## Oral Interview with Boyd Opheim August 27, 1993

Interviewer:

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Boyd Opheim is a fisheries biologist who retired from the Montana Fish, Wildlife and Parks. This interview took place near Flathead Lake near Finley Point. To start out, I should say that both Opie and I started with the department it was known as the Fish and Game, and we will use that term.

AW: Well, Opie, let's start out with where you grew up and went to school.

BO: I had quite a history. I had a Canadian mother who had gotten in trouble in Canada and they sent her to her brother in Menson, Minnesota. It was a small town in west central Minnesota. When he found out she was pregnant he wouldn't permit her to be in the house anymore so I was born at a mid-wife's home, the Opheim's, in Starbuck, Minnesota. This was a Norwegian family who came from Norway on their honeymoon. I was raised with three Norwegian toughies and I didn't realize it but I knew I was different. I found funny things that if I would go someplace and there was a real good buy on something, I would buy it and take it home even if I had two at home. Later on when I reached the age of 50 I decided I'd go to Canada and find my mother. I did this because elk hunting was real noisy and miserable, so I jumped in the car. I knew that I felt real funny when I was in Chilowak. I'd made several meetings at the big lake near Chilowak and I felt real funny there. I had an address in Texas and it was one of the closer relatives and they were the ones who told me my mother was in Sardis. Well, I met my mother and had a very enjoyable evening and was told of the other family I had. I had a sister and a brother. The sister was two years younger and the brother was four years younger. Eventually I went on to meet them and got over this very scary situation that there might be some colored blood in my background. So, I graduated from Starbuck High School. They were talking of the draft. We thought we would get in there. We left Morris Minnesota at 11 below zero and five days later we were in Mojave in the old World War I cars with the old stoves in the corner.

AW: Was that the cars where they fed you in the baggage cars, they had a stove set up? What year was that?

BO: It was in '41, in February. The funniest thing of the whole trip was that we had a colored porter on the train, and this was very unusual because I'd only seen one colored gentlemen to this point. We stopped in Sacramento. The train was stopped and here he comes running through the train yelling, who pulled the cord? We built the camp near Riverside and it was drenched in earth. We named it Camp Holland. We were there a short time and on our way to the Mojave Desert, 40 miles out from Barstow. There we spent our time digging gun emplacements and chasing rattlesnakes and having one glorious time. We got our training over with after 13 months out there. We were all anxious to be discharged. The orders came through that was a bunch of bologna. There was no more of this one-year stuff. We were there. We get back to camp and I didn't realize it but the aircraft in peacetime duty runs the guns on the Merchant Marine. Next thing I'm running a stereoscopic hearth-finder on an old German confiscated freighter, the Marine Wolf. It was interesting. They had one gun and it was a 3" spider web mounted on the fantail. All the instructions on anything aboard ship was German and we only had one guy who could read the instructions. It wasn't long before the Japs hit Pearl Harbor and I was put back in to Alameda. Then I was a real expert. They made me an instructor in the aircraft and I started instructing gunnery and stereoscopic hearth finding at Alameda--the Alameda golf course. It didn't take long before I had about all I could stand. I'd been working to get into the air force and be a pilot and I finally got a chance to take a test. I feel so good today because out of 800 only 2 of us passed. Then I got my orders to go to Lubbock, Texas. Get down there with all the big watermelons and turnips; Texas is bigger. I learned that the hard way. I completed by two-year equivalent training and had been accepted for pursuit training in Santa Ana, California. I was happy. I was ordered and shipped to Amarillo. There I flew a little out of Hatbox Field in Amarillo and waited for my orders. A terrible snowstorm appeared and everything was shut down except for the wireless. Here came the order from Washington that all servicemen who had previous ground force experiences were to be returned to the ground forces for the invasion of Europe. I worked so hard to get there and then they took all of us experienced guys and left the high school kids who got the gravy train. We boxed up everything and went to training. We had trained to fall out in less than 90 seconds. We pulled into Camp Gruber Oklahoma and our captain blew the whistle and we were out. What a time we had -- real renegades. We could do everything better than the instructors. Here came the order for me to get my bags packed and get ready. An order had come through that I was to ship out. I asked how come me? They said they read my enlistment records because in my original enlistment papers they asked what I was and what I'd done. I put a scout, guide, hunting and fishing guide and that was it. These were the qualifications that made me qualified for this job. It wasn't long before we wound up in the east coast and we finally got on board. We were late to the convoy. This was an old unit for carrying tanks and consequently it didn't have enough ballast and they tried to put more ballast in it. When they hit rough water we were scooping water with both sides. We got out of Southampton after many drills and we hear these awful noises. It was huge English flying boats dropping charges on submarines outside the channel. We finally got to shore and I was detached to the English oss for training and recon and for the invasion. Now that

