you in on that story because he was a realty officer. We were then blackballed by Wildlife Preserves, Inc. because they wanted one hundred

thousand dollars for a piece of land that they got for nothing which was suppose to go to us in the first place. But the people didn't realize that we were not all the same, so they deeded it to them. They ended up with two thousand acres of Great Swamp. Some of it we condemned, and some of it we just did without. It was a shame, that's kind of another area where we didn't get what we should have gotten. Although I think that slowly we have gotten most of it. Some of it may have been sold for a subdivision and that kind of thing. But that's another story where the Refuge System didn't get its due. Most refuges were pretty clear-cut, and clean. We had some real tragedies in this region. Parker River is the one that comes to mind the most. We actually had it in our hot little hands for a decade, and then it got axed. They wrote it out, and gave it back to the Indians and the State, and whoever else claimed it. They put us down in a little cubbyhole.

MR. GOETTEL: I heard that they did that at Monomoy too, with Morris Island.

MR. GUVATIS: Did they?

MR. GOETTEL: It wasn't Monomoy itself, but Morris Island.

MR. GUVATIS: Maybe it was a trend in Massachusetts at the time. A precedent was established somewhere. It was probably in Massachusetts mostly, and maybe a little bit in New Jersey too. All those of those other wetlands that I mentioned north of Great Swamp, are part of the Glacier Lake Passaic, which is like twenty-five miles long and was a big glacier lake. They all have clay bottoms, and deep muck, and peat and soils overlaying. They have a lot of water, and a lot of wetlands with poor drainage. I could still and talk at length about all this stuff. But there is a lot of history in those narrative reports. And as the Wildlife Manager at Great Swamp, I have several of the narratives that were written. They were kind of legends in their own time, because they were written in the 1970s and late 1960s. We were the first ones to put color photography into them. Some people thought that this was inappropriate, and that it was all supposed to be in black and white. They said that it shouldn't look like a magazine. It should look like a dull, dry paper. I got letters from Noble Buell who was the assistant Director saying that he wanted to congratulate you people from Region five, and thank the Refuge Manager for providing a readable document that was interesting. It had a little bit of humor here and there, and there was photography all though it, illustrating the ditch plug, and the wetland restoration, or the deer-poaching problem. It was like National Geographic magazine, almost! Some of the pictures we had were really good! I used to carry a three hundred, and a four hundred millimeter camera in my suitcase in the car. And in between my residence on the refuge and the office, I would get *incredible* photo opportunities about once a month along the side of the road. Maybe there would be a short-eared owl that was very tame, or a big buck standing there because he was crazy for the rut. I used to walk the nature trails, and we had observation blinds. At the residence at the refuge, right out of the window, we saw the first Yellow-headed Blackbird, the first one in New Jersey in sixty years! He was sitting at the bird feeder in the cherry tree. We could get pictures like that without a lot of effort, and we would put them in the narrative. One of our assistants did a thing on Monarchs, and showed the chrysalis, and the egg, and the larvae and the pupae. We had pictures of Monarch on Asters. When were getting RBUs,

we had a RBU for every Monarch butterfly, and we had millions of them. We were the most valuable refuge in the country! [laughing] That was in the old PPBE days, when we went through all of these budgetary things.

MR. GOETTEL: I was up at Moosehorn then, and we put down clams, you know. Somebody made us stop doing that. The worst part about the clams though was that there were two reasons why they should be in it. First of all, there were a lot of clam diggers. That was a big thing in ‘down east’ Maine, and still is today. The other thing is that all of the Eiders would come in there, and the Sea Ducks too. And what do they eat? They eat the clams and mussels and things like that. So this was probably one of the things that you *should* include.

