Bot Jones Bot Jones Senderview

I was a Boy Scout -- an Eagle Scout actually -- and I used to teach at summer camp at Oceola (?), I was a counselor there and taught some natural history -- things like bird study.

I didn't do much fishing as a boy — my father was keen on fishing, he and my older brother used to go to Lake of the Woods. I was aware of what fishing was all about, at least a little bit. we used to fish for catfish in the Osage River, in mid Missouri. But I really wasn't into fishing before I came out here. I was interested in natural history. I started out the first year I went to William Jewell College — I won a scholarship, I used to debate in high school, I used to orate. So I won a scholarship to William Jewell college, which is very close to Kansas City.

I was really interested in natural history. The second year I went to the University of Missouri, and they have a course there called Wildlife COnservation, and Dr Rudolf Bennett Was the head of it. It was quite an outstanding course. I was just there for about eight months. That was sort of the beginning of the war, and I was in the enlisted reserve corps and so I went out to COlorado and studied radar engineering to become a technician for repairing radar equipment. And then the draft came up and I was called, and I went to Leavenworth, Texas -- Sheppard Field -- and I was inducted and took a series of tests. My dad was a pilot in the first world war and I'd always wanted to be a pilot, so I took these tests and I qualified in all three divisions: pilot, navigator and bombardier. I was a cadet, and went to Walla Walla COllege for some physics and math, and then to cadet training in Santa Fe, California. Then they decided they had all of the pilots they needed, and if we'd qualified in one of the other air crew positions we could select one. We were in this big auditorium and the major said, "Navigators on this side, bombardiers on that side." I kept switching back and forth and he finally said, "Time's up!" I was on the navigator side, so I went ahead and went to navigation training. To be a navigator you also had to know a bit about bombardiering, so I took four months of bombardiering.

I was commissioned as a second lieutenant at Hondo, Texas, and got my wings. Then they were looking for flight engineers, and my dad, who was in the army at this time, in San Antonio, said I should go for that. So I went out to Victorville, California, but then they dropped the bomb and the war was over.

Then we went to Clovis, New Mexico. During this time I was really very much interested in religion. I wanted to get this thing squared off because I was going overseas. I was in the officers club at Clovis one day and there was a newspaper called the CLovis News Journal, and there was an article called The Parson in it. I didn't know what a parson was, but I read it. I looked it up later and it said "a parochial incumbent," so I still knew less about it was. It was by a Dr Calvin. he was a very good naturalist, he was writing about some trips he had made to Tucumcari in New Mexico, and the birds he had seen. I thought, well, this guy knows something more than just religion. So I went in and introduced myself and met his family. Then I sent through what they call a "confirmation course instruction," but I didn't think I was ready for that.

So, anyway, I was discharged, and I was accepted at Cornell University. I was really interested in ornithology — birds — and they have a department there. and they have one at the University of California. So I entered there about mid-term at Ithaca, New York, and while I was there I took the prerequisite courses in biology, and so forth. Then I got a scholarship in bird sound recording. You've probably heard these records put out by the Laboratory of Ornithology — on bird calls? Well, I helped do that while I was there.

I was really interested in religion, and I thought, "Well, perhaps what I really should do is study for the priesthood." So I spent a summer in Pittsburgh, a place called Gibsonia — the ST. Barnabus Brotherhood. This was an outgo of this Dr Calvin that I'd met in New Mexico. while I was ther, an Anglican deacon came through from Philadelphia, quite a bright young guy. He said, "Well, you should really study for the priesthood."

So, I graduated from Cornell with my Bachelor of Science. Then, I was going to go around the world, but that didn't come off. So I decided I was going to study for the priesthood, and I went to COlorado. You have to be of a certain diocese; this friend of mine, Francis Volcker, this deacon who is now an ANglican priest, knew Bishop Bowen in Colorado. I went out there and he accepted me as a candidate. then I entered the seminary in Wisconsin called Nashotah House. So I studied there for three years — the scriptures, dogmatics, liturgy — in the course of time I was ordained a deacon — that's the first step. So, the priesthood was coming up, but I was sort of uncertain about Anglicanism — I was looking really for the Catholic Church , and I thought that Rome was wrong about certain of their teachings. Anglicanism was the closest thing to the Catholic Church. Anyway, I was still a little bit uncertain.

Anyway, I took a Bachelor of Divinity from Nashotah House, and then I wanted really, a contemplative live, a life of prayer. There was really nothing in the Episcopal CHurch. Some friends said, "Well, you should go to England and see what they have there." So I did. I went to England and I looked around at various religious houses. Then I went to a place up in Merfield, up in the west riding of Yorkshire, in northern England. It was kind of a scholarly community and you could sort of follow your own trade. So they said, "Well, if you're interested in a life of prayer, we'll give you lots of time to pray." So they did.

While I was there they said, "Well, you should go on for your ordination. You've done your studies." It was kind of difficult because I was an American citizen in England and there was no precedent for an American being ordained in the CHurch of ENgland. So they went back and they found a precedent — George III or somebody, some AMerican had been ordained. So then I was ordained by the Bishop of Wakefield. I have the bible upstairs that he gave me for the ordination in this big community. I was there for about a year and a half and I decided, well, I don't really belong in England. But I was still interested in this life of prayer, so I made a trip to ROme and Assisi, and I returned to the US.