should be just about as far as we need to go.

AW: That's as far as we need to go. When you graduated from high school, did you know there was fish and wildlife management?

BO: Well, my only insight to it was as a guide. We'd have town meetings and the fish and game from Minneapolis/St. Paul would come up and explain why something was happening. The only thing that I realized was a solution was to plant something else. Then I had discovered that they didn't know as much as we did about it but they were getting paid.

AW: When did you decide to go to school and learn about it, when you got out of the Army?

BO: Yeah, when I got out of the Army. I had a ski scholarship at the University of Minnesota and stayed there about six weeks. I found out that ski flying wasn't going to be my game. Anyway...

AW: What do you mean by ski flying?

BO: Jumping off the big ski scaffles, now they make a wing. When I was jumping they stood up straight and waved like mad. I decided then that, and I didn't have any money to go, so this military thing was the only route I could go. I had quite a bit of time. I got hit in Germany and was hospitalized there and had something like 131 points and they were discharging in the states with 9 points. So I had it made and it wasn't very long before I got another order that I had been deemed essential for the invasion of Japan and it was only four of us available with the training I had. I had all this training in demolition and most of it was with German stuff and the Japs had copied all of that.

AW: So, when you got out of the Army, where did you finally go to school?

BO: I went to the Philippines and then came back. I was in the hospital for a year and decided what I would do when I got out. I decided I'd better go to school. The only thing I knew was fish. So I decided to go to school for fish diseases. At that time there were very few people who knew anything about fish diseases. Then I thought I might go into forestry. I got Associate of Science in Forestry out of North Dakota school of forestry. Then I decided I'd like to go to work in fish and wildlife and Utah State was the only school that was doing anything then. I enrolled under Dr. Ziegler and thought I might go into fish disease. I eventually went into fisheries management with a minor in upland game birds and wildlife. My summer employment with the fish and wildlife service I spent two summers as a fish biologist in the Yellowstone and Missouri drainages plus the black hills of South Dakota. I was called an aquatic biologist. When I graduated I had to wait for a while so I worked in construction in Logan for a while. I thin got a job as a creel census on the Madison River with the fish and wildlife service. Is pent the summer

enjoying the work very much. I had some difficulties because I wanted to do a side study with my extra time to do a study on the food habits of the pelican. The people from Ennis and that general area were even using airplanes to bomb the pelicans in the mouth of the Madison. It didn't make too much sense to me because less than 100 miles away we had a big refuge for the pelicans. I requested permission and was told to stay away from the pelicans. This soured me and then I got an order to work on peasants in Wyoming. It was in the fall. I applied to the state and was interviewed. Walter Allen was the superintendent of fisheries and was very friendly. Chuck Phenicie was the only biologist. I finally realized that I was there because I had taken several courses in biometrics and chuck had about four years of data that he wanted run. I think that was the main reason I was hired. I was the assistant fisheries biologist. It was quite humorous because I had lost about \$1800 a year and other benefits to go to work for the state. I didn't know I was too dumb to realize the system. I hadn't been exposed to the public at all. Walt called me in and said there was a meeting in butte and wanted me to go talk to them. So I went and there were about 400 people. There were two kingpins, Scotty and Barney Frame. They were lawyers. They got me up and started drilling me. Every time I tried to answer they would cut me off. I started doing the same thing to them. Pretty soon the audience is laughing and barney said you wouldn't talk like that to me if you were in front of a judge. I said, Mr. get your judge and let's get going. So I came to work the next morning, I didn't realize -- I got orders to go into the director's office and Bob Lambeth was his name. What in the world did you do in butte/ all I did was talk. He said well look here, this is the first letter we've ever gotten for commendation from butte. We laughed and that was my first experience. I was spending most of my days pounding the calculator. I had noticed the Clark Fork River. It was tragic--. The road was awful. I was living in my camper trailer. I put a sign that said, "This river polluted by the Anaconda Company." I propped it up where the headlights caught it going down the river. Well I came to work in about three days and here's three guys all dressed up in suits standing in front of Lambeth. Walt comes in and transferred me down to lakes near red lodge. It was next to the old hatchery.