MR. GUVATIS: We all got caught up in that. I think that most of us bought into it. It ate us up for like a year or two. It was just like the “sick sea” thing we just went through last winter putting that back together from ancient history. But yeah, we did have some interesting times on these refuges. No doubt about it! I was only at Great Swamp for like five years. When I moved there from Iroquois, we did a “first”. There was a refuge house at Iroquois my position and McAndrews’ position occupied. He was at Great Swamp as acting Manager in the Refuge Manager’s house, and I was in the assistant Manager’s house at Iroquois, and we swapped. The mover said that he would never do it again. But he packed us up at Iroquois, and drove us down. Then they had to pack up all of McAndrews’ stuff and get it out before they could move us in. And they still had to turn around and go back with McAndrews’ stuff. We swapped houses. That was a first, I think. We all worked for “Smitty”. If you didn’t work for Larry Smith in those days, when Moses, McAndrews, and I were coming up through the ranks. You had to work for Larry Smith before you could get your own station. Before you really went anywhere. You were nobody until you worked for Larry Smith. He was the premier refuge manager in the region according to Tom Horne who was the supervisor. He thought the world of Larry Smith. “Smitty” was a very thorough and detailed person. He has impeccable records on everything. He was quite a filmmaker too. He made these night-lighting films, and some others also. He didn’t make the ones from Great Swamp, but he did the one at Montezuma and Iroquois. We used to have all of this dead timber there, and we used to go up and put up these chicken wire baskets, hummock nests we called them. We would nail them into the crotches of the timber on the ice. We would put up these “chicken baskets” and fill them with hay. And Mallards and Black ducks used an incredible number of them. And even Red Heads used them. Even Pintails would use them. But then the raccoons would catch on. We also had a toxic egg program. We used to take eggs for free from the Pheasant farm at Iroquois. There was this little drill similar to what a Dentist would have. You would cut out a little flap on the egg. And then drop a strychnine pellet in each one, and wax it over with a candle. We would put two or three in a clutch. It was very selective, out over the water. The only thing we ever got with it was a raccoon, or maybe a mink. That was a way that we did predator control. It actually improved the waterfowl population as a result. But those are days that are gone forever. I can remember another situation when we had the same kind of eggs at Parker River, and the biologist used them. Some of this you may not want to use, but it is interesting. It shows the environmental impact we might have had in some cases. When

the word came out that agent orange was bad, that it had dioxin in it, it got buried in plastic bags in some cases. Maps were drawn to show where it was. The Biologist at Parker River took the strychnine that we had. We decided that the toxic egg thing was something that we shouldn't be doing anymore because an eagle got killed somewhere. He took it down to the beach, of the Atlantic Ocean and "cast it upon the waters", thinking that the dilution would be incredible, and it would be gone. About three hours later a message came on the radio, "There's dead Sanderlings all over the place"!

MR. GOETTEL: Oh no!

MR. GUVATIS: And this guy was really sensitive. He was so upset. He almost died of a heart attack when he heard this! What it had done was to get into the shrimp, and the stuff at the tide line. The little shrimp, and the copepods and all that stuff had ingested it and the Sanderlings ate them and boom. It just goes to show you that when you create these toxins and don't realize what they can do, it can be bad. Nobody intended anything bad to happen as a result of it but I'm sure that a lot of it happened. Every refuge had it's own dynamite shed. It was basically a pillbox in the ground, lined with cement. You kept dynamite in there, which changes composition and create more and more nitroglycerin. It gets every unstable, and that's kind of what we had on every refuge.

MR. GOETTEL: Up at Moosehorn they would get it from Georgia Pacific. And I don't know what Georgia Pacific was doing with it.

MR. GUVATIS: They probably used it to blow log jams on the rivers when they were doing river drives of timber.

MR. GOETTEL: They would keep it through the expiration date and then give it to the game wardens and the wildlife preserves.

MR. GUVATIS: Maybe they thought we could blow up beaver dams with it! We used it to blast ditches with it, and potholes. But ammonium nitrate was far more effective. When the military seized upon it, they called it a "cratering charge". They used it to destroy airfields or landing strips that we were either abandoning during the war, or that we wanted to destroy so that the enemy couldn't use them. You could just fill it full of twenty-five foot wide, eight-foot deep craters. It would neutralize anyone's ability to land a plane on it. We just took it from there, and used our own ammonium nitrate fertilizer and fuel oil in bags with a blasting cap in it. You had a hell of a lethal explosive that you could make nice round holes in the march with. Every one of them was a breeding pair habitat site. It was great! And if you ever drained the areas, you had reservoirs for fish and stuff if you wanted them. If you didn't, you still had them. If carp got in there, you'd never get rid of them unless you treated every hole. Would you like a drink or something to eat? I must be getting hungry.

MR. GOETTEL: Yeah, I wouldn't mind a glass of water or something. That would be great.

MR GUVATIS: [voice fades as he walks away] I've got lemonade and grape mix or something like that. I also have milk, and ice water. . .