I lived for a time in Connecticut, a place called Gaylordsville. There was an Order of the Holy Cross on the Hudson River I was interested in — sort of promoting the contemplative life in the Episcopal CHurch. I had a hermitage there and I was chaplain at Kent School, a boy's private school

book binding, old equipment -- and they said "Sure, we'll send it off."
So they did. They sent a truck load of stuff. It's still downstairs;
this stuff here is more modern and sophisticated -- state of the art. So I started doing that.

I remember that first year I was there — August and September — I saw all these pink salmon splashing just below our swinging bridge across the river. A female pink looks very much like a trout, and I thought these were very large trout. Beautiful, big fish and I was quite amazed. They were all digging redds just below the bridge. That was my first introduction to salmonids. That would have been in '65.

David Muir took me out once on the Tsolum River, somewhere below the power line, and gave me a lesson on fly casting. And then he said, "Here, take this." And he gave me his rod and his line and a couple of flies, so I was in business. I still have that rod upstairs. So that was sort of the beginning.

I remember the big runs of coho that used to come up, and steelhead. It was a marvelous river for fishing.

In '67, federal fisheries decided they would do an experimental hatchery on Headquarters Creek. Since I was there — right across from where they were — and they needed somebody to look after the hatchery when they weren't around, and also help construct it. I was hired as a technician — a very low grade, but anyway there was some income there to buy this property here, with what I earned.

The experiment was to do with pink salmon, and Dr Robby Bamms had invented what is called a Bamms Box — a rubber lining inside the hatchery into which they put layers of gravel, then eggs, then layers of gravel, and built it up up to four feet in depth. Then they channeled the Headquarters water through that, so it was the same temperature as the river. It was to simulate a stream condition inside the building. The purpose was — ordinarily you would have used Heath trays in the past, and they found when they hatch, the alevins are kind of moving around all the time and using all this energy. Whereas in a stream, underneath the gravel, there is very little room for them to move, so they conserve their energy and get larger, and are more equipped to live a longer, stronger life in the ocean.

I helped with that. For the first full year we got a return of about 5,000 pinks. The following year we only got about 200 because it was the off year. They tried to go down and seine some fish, but they couldn't get any, so they closed the hatchery down. So I was hired as a caretaker for \$100 a month.

During that time I began to fish for steelhead and also for coho. I would fish primarily at Dove Creek, there would be steelhead there and it was a marvelous pool. Also fishing for coho — they would come in in early October with the big freshets. These were big fish — 12, 13 pounds. So that was my introduction to fishing on the Tsolum River.

I really wasn't aware of that mine when this hatchery was going — you know, it began in '64. Dave Muir used to talk about it. He was concerned about the tailings pond emptying into Wolf Lake and then into Headquarters Creek. I remember the big trucks — I got splattered once when I was riding my bicycle with a new Cowichan Indian sweater on. So I knew the trucks, but I didn't really relate to them, it wasn't in my mind that there was any damage taking place.

People were talking about arsenic getting into Wolf Lake and coming down Headquarters Creek. But I can remember Dave Muir was concerned about this mine and he talked about the mill and the tailings pond — and he was concerned about the tailings pond.

I began to get more commissions for book binding, so I realized I had to know more about it, and I had to know more about paper. So I spent a couple of months in San Francisco studying, this would have been in '73, I was studying with Stella Patri and Peter Fahey, two book binders and paper conservators. Then I came back and applied for a job at the Library of Congress. I was just about accepted there, but for some reason I wasn't -- I forget what it was. The I had a call from George Cunha, who had established a regional conservation centre in Massachusetts, on the Merrimack River. Somebody had mentioned me to him and he said, "If you come here and do book binding for us, we'll teach you paper conservation." So I went, this would have been in November of '73. I was actually earning money while I was there -- not much, but something. Then I decided I should go to Europe and study where they had better centres. After being there for a year and a half, George Cunha actually helped me. We wrote to a lot of centres in Europe -- book binding, paper and conservation centres in Germany. So I went to a place called Ascona in southern Switzerland and studied fine binding for four months. While I was there, I got a call from the Canadian Conservation Institute in Ottawa. I had been in contact with Dr Nathan Stolow, who had been the founder of that, and the purpose was to establish regional centres right across Canada, like the one where I was in North Andover, in Massachusetts. He said "Would you be interested in working for the Canadian Conservation Institute?" and that was at a big salary.

So they flew me from Ascona back to Ottawa, and they paid me \$200 a day and all my accommodations, my air passage.... They interviewed me, and then they said, There was an opening in Vancouver and another one in Moncton, New Brunswick. I was interviewed there by the director and he said he would like me to come. So I actually was hired, then they flew me back to Europe, to Ascona, and I finished up my studies. They actually paid me \$3,000 to finish the studies, which was pretty nice.

Then I went into Germany and studied for about six weeks in Munich, at Stats Bibliothek, and then to the academy in Vienna, the British Museum. Then I flew back to Canada.