AW: Did you ever take a picture of that old sign you put up?

BO: No.

AW: Just recently I've been contacted by an attorney for some insurance companies in California. The present owner of the Anaconda Company, Asarco, is trying to get out of paying for any cleanup on the river by saying they didn't know it was polluted when they bought Anaconda because Anaconda never knew they were polluting the river.

- BO: I wished I could have kept that sign. They sent me to Red Lodge. Walt knew I had painted the sign because he lived by me. You didn't get by with much that Walt didn't know about.
- AW: Do you think the reason you got transferred was to get you away from the Clark Fork?
- BO: It was to hide me from the Anaconda Company because they owned at this time all the papers in the state, but one. I worked there with one of the finest wardens I've ever met. Vern Waples. I understood the department hired Vern because he was always poaching elk. We backpacked to most of the lakes carrying boats and nets and what have you. I was really in physical shape when I left that assignment. While there I studied the brook trout. Most of these lakes were heavy populations of brook trout that rarely ever got to 6 or 7 inches. And here we had stupid regulations in the state with a length limit on them. When some of the aging came back on these fish they were five years old or mature fish at this size. So I got the bright idea if we wanted to increase the fishing pressure up there we should make it just a weight limit and no size limit. So I talked it over with Chuck and he thought that was good. He said it wasn't going to be easy. So we started trying to sell that ten-pound limit I think we figured out a 10 lb. limit would be 256 fish. Anyway, we got it sold and then we got the regulations changed. They used to be in a book that most of the boundaries were county lines and different areas where no body but a surveyor could figure out what the lines were. So we got going and got it down to a single sheet of paper. Then we worked with that. I figured it was a real good job and everyone could understand the regulations and we thought we were doing good. But I looked at some regulations the other day and they're right back up to the big book.
- AW: They're back in a big book again, just not county lines.
- BO: I spent a lot of time in the Helena office, working out of Helena. They were going to open a district and the first one they wanted to open was Miles City. I told them that if I get that far East, I'm just going to keep on going. They located the interviewer and he was happy to come from Minnesota. I think this was one of the best reports we had in the Dingell-Johnson program. And that was it's too expensive to hire a biologist to survey all these potholes. It would be better just to plant the fish and see if they live. He wrote himself right out of a job. Anyway, the district system finally started to evolve.
- AW: That was me that Opie was talking about and I did write myself out of a job. I'm proud of it now but I didn't think it was too smart at the time.
- BO: We had Art in Miles City and then they were starting the district system. So I went down but I was still headquartered in Red Lodge. I was given the territory from a few miles east of Billings to the Idaho line. In the Red Rocks refuge area there was a nice population of grayling and cutthroat. Perry Nelson was getting his Master's from C.J.D.

Brown. While in the area, I went to Elk Lake and there were lake trout in it. That was the first lake trout we found in this area. I sent the collection to C.J.D. and he sent it to the Smithsonian. They recorded it as the first unit of the lake trout. Then the big problem I had in trying to manage this was the limits were wide open on the grayling. The grayling was not able to sustain heavy fishing pressure. So Perry got the limit knocked down to two grayling. That shut down the fishery. Most of the roads were gravel and they weren't about to travel 20 miles to catch a grayling. The other problem with the grayling management was the Ennis federal fish hatchery was distributing catchable rainbow. Little or nor supervision was going into the introduction of these exotics. I finally got that stopped and realized that I'd been lucky to get in and out of Centennial. This valley was loose gravel and mud and if it rained you were there for two weeks until things dried out. Perry graduated and worked for the department. We kept working on different things and in my travels the first thing I realized was that it wasn't fishing that was hurting our fish populations it was the near complete destruction of fish habitat. So I started compiling pictures on this destruction. The highway department would have to go where the land was the cheapest and this put them practically in the floodplains and the river areas. Then they would widen out the river and it would be one continuous straight riffle area only able to sustain very small fish. I was working then out of Bozeman and going up the Gallatin Canyon. We were trying to keep the highway out of the Gallatin River. They were improving the highway. The effort was useless and they went about it as they wanted. The next spring high water the Gallatin rose up and started washing out the road and these false meanders. The highway department ran to the city dump and got all the wrecked cars they could find and went to this beautiful forested area and tried to stabilize the river with car bodies. It made wonderful photos for me. Then is tarted showing the pictures around and, the next thing you know, the highway is up there trying to cover the cars with rocks. I feel this was the start of a major effort by Fisheries Division to photo this destruction and try to get something done. It worked out that the conservation districts were brought into the picture and they had a pretty good chance to make recommendations on these projects. The headquarters finally opened in Bozeman and I moved from red lodge. I wanted the headwaters of the Missouri and Big Hole and it was probably the backbone of salmon fishing in the Continental U.S. I hadn't been there too long and there was this forest epidemic of spruce budworm. I tried to do all the reading I could and found out that spruce budworm is a native insect and only attacks trees in marginal growth areas. I get word that there's huge fish mortality in the Yellowstone and I'm called in to investigate. When I got over there, there were dead fish from within the park to big timber, well over 100 miles of beautiful trout waters. I started collecting aquatic organisms and I could find none in the spray areas, but the areas that were unsprayed had populations of aquatic organisms. So I wrote a report that went over like a led zeppelin. The Forest Service denied everything. The district foresters were traveling the country saying this was a bunch of bologna. They didn't kill fish. So here I am on the old treadmill again with my slide pictures showing all these dead fish. And explaining. Well they sent two people from Washington to investigate this deal because it was very serious. They came and I showed them the data and took them to the area. They wrote a

report through the headquarters in Missoula that the findings they found were exactly as I had reported them. Serious damage had been done to a national fishery. One of them wound up studying jack rabbits in California and I don't know where the other one was sent. But it was a big fiasco. Anyway, there was only one other study that amounted to anything. That was in Canada and the effects of DDT. Next comes a subpoena from Brooklyn, New York. I was to testify in court on DDT. This was brought about because the Forest Service had a program trying to eradicate the gypsy moth, before they got into the Adirondacks. They were going to spray all the populations that Dr. Spock, the Roosevelts, etc. filed a suit. Here I am, being treated as royalty back there. I'll never forget when they put Hargraves on the stand. They asked him if he was familiar with the AMA. Dr. Hargraves looked at them and shook his papers and said I am the AMA. I wound up really laying it on the line what I found, what a beautiful place Montana was and we couldn't sustain this kind of thing. This little guy shook his fist at me and said, your honor this guy isn't testifying. He's making a speech. I looked at the judge and said I didn't come 3,000 miles to listen to this. Got the whole audience started clapping. The judge pounded the gavel. I told him to come to Montana and we'll go fishing. He said thank you very much. And I left. But I got \$50 a day plus some real fine meals and an awful lot of real fine people. And I get on the train and I feel so good, I had my cowboy hat on, I was dressed, everyone was Dr. This, and Dr. That. I got into Bozeman at 11:00 at night and I step off the train and here's this old guy that I've known in Bozeman for a long time. Well he says, Opheim, you old SOB, I see you made it back. That was the extent of my work with DDT. Although we won the court case and the Forest Service did not spray any more DDT, to our knowledge, at least their fish mortalities were minimized when this program was over.