I had a van I had left with some friends in North Andover, so I picked that up and I drove to Moncton, which was about 500 miles. I really had no intention of doing it all in one day, but I started out and the weather was nice. I got to Fredericton and had dinner, then I thought I might as well go on to Moncton, it was only about 110 miles. So coming in, it was dark and it was raining, and I hit some black ice on a huge hill... the hills there are long, long, long hills, not like we have here. They just seem to go on for miles. So when I hit the top of this hill and went over I realized the car was out of control and there was nothing I could do. I was on ice!. It was really scary because it lasted so long, and then I finally went off the highway into a big snow bank. I was fine, a bit shook up, but the car was a write-off. I had BC insurance, so I got \$4,500 for that and I bought another one.

I started working there at the Atlantic Conservation Centre, which is part of the Canadian Conservation Institute. I was hired as a paper conservator at \$18,000, which was pretty good for that time. I was there for four years.

I began to fish for Atlantic salmon on weekends, in the Miramichi. You know, there is very little free water where you can fish, it's like England — it's all private water. But there is a stretch there near Miramichi where I would often drive up and stay overnight. I never got into a salmon, but I got into grilse. They were three-pounders and they took a fly. There was one stretch of water there, you know, you would get into a big line — you go to the top of the line and sort of work themselves down. Eventually you would get to the hot spot and get three or four strikes. It's all fly fishing in New Brunswick.

A couple of times I got down to \_\_\_\_\_ River in Nova Scotia, near New Glasgow. I had some friends in AMherst . I would stay there. But the fact is I didn't get any fish. It wasn't like the Miramichi.

I was there from '75 until '80, and then due to budgetary restraints the centre was closed, and the one in Vancouver was closed. I went back to Ottawa and worked at the big centre there for about a year and a half. Then there was an opening for a paper conservator in Manitoba, in Winnipeg. They wanted to set up a state of the art conservation lab for the provincial government. So I applied for that and I won the competition, so I left CCI and... by that time I had acquired a small pension — I had worked for about five years. So I left and I went to Winnipeg and set up the lab, we had almost a million dollars to do that so it was really a very good conservation lab.

Then, from there I returned to here. You know, most of the time I would come back for two or three weeks every year. I had a tenant living here, a family, and they would go someplace and I would move in for a while while they were gone. So, you know, I was always back here. Then in '83, '84 I moved back to the hermitage on the Oyster River. I had this new conservation lab built by a contractor in Campbell River. I was planning this for quite a while. In fact, this one big board cutter cost me \$10,000 for that one machine. So this was all being sort of planned during my last year in Winnipeg.

I made two long trips to the States to visit my family in Kansas City, and then in '89 I went to India for two months, in the state of Tamil Nadu. I went there because Dom Bede Griffiths, I have many of his books, what he did he went to India in '55 and took the Benedictine life, but instead of taking all the gothic churches, gothic windows, they adapted themselves to the Hindu way of life — their temple, their religious garb, the Indian scriptures. It was Catholic, but with an adaptations. I had followed his writings, and I had friends in Oklahoma — Sister Pascaline, I had known for years. She had set up an ashram something like that, so she sort of encouraged me to go. She's been there a number of times. So I spent two months there. I had a hermitage. Simple, but it had running water and the food wasn't too bad. I got really sick the first ten days I was there. I was on the Kauury River and I would watch the boys fishing, just with a stick with a line on the end of it and a

little hook. They would catch these little fish, 20 or 30 of them, and take them home. there would be enough for a meal for their family, I guess.

I didn't do any fishing while I was there. I had my binoculars and I bought a really good bird guide, so I did some birding while I was there. I used to walk along this river... the is a lot of pollution in India, they are building dams there and they have a lot of nuclear power stations now that the people are concerned with. There was a woman and her husband there — her name is Dr Joanna Macey, from California — I guess she's a Buddist. She's very much into ecology, "Thinking like a mountain" — that's an expression from Aldo Leopold, whom I consider the founder of North American ecology. What he means by that — he was a forester....

In the times of Newton and Galileo, if we could get to these little basic particles — the atom — if we could understand that we could understand the whole. What scientists are finding out today is that when you get down to subatomic particles, they don't behave according to any laws. They are just little packets of energy, and every particle is related to every other particle. He calls it a complicated web of interdependent relationship. That's what all these people were talking about — the earth. Where we're related — it's all tied in together. We are working against the earth instead of working with it. The earth has been working pretty well for something like 50 billion years —until we came along.

When I came back in '85, Frances Bula wrote this article "The Tsolum River is Dead." I was quite amazed. Then I heard the Steelhead Society of BC was reforming a chapter in the Comox Valley, so I went to the first meeting. We made our first commitment the reclamation of the Tsolum River, and during our second meeting several of us formed a committee. I ended up as the chairman.

We started writing letters to the government, to all of these different people, and we finally started getting some responses. Tom Oxland, who is the head of the Ministry of Environment on Vancouver Island became very interested. He invited me up to the site and he had all of the experts there from the Ministry of Resources, and mining, Keith Ferguson from Environmental Protection in Vancouver — the federal Ministry of the Environment — waste management people. This would have been in '87. They took samples, trying to find out a sort of a strategy. They hired a consultant from Vancouver. They came up with recommendations, which was Greek to us.