- AW: Well that didn't happen immediately in one year though. It took several years before they pulled out of the project. Because I can remember having chased spray planes in the Missoula region for several years. The Forest Service, as I remember, instituted a lot of what they considered safeguards; they had the wind people in the woods and at the last minute they'd call off the whole project if the wind was wrong; they might put the spray into the streams.
- BO: I flew above the spray planes out of Rock Creek with Taylor Craft and when they'd get too close to the river I'd be banging them on the CB and the thing that's so funny about it, and you know from the studies, they'd be spraying one drainage and there'd be nothing that would go in that drainage but it would go up and over the next drainage. I don't know.
- AW: That's where most of the trouble came from after they instituted the safety precautions. If the weather had allowed them to follow them they probably could have done it without killing fish but they still could have gotten their spray in the streams. For several years after that they did. It was a tough operation to get out of. I remember trying a case of spray plane when they couldn't find out there were people in Missoula, Hamilton, up in

the woods and you couldn't get a handle on who was finally going to make the decisions. Several times I would take off to go chase spray planes and I'd get there and none would appear. I'm sure you had the same problems.

BO: Yeah. It was just too big a program. The thing I found since I was doing a lot of flying and knew many of the pilots, the people who were most volatile about reducing the program were the people who were handling the fuel oil mixes. They needed a gallon of fuel oil to a certain amount of DDT and they were sure hostile. And all these histories, my name had become pretty popular with the Forest Service and being in Forest Service country it was kind of a tough deal to get back in their good graces. I remember many of the rangers agreed with me. My first big trouble came when we were inventorying streams with the shocker and it was in the fall of the year. No, it was in the spring of the year and we were in Bozeman. I had the crew and we were going to run a population deal on Miller Creek. Well, anyway, I had some stuff to do so we loaded all the equipment and I sent them up to get everything set up and I had a call from Perry Nelson in Billings to send the generator; we had an extra generator down there. I was going to get that created and I thought no, I'll get this shocking over with. Anyway in those days we had to write out our monthly reports and Chuck wanted them in Helena by the 30th or the 1st. That made us anticipate what we were doing for the last two days of the month. I had made out my report and said shocking this creek. Snowstorm came up and there was no way I could get there and I knew the crew would pull out so I went back to the area and got the generator and crated it up and sent it to Perry in Billings. Well, it wasn't long before I got the word to come to Helena. The chairman of the Commission, I was called before the Commission. They said, "You're getting your two weeks notice." And I said, "What for?" And they said, "Falsification of records." I was dumbfounded. I really didn't know what to do. So I walked out and Walt said, well we'll take care of this. I was all shook up. The next meeting I had was in Ennis and they were a very active club. I got the end of the meeting and I told them I had been terminated and would be leaving; that I had a job offer in North Dakota and Utah. They really got hot and started a statewide campaign against the Montana Fish and Game Commission. Eventually, Bohardt, the attorney in Bozeman and two attorneys in Helena, contacted me and they wanted to take my case and file a writ amandamis action because it was against the law for me to be discharged that way. So making a long story short, we went to court and won and they appealed it to the Supreme Court. Historically, one of the quickest cases the Supreme Court has ever decided. It came through there in less than six weeks. I was restored to my former job with all back pay, about \$2400. I thought this was wonderful. I had gone to work teaching welding at Montana State while I was fired. I had made \$500 more when I was fired than if I'd worked full time for the state. They discussed the verdict and Chuck thought that it would be better if I could accept a transfer to a different area just to appease the Commission. Stefanich was the manager in Kalispell and he wanted to get to Helena but he never did quite make it. So he decided to take a job with Alaska. So this left the lake country out of Kalispell open and this was my background. I was a lake fisherman; I had fished in Minnesota and had rarely ever