Another project we considered because the government was really dragging their feet. You know, we began in '85 and nothing was really started until '88. During that time a Unitarian minister, Reverend Jack Kent came out to visit and did an interview for a newspaper article he was writing. He mentioned that his son-in-law, Dr Dai Jones, was involved with some sort of a bacteria, bug study, and had a friend down in Tennessee who had a system for precipitating copper by using bacteria — bugs. He came to the valley and talked to the Rotary Club. My immediate response was that he should go down and talk to the ministry of environment, but he was reluctant to do that. He came to the Steelhead Society meeting and there was a lot of enthusiasm shown to Dr Jones' project.

The ministry of the environment was a little cold about it, but he eventually did go down and talk to them. They felt it was a good idea, but it needed more research, and they might help with the financing to do some additional research because of the lack of background information.

We decided we would go with the government's plan, and about that time they did get a budget. In '88 they began working up there. Where they took the ore from, is an area of about 60 acres. They started in '64 and went into receivership in '67, and they just left this open pit. They didn't reclaim it, they didn't cover it — there was no requirement then from the government for them to do that. There was the north dump and the south dump. The south dump drains into McKay Lake, which goes into McKay Creel, then joins Murex. It's OK, there's no copper there. The north dump, the east part, which drains into Pyrrhotite Creek.

What they did, on the east part of the north dump, they hauled all the loose material they thought might be contaminate, that might be ;eaching stuff into the river. They put it all into one big pile — they brought 11 trucks in. As they were doing this, they mixed it with limestone. They created what we call a big tow on the east part of that north dump. Once they got it all into place, they then started hauling till — which is a mixture of clay and gravel and sand. They were going to cover it one metre thick over the whole tow. They didn't complete it that summer,

and they came back the following year, '89, and finished it. It's called a "raincoat," and the purpose is to keep water and oxygen from getting into this overburden, so we won't get the leaching — so there won't be any action there.

Then they discovered that even when they got that finished, there were still some spots on the pit floor where the pH was very low, so there was a lot of acid being formed. They figured they hadn't got all the material, so then last summer they started cleaning off the pit floor a bit. They got this one area where they got right down to bedrock. All the way from this raincoat up to the top of the pit — about 40 feet wide and several hundred feet long. They used hydraulic water pressure to clean it off.

When they monitored last spring, copper levels were just as high as they had been in the past.

If they find there is no leachate forming there, then they going to conclude that it's being formed by the rest of the rock that's left sitting on that pit floor. And then they are going to have to decide if they are going to clean the rest of it up and put it in a pile and cover it up.

Another thing they are talking about now, and this is quite interesting, Cliff Rainey, his idea was, from the very beginning — he thinks this is a big failure up there, you know — he suggested to them was to create a limestone pond so all the water went through that. That would neutralize the water and precipitate the copper — that's what they are doing up in Westmin, for example, they have these limestone ponds. They looked at that — that was one of the options of this consulting firm, but they thought that would be too difficult. Access is difficult, and you'd have to do it every year, and there is a problem with snow. There are all these complications in creating that kind of a pond. So my suggestion was this year, now we see it's going to take longer than we originally thought, it might be feasible to dump some lime in there while they are getting the thing cleaned up, and at the same time we could be introducing fish into the river and just be speeding the process up a bit.

Another thing they are thinking of very seriously is creating a bog, a kind of a marsh area down below, and planting it with all kinds of plants. Keith Ferguson, who is an engineer with Environment Canada, is thinking of introducing pig manure. What this will do —— I don't quite know what's the difference between this and Dai Jones' process, but he says it's a different process. It's anaerobic —— instead of oxidizing they reduce it, they take all of the oxygen away. Then bacteria are formed and they precipitate the copper. Other people I've talked to seem to be interested in that. This is something they could be doing. They have tried this some place around Halifax and it seems to be working quite well. I feel very hopeful and convinced they are going to solve this problem eventually.

John Keyes, an entomologist, said you could set up a control area, then if it is polluted you have something to compare it to. He thought it would be possible at the time, I don't think he thinks so now, that if

you went in and measure the actual invertebrate life in a river, so much per square metre, so many different varieties, and so forth, then later, if it's messed up by Quinsam Coal, and these invertebrates decrease, then that's an indication it's from the mine work, mining the coal. A number of people are interested in that. John Ross, who is the president of the Vancouver Island Resource Society in Campbell River -- I'm a director -he got a MILAP grant from the government to do a study on all these rivers and create this control -- the Oyster, the Tsolum, Pyrrhotite, Quinsam, Campbell.... Gary Baldwin worked with that -- he's a biologist -- they had a crew and they collected the insects and identified them. The report has never been forthcoming. John Keyes is primarily a taxonomist -- he's interested in looking at all the little mouth parts and so forth -- so we don't really have anything yet. We have something. Like we know the Quinsam is the richest of all these rivers, especially at the outfall, the Middle Quinsam. The Tsolum is probably the least productive. The Oyster isn't much better. The Campbell is better than we thought. Just giving them numbers, the Quinsam would be about 29, the Campbell about 9, Oyster maybe 2, Tsolum 1 1/2 and Pyrrhotite zero. It has to do with the weight per square meter of organisms. The numbers themselves tell you something -- 29 is really rich, that's the best river, and Pyrrhotite is zero, there's nothing there.

BRANDT/DRAFT

The Oyster is a concern right now because last summer it was the lowest that I can remember. But that's also true of other rivers -- the Stamp and the Gold were all low. GROWTH

The level was so low that we were concerned at the hatchery that it might be too low for the intakes to function from the river. It also created a problem with the diatom growth, we had to clean them off all the time. There's a possible subdivision going in just above my place and everybody is taking water from the river. There's a petition up at Robinson Lake, near the Oyster Bowl, about 60 people have signed it for additional water, additional wells. They are talking about putting in either a well or some kind of a take-off from the Oyster just above the highway bridge. So there is a real scarcity of water and we are really concerned about that. The effect on the river.

Campbell River has had their eye on the Oyster River for years. Back in '66, '67 they were talking about putting a dam on the Oyster River because they needed water in Campbell River. They have always been talking about a dam. In my opinion we should never have a dam on the river, I'm very adament about that. On Wolf Lake, for water retention, it's OK.

About three years ago we got wind that Cream Silver was going to do some drilling, in fact they did do some drilling, and they used part of an existing road and constructed a new road into the siding. This caused a lot of media attention through the Friends of Strathcona. I gave several talks at rallies.

Nuspar was a proposed open-pit coal mine going in on Woodhus Creek. They wanted take a "test sample" at something like 20,000 tons, which was a pretty good size. They were already mining and they had never done any preliminary work, impact study — so that was our concern there. Consequently, that was disallowed.

When Pacific Playground was proposed in '70, Al Dzuba was chairman of the local steelhead group and I was the secretary, and Barry Thornton was president of the SSBC. I prepared a brief for that on behalf the Steelhead Society. We really fought that hard, I did a lot of letters. Then I left before it was finally settled. A chap by the name of LeBaron, a sociologist I think, was appointed to conduct a hearing on that. His conclusion was that it really should not go ahead, but it eventually did. The thing that didn't happen there that I'm grateful for is they were talking about putting a big berm on the other side of the channel, which they didn't do. I don't think it has been very detrimental, I don't think there has been any movement of gravel, the beaches seem to be the same.

The SSBC is sponsoring a study on the Oyster River watershed, and I think that's extremely important. What we are doing, we have hired a consultant -- Ron Frank, who is a forester, a soils expert -- known to all these people at Fletcher Challenge, and they respect him. What he is doing is making a study of past, present and future logging on the Oyster River, and the impact it has on the watershed. In the sense of how it affects peak flows and movement of gravel, how erosion affects the soil. So that's an ongoing thing at present. In the past there is no question, according to DFO reports each year going back 65, 66, 67 -- about the time I moved to the Oyster River. They began to clearcut in earnest then, that's when they built the Burma Road. From that time we've had some really bad flooding. In '75 and again in '80 they lost houses. I lost 1,500 feet of river on my property because the river changed its course. It used to wind down around my property. There's no question that the clearcut logging they have done up there has had really deleterious effects on the river in the way of flooding and the movement of gravel.

Another thing, I've got some very good shots from a helicopter of the estuary. You can see this whole fanning of gravel — and that's where the gravel is now from the Oyster River. These fisheries reports mention so many places that are just bedrock, there's no gravel left, it's all moved down. When you clearcut you remove all the root system. It's fine for about five or six years, then the roots begin to decay, then they lose their hold and no longer retain the water or the snow, so you get great movements of water. What it does, it moves the gravel and the eggs in the gravel — it affects the whole water system. There have been so many changes to this river through high water flow.

I remember when I came to the Oyster River, the whole quality of the river was different. I remember walking up at the end of Glenmore Road and the nice pools and the movement of the water. That's all changed now and there are empty gravel bars in a lot of places.

We've got the Ministry of the Environment involved in a study on the brown slime that has formed on rocks in the river. It's called a diatom. It's a form of algae. They've found it now in the Heber, the Stamp, parts of the Gold. They find it's not from nutrients, like phosphates, they find it growing in rivers that are nutrient-free and pristine. It's not sewage. It seems to grow in rivers that are extremely low, like the rivers have been this summer. It has affected the invertebrate life — decreased it in the Heber — but it doesn't seem

to have done that in the other rivers. It's probably always been there, but until you get low water conditions it hasn't been growing. That's another thing with logging, we get very uneven flows — in the summertime very low, in the wintertime very high.