fished a stream. So I was transferred to Kalispell and there started very intensive program on the native species -- the cutthroat and the Dolly Varden. I knew we had to do this because I'd worked with rainbow and the Creston Fish Hatchery, a federal fish hatchery, had dumped about 70 million rainbow into Flathead Lake. I think the creel census had turned up two fish and they were brood fish that had put right in the Big Fork Bay. One of the problems that was confronting the people in this area was the Army engineers had a big plan to open up or cut out the outlet of Flathead Lake so they could drain it faster. By law they can fluctuate approximately by about 10 feet a year. This to me was very bad and I worked very hard and managed to get the fish and wildlife service to come do a creel census to establish the value of this Flathead fishery. In addition to that got studies started on the life history of the cutthroat and their areas and spawning success in the Bob Marshall as well as the Dolly Varden. After considerable time, the Army engineers put aside their program for opening Flathead Lake outlets and the studies on the cutthroat and Dolly Varden progressed. There was no control over the fisheries for Dolly Varden and most of it was a snag fishery. By working hard with the law enforcement division I got several of these streams and smaller tributaries in the Flathead closed to Dolly Varden fishing. It was very common to find huge Dolly Vardens with snag hooks in them and big snag holes. Well this was one of the main programs that we got going in the Flathead and everything was progressing nicely when word came through that we were to undertake a tremendous rehabilitation study and program on the Marias River, which was east of the Continental Divide in Nels Thoresen's region. We were all assembled in Helena and given an overall prospective of the plan. I have got this out of sequence because the Marias started before I left Bozeman. At this meeting it was decided that I would fly the plane and we would do as much aerial reconnaissance as we could. So I left home and flew up to Cutbank and we made a temporary barracks arrangement out of the old Army hangers up there. I was there with several other people when the freight ways trucks came in with truckloads of rotenone or fish tox.

AW: I remember that commercial product. It was much more effective than regular rotenone. As far as we knew it was just rotenone that dissolved faster; at the time we didn't know what it contained.

BO: Well, I knew from flying when we were working these slugs down the river system there would be a mortality and then it would stop and then way down, farther down, 30 miles below where the river meandered and slowed up, here fish were dying. We got the explanation for that -- these gray pellets in the bottom of the rotenone sack we would take in our hands and mash them up to get them better distributed in the water. Come to find out this was a surplus of the Hercules powder manufacturing people in San Francisco and it turned out to be toxaphene, one of the most violent fish toxicants that are around. Well, the Marias encompassed many miles of streams and swamps and sloughs from Glacier Park clear to the Tiber Dam on the Marias. I flew this area and my job was to follow a Whittaker duster that was rigged for low level dusting of rotenone products. I was loaded heavier in an airplane and I would have to fly and follow Loehoff and when

he ran out of toxicant, I would land and we would load him up again. Well this turned out to be a real project. I can remember some of the things that happen when you fly; we'd lost a bow on the wing of this duster and I was going to take it to Helena to get it fixed. We took some boards and clamps and patched the wing. So I'm flying down and I hit Wolf Creek and I proceeded up Wolf Creek and I saw quite a storm. I managed to see the Helena valley so I flew through the hole and got down into the valley. When I was landing in Helena my fabric was coming off my wing. I started to wonder if it was all worth it. Well I got in there and I got another airplane and flew on to Bozeman and spent almost a whole day before I had to go back to Helena to pick up the duster and return to Cutbank.

- AW: Marias was the project that required most of the fisheries division with some help from enforcement walked most of the way on all the stream drainages that drained the East end of Glacier Park and the Tiber Dam site. Not once but several times during the summer. And all this with the barracks or tents. Opie and I were one of the first ones to try to determine length of time it would take a slug of toxicant to get down the river. They put the two of us off in a riverboat from the east boundary of Glacier Park and let us float down to the mouth of Two Medicine. Do you remember what they told us as they shoved us off?
- BO: Well, we were right below the falls on Two Medicine Creek and it was amazing. Art and I were the two dog faces and as we waved goodbye there was a couple of Navy commanders pushing us off and they said, look out for the secondary falls. We were in a rubber boat with a box with groceries and the first falls. We didn't have very long to wait and we were in this rubber boat with two paddles and the next thing we knew Art is going over the front end of the boat with our box of groceries. Well, we finally got squared away and our clothes were all full of sand and we decided to put on our swimming suits. We fought over four more falls and finally hit this slower meandering portion of the river. It was flowing through a narrow canyon and the sun was beaming down and we stayed and worked our way down the river until 9 at night. We reached our stopping point and when we got out we needed help to get to shore because we were so sunburned. Then we worked for two weeks to get our legs healed up so we could use them. This project was so immense we had no idea of what a tremendous undertaking it was. I think most of the fisheries crew and some enforcement people were sent up to help us in the Marias. We worked over 1,000 miles of stream; most of it was walked and most of the toxicants were backpacked in fire pumps and slugs filled with sacks whipping in the river. The Whittaker duster was the main form of application. It was a tremendous experience for me because I learned an awful lot about low level flying. I can remember many times coming down the canyon and seeing this line coming down and I would just barely miss a power line. Our chief pilot, Cooper, had rigged a fish planting tanks in this Cessna. Vern Campbell of the Arlee fish hatchery had taken over most of the distribution problems. I remember the morning I had just landed in Cutbank at a military airport where we walked out and heard a Cessna come over and it's making an awful banging