I look at this Oyster River valley, and perhaps the Tsolum to the Puntledge as kind of a region -- I call it a bio-region. I've lived in this now for 25 years and I know the plants and the birds and the rivers and fish and so forth. So we have a hatchery... What I would like to see -- and this was the... UBC Farm wanted our long range plans for the hatchery. I'm on the fisheries committee of the Oyster River Enhancement Society. Some of the people said we would go in for chinook, coho and pinks. So I sort of formulated what our long range plan as far as the fishery was concerned, was to return the Oyster River to its original capacity for salmonids -- the four species of salmon -- plus cutthroat and steelhead. That's out goal, to do that if we can. My feeling is we should work with what was originally in the river, the original species, and return the river to that level. So that brings up the idea that we are feeding over the winter something like 98,000 chinook. That's very popular in the eyes of the commercial and sports fishermen because they are very keen on that. DFO they like it because there has been such a scarcity of chinook, it looks good. I go back over these records and one year -- back in 1955 -- there were something like 200 chinooks counted in the river. Ordinarily there have been 25, whereas there were over 100,000 pinks, 35,000 to 40,000 coho, 15,000 chums, and there were always good steelhead in the past and cutthroat. So my feeling would be that we haven't had very much success with coho in the hatchery -- this is due to we had an escapement one year, they got loose and went back down into the river. But I really think that's the big thing we should be working on -- first of all coho and pinks and chum, without too much emphasis on chinook, because this is not a chinook river. It's not deep enough, there's not enough water, it doesn't have the right type of gravel. Whereas it's a perfect pink river, it's a good coho river -- the coho can get out of the river and into the tributaries like Bear Creek, Woodhus Creek, the Little Oyster, those are all good tributaries. We now have a ladder up on Woodhus Creek so coho can get up more easily.

There's no question that beaver dams can be the saviour of a fishery. That's why the Oyster River is important — there are some good tributaries where coho can go and fry can survive. It's like Black Creek. It goes dry in the summertime, but they get into the beaver dams on the tributaries. With pinks and chums there is no problem because they go right down to the ocean, and chinooks, they spend either four months or a year in fresh water before they go down.

What I would like to see, if the river gets operational again as far as good logging practices are concerned, and there is enough timber up there to maintain proper flows. And as the fishing returns to some sort of historic levels, then the hatchery would disappear -- that's in terms of a commercial hatchery.

I'm absolutely opposed to a dam on the Oyster. Just the whole image of a dam is repugnant. Like the dam on the Puntledge, for example, the effect that's had on the river. The Columbia.

The government has given us \$25,000 a year, and this will be our second year. We're called a Public Involvement Programme, and there are several scattered all around BC. The there is another programme called the Community Economic Development Programme. I think there are 19 of those. In a sense they are slanted toward native people to give them employment. I visited one of those last summer up in Fort Hardy, on the Guatse River. They have a budget of \$180,000 to run that place and they have five employees. That's the way we should be going, but it's very difficult to get into that, if not impossible, because they are just not allowing any new CEDP projects.

There might always be a place for the hatchery, but not as a commercial hatchery -- you know, we could work with steelhead or cutthroat.

I see what hydro development has done to the Puntledge River. It was before my time, but there used to be a wonderful run of chinook into that river, and that has certainly been screwed up by what Hydro has done. They used to go all the way up into Comox Lake and spawn in the Cruickshank River — a beautiful river. All that beautiful gravel and it's wasted now because it isn't utilized. I guess that's why I'm opposed to any dam on a river. They've been so destructive. Look what they've done to the Columbia River — there are a whole series of dams. They are thinking in terms of power — they aren't looking at the whole earth in a balanced sense. They need energy, so they write off something else to get their energy. Write off another resource such as fisheries resource. I think eventually the source of energy is going to be solar energy rather than hydro, rather than coal.

Some of the best agriculture land is the Comox Valley, and they do some farming along the Tsolum River. They irrigate and take a lot of water and that's again kind of a tragic thing. The Tsolum this year is the lowest that I've seen. It's flow is probably below 10 cubic feet per second, and it would be lower than that if we didn't have the dam up there on Wolf Lake to open up to increase the flow around August 15th for the pinks. But these farmers irrigate, and they are taking a lot of water downstream, which is certainly depleting the Tsolum River.

I suppose the alternative might be to have deep, deep wells. I don't know enough about this because I'm not a hydrologist. Where can we tap water so it won't interfere with the watershed? If you go deep enough you might not affect the rivers. But that's for the specialists to tell us.

A fish I've enjoyed the most is fly fishing for pinks along the mouth of the Keogh, and this year at the Oyster River. I don't realy enjoy too much the mechanics of fishing — salmon fishing from a boat. It's great I'm sure if you have all of the equipment, but it's much simpler if you can just put on a pair of waders — or maybe you don't even need waders — and just fish along a river or an estuary without a lot of equipment like boats and trailers and ramps.

I really enjoy fishing at an estuary, along the beach or in the river. Those are my favourite types of fishing. Like coho at Black Creek, cutthroat in the Oyster and along the estuary. Again, it seems you have a better relationship to the earth, the water, the birds and so forth if you are doing it in that way.

I've been out a few times coho fishing with my friend Gordon Merrick, who's the chairman. To me it's never very pleasant. You're sitting there and getting all these fumes, hour after hour, sometimes no fish. The other is a much calmer type — like Izaak Walton said, it's the contemplative man's recreation. Fishing from the stream or estuary or beach it's not so high-tech.

I do mostly fly fishing now. The only difficulty is steelheading in the winter. I'm doing most of my steelheading in the Campbell. Five fish there, twice a week for two months, and I really get satiated with steelhead. You know — that's enough. If you get hold of four fish in one day, that's pretty strenuous fishing, especially when some of them are big fish — 17-pounders or so. And there have been some big fish this year.

The biggest steelhead I ever caught was probably my first one. That was back in 1966 on Christmas Day. It was 18 pounds 6 ounces, taken at Dove Creek hole on the Tsolum. Then I got another one, remember the run just below the bridge there on Farnham? And that was a big fish, too, probably about the same size.

I was ordained in '66, and my dad gave me a Silex reel, and I was using that. It was interesting. I was talking with Al Limber and I said, "Where can I fish?" He said, "Go down to Dove Creek, that's a good place." I had this big rod -- it was a terrible thing, you couldn't break it down.

The reason I got that Scientific Anglers System was, I was thinking of getting a rod and I was at Haig-Brown's. I was talking to Rod about that, so he told me about Scientific ANglers. I pushed him a bit on it, and he had all the files in a big cupboard under the stairs. He went underneath there and dug through it and found the literature. That's how I happened to get that system, was through him, through his recommendation.

When I first came here, after I built my hermitage and got the bindery set up, this would have been in '65, I needed customers. David Muir used to come out and check the guage there, and we had a lot of conversations together. I talked to him and he said, "Go up and see Roderick Haig-Brown." I'd never heard of him. So I made arrangements with Ray Cunningham, who was the pastor there. I was going to spend the night there — they have a little place in the church, upstairs, living quarters. So I went around to the RCMP station which was right across from where the fishing ramp is now. I went in and said I would like to Roderick Haig-Brown. He came out, and he was wearing his magistrate's robe. He was really quite fierce, he had a kind of a fierce look on his face. I told him what I was up to, that I'd set up a bindery. He told me, "I'm a professional writer!" You know, that's who he really was. He was quite intent on that.

That same day I went around to the high school and the librarian came out, and it was Anne Haig-Brown, his wife. So we had a wonderful talk, and she invited me over to the house that evening. Then I went around to a lawyer's office looking for work. I forget who the lawyer was, but he was married to Valerie Haig-Brown, so I met Valerie that day, too. I met three Haig-Browns in one day. That was the first time I met them.

I assisted Ray Cunningham for about a year and a half in the parish, either going there, Gold River or Sayward on the Sunday. So I would frequently go over to the Haig-Browns between masses, or they would invite me over. So I knew him quite well. He actually gave me a fly casting lesson out on his lawn. He used to keep a rod in the library, there was sort of a long ledge in front of the shelves, so he always had a rod there. So he took me out and gave me a lesson using this Scientific Angler's System. That's the one lesson I had from him. It was a beautiful place — they have a beautiful lawn.

He came down to my hermitage twice. Once, I did some binding for him and we had to select some leather, and then I showed him the hatchery there. And I pointed out to him that run, and he fished there from that side — he could look at it as he crossed the river, and he said, "Yes, I can see that that's a good run."

They used to visit in Idaho -- Bumpy, Hemmingway -- they knew, he'd go there for conventions. They brought back one of his books. I bound that for them and they presented it to him, Bumpy.

In relation to the hatchery on the river, I just ran into Pete Law a few days ago. He was down at the mouth of Black Creek. He was telling me how this increase in pink salmon has really helped the cutthroat in the Oyster River. They swam it from the Council House down, and they counted 600 cutthroat. And he said, "That's just a little bit of the river." There is all the rest of the river they didn't swim. So that's quite amazing. When they seined, they got 260 brood stock, almost unbelievable. And some of these were really big fish. Right here where I live on the Oyster River, I can go down, there's a run right down below me, almost always I can get into a cutthroat. There's that white water, they lie in that pool. Good size and they take a fly very well, I use a little shrimp fly. So it's a marvelous river for fishing. There's a pink fishery now, there's cutthroat — down at the estuary. Up from the

estuary there's a point a quarter of a mile up, sort of a gravel bar going out. That's a wonderful spot for cutthroat. I've been down there at least two dozen times, and I've always gotten into one, two, sometimes a number of fish, but at least one or two.

They are about half and half. When they swam the river they found there were quite a few wild fish. I think that's the big problem, people will kill the wild fish. They should be left entirely. I'm really happy about the cutthroat fishery on the Oyster River, and that's something the ministry of the Environment, especially George Reid has been working on for years. I once swam part of the river with him. We went in from the canyon area, way up where they pan for gold — you go up the Oyster Main and the road that goes down. We started there and swam all the way down to the placer mine site and ran into some beautiful cutthroat. You know, there is a lot of white water, and they really like that kind of water, riffles.... He was thinking of perhaps building some kind of side channel for cutthroats up in that area.

I would approach the topic of education a little bit differently today. There has been a sort of evolution in my thinking. Like I'm going to this conference on Spirituality and Environment, and going to India was very helpful, too. You know, all the great religions like Buddhism, Hinduism, Taoism, Christian Mysticism, Islam -- they have what we call a perennial philosophy. This goes all the way back, away before CHrist, thousands of years. The idea of it isn't just matter out there, it's filled with some sort of basic consciousness and spirit. There is a unity between man and nature and living things. This was a philosophy that was accepted in the west right up to the Renaissance, to about 1500. Then a group of scientists, who were religious people as well -- Sir Francis Bacon, and Isaac Newton, Galileo, Descartes. They came along and they began to look at everything outside of mans' spirit as sort of a mechanical system, the earth was purely matter. That if they could understand the atom, the little building blocks, then they could understand the whole. Everything was just built up from the parts.