noise. Sure enough, old Cooper landed it and got out and he was in tough shape. They'd gone down and hit this power line with the antenna on top of the Cessna and that had broken the line loose and what hung on banging into the rudder and the back of the airplane. When they came in we were trying to get them to take a cup of coffee and Cooper was shaking so bad he couldn't hold the coffee. I told him, sure too bad you didn't tell me you were coming and I'd drawn you a map with all the hazards in this country. We continued with the toxicants in all the rivers there. Probably one of the most interesting things to me was Kipp Lake outside of Cutbank. We had decided if we could get a big airplane we would apply the rotenone with the big plane. In Choteau there was a Ford tri-motor and the pilot came and we cut a hole through the bottom of...

AW: That plane was rigged for spraying liquid toxicants and we wanted to alter it for putting out this dust, our fish toxicant. It was a question of taking all the pipes and tanks out of the inside of his plane, which left the hole. But then we had to increase the airflow so it would suck the dust out. It didn't work.

BO: I can remember we had the rear end loaded with sacks of rotenone with seven guys on board with shovels.

AW: No there were three at a time.

BO: I'm counting the pilot and copilot. He wanted me to go as copilot because he couldn't reach the brakes to hold them. I'd never flown in a tri motor and I can remember sitting on the banks of the river without any runway and he revs up the motors and I got the brakes on full and he gives me this signal and I release the brakes and looked out and watched that big wheel make about five revolutions and we were airborne. It was an experience I think we got a complete kill out of Kipp Lake.

AW: My memory is this stuff didn't work all that well. We were supposed to pour the toxicant into the barrel and it would get sucked out. But it didn't. It would bridge over and somebody would have to shovel. When it finally busted loose it would blow back into the airplane and all of us were covered with this dust.

BO: This turned out to be a real experience and I think most of the people who were there really enjoyed the project. It did one thing for me that I made up my mind that I didn't care what they paid and what they did there would never be another Marias.

- AW: No, they'll never get anyone else to do that. I think we actually acted a lot like troops in the front line in a war zone and that's the way we lived -- from tent or airplane hangar to Marine Corps barracks. Some of you guys were married but I was single and I enjoyed being with my buddies.
- BO: I had an experience that was kind of cute. We were flying most of this Indian country and I would try to explain this project to people when I landed. I'm landing down in this harvested grain field and here comes a big collie dog and the prop was still going so I cut the motor and rolled up and got to the edge of the field and stopped. I got out and here comes a full-blood with braids and I was going to explain what we were doing. And he says, "White man, you kill all buffalo. Now you kill all fish." That about concluded the conversation. I told him to hold the dog and I left. There were many times like this that happened and the people were very grateful. Probably to end this, one of the nicest fellows that I ever worked for was Walt Allen. We were making a program in Cutbank and it was one of these luncheons. Walt was a very sympathetic and kind person. He'd been rattling on and everyone was getting hungry. He was still talking and I was standing behind the curtain. He said I want you people to know that this project is being done for you and for you and for you. It was too good for me to miss and I stuck a wiener in his hand. The people thought that was the funniest part of the whole program.

End of Tape.

Transcribed by Margie Peterson July 23, 1996