We have lost this, what I call perennial philosophy, this unity of all beings, except the native people still have it. They have this wonderful sense — like Chief Seattle's prayer: You are one with nature, nature is one with you, we are all part of one another. Thomas Berry speaks of the four components of the earth: the land sphere — that's the earth, the water sphere — the rivers and the ocean, the air sphere, and the live sphere — the plants and animals. This is all sort of one big organism, we call it Gaia. Then there is the mind sphere — man is given consciousness of this. An what man has done with this mind sphere he has taken these four components and he's altered them geologically, chemically, in every way. This happened after this new way of thinking about the universe — there was the industrial revolution; high technology, and man began to manipulate the earth, to exploit it. It's had just dire results.

Part of this logging we see, and pollution, everything is really due to mans' manipulation of nature, of the earth, in a really deleterious manner. In a way that it can never be the same again, but what I think we have to do is get back to this sense that this unity of all beings, regain this sense of the perennial philosophy which we've lost. That to me is what ethics is really all about. I don't think you can just regulate people and say you mustn't do this, people really have to see this, they sort of have to experience it. Like Izaak Walton said, when we go fishing, we sort of enter into this sense of oneness of being with nature. That's why river fishing to me, or estuary fishing, is kind of the ideal way, because it's a very leisurely, contemplative, no pressure way of fishing. Getting in touch with the earth.

The environment I live in is a very beautiful environment. People come here and they see this setting — the trees, the river, and so forth. This is a very genuine part of my life — it is kind of three levels — I'm really intent on the contemplative aspect... What I mean with the contemplative aspect is we have an ordinary consciousness, like when we are talking; we are conceptual, we have ideas; we are creative; we write, and so forth. Part of that flows from a deeper consciousness, of course. There is this surface consciousness, but we have a deeper level of consciousness, and that's really what the contemplative life is —

it's kind of a non-conceptual way of approaching reality with a deeper level of consciousness, which is not conceptual, is not thought out, but it brings you into contact with the earth, and with people and with God in a way that you can't really do with thought. That's really what the contemplative life is.

That's one level. I think that out of that I am concerned with what flows from mans' spirit — what he writes, what he creates from his ink or crafts. First of all I'm concerned with really restoring preserving mans' spirit, his contemplative spirit — mine and other people, and then restoring what flows from that. That's probably one way I'd apply to book binding or paper conservation — it's not just to make money, I don't really need a lot of money, but it's a very satisfying thing because it's close to mans' spirit.

The third thing is restoring preserving the earth. If we don't restore the earth, preserve it, why we have nothing. Museums like to preserve Indian artifacts, and they are nice. People compare them with Picasso and they are quite beautiful things... their weaving, sculptures. But what's really important is not just to preserve their artifacts and take them into a pristine environment, but to preserve their spirit, their culture that the artifacts flow from. To do that, you have to preserve their environment — their rivers, their streams, their mountains. So we have to look at the whole earth, not just one little artifact and getting it out of the bad environment into a good environment — a museum. But museums have to go out and look at the whole thing today.

So anyway, those three levels of preserving the spirit, what flows from the spirit, and preserving the earth -- I guess that's basically what I have to say.

The Indians still have this, what I call perennial philosophy, this unity of we are part of the earth and it is part of us. I don't say the young bucks have that, but I think the elders do. I think we should really listen to the elders. We just came in... there haven't been any treaties, especially in B.C., or very few treaties. We just took the land and Douglas was a little bit concerned about certain burial lands, but that was the extent of his real concern. I feel they have been really unjustly treated, especially the Catholic church I think has really been bad in their treatment of the Indians. Trying to force a way of belief on them, and try to destroy their own culture, their own native spirituality, their natural mysticism, earth mysticism. Today the church really realizes that the white man has introduced them to drugs, for example, liquor, in a sense we are really responsible. I feel very close to the native people, to what I call their natural mysticism. Their is a bad element, too, this aggressive, violent element, but you find that everywhere. But I really would like to see a settlement of their land claims -- I think that's extremely important.

I don't think they want it lock, stock and barral -- I'm not afraid they are going to take my property -- it's not my property anyway, I'm just using it while I'm here.

They used to come over and fish the Oyster. The first time I ever met Cal Woods -- the Oyster used to go down and go around the back of all these

homes on Catherwood Road. I guess it was in '80 it shot straight through. I met Cal on one of those little runs. He and his son were fishing there, it was the first time. He knew who I was, and of course I knew who he was — we'd never met. This was the time the Pacific Playgrounds issue was up and I went with Barry Thornton down to the Gualicum once and we met Cal Woods and his son. Once I went to a conference at Naramata — I was representing the Steelhead Society — I introduced a movement to this group that the estuary be retained. As it was, the marina went ahead. I had a number of meetings with him. He was impressed by the fact that I did a lot of work on that. He said, "If everybody worked as hard as Charles Brandt on the Steelhead Society, we'd really get things done."

He was a very amenable person, very friendly.

Jack Hames award