Date: Saturday May 10, 2014. Location: Union River Dam, Ellsworth, Maine. Interviewer: Julia Beaty Interviewee: Rick Welch Associated sound files: UnionRiverFishTrap.wav, RickWelchInterview.wav

(Notes:

The first part of this transcription is based on a conversation that took place before the interview formally started. There is a lot of noise in the background because Rick and Julia were standing close to the dam while Rick explained how the fish trap works.

The conversation during the first 45 seconds of the recording is virtually inaudible due to background noise from the dam. Up until that point Rick is explaining how the alewives swim against the current until they are funneled into a pipe that leads them into a fishway underneath the walkway that he and Julia were standing on. The alewives swim against the current in the fishway until they reach the entrance to the fish trap.)

Julia: So have you gotten any today?

Rick: No. Not yet. Five minutes from now they could be charging in so fast that we can't handle them. Something tells them when to go. We don't know what it is. It's probably got a lot to do with the stage of the egg development of the fish. I think they probably ripen up as they come in to this warmer water. If they're not ripe enough they don't have that desire to run so they just mill around out here like they're doing now. But ten minutes from now that could change. They could just decide to go.

Julia: So they kind of like come in waves? It's not like a slow trickle or a steady stream?

Rick: It's pretty much a steady stream. Only because some will come up and they'll mill around. Other ones will follow them. So we don't know if they're coming up, going back around, cutting across, coming back again. We might be looking at the same fish all day long, just going in circles. But in the afternoon they have a tendency to congregate over here by this wall. (A few inaudible words.) For some reason they like this side of the river. It's probably an attraction to the generators or something. (A few inaudible words.)

Julia: Do you think the noise bothers them?

Rick: Not a continuous noise like this, no. I think they get used to it. If you introduce a strange noise, an intermittent noise, it will probably spook them. No, we haven't seen that that bothers them.

Julia: I guess their desire to get upstream overcomes their fear of the noise?

Rick: It does when they get ready to go. You can see the opening between these compartments right there. (*The conversation is inaudible for a few seconds after this because Julia pointed the camera down to see the fishway underneath the grate that*

they were standing on.) This is the part that's used to trap them. *(Inaudible few seconds.)* Over here, I don't know if your camera can pick it up, but you can see it with your naked eye.

Julia: Oh, cool! (Looking at alewives in the water.)

Rick: They're all the way up, they probably go down the river for quite a ways, probably all the way down to the ocean.

Julia: So this is not a lot for ...?

Rick: For this time of the year, the beginning of the run, this is really good.

Julia: Oh. Okay.

Rick: You usually don't see them like this. That's why it's kind of exasperating because they won't go in the fishway. But they will. I know they will. It's funny because every once in a while you'll see one flop itself out of the water. We always figured that was practice, they were practicing to fight the current. Usually when they do that they won't run in the fishway. But when they stop doing that, they'll go. It could happen from one minute to the next.

Julia: I wonder what they're waiting for to know that it's just right.

Rick: Well, it could have something to do with the tides. Even though the tide doesn't come up in here, they know when high tide is, even though they're not in tidewater. They have a body clock or something. They can sense it. It's probably that the tide has the tendency to lift them over a lot of obstacles that probably they would have to fight to get over, and they know that.

(At this point one of Rick's helpers is standing nearby, also looking into the trap.)

Julia: So you're just waiting for them to go in?

Rick: (Inaudible, but he's explaining that when they enter the fishway there will be lots of them stacked up against the entrance to the trap.)

Julia: So it's blocked right now and when they come in you pull it up?

Helper: Just so we know when they're coming in. So we don't look down and the trap's full and, oh, where did they come from?!

Julia: To regulate it.

Helper: To regulate it, yeah.

Rick: That's the block that we use right there. (*Inaudible, but he is explaining how the trap is lifted up to ground level where the alewives can be emptied into a big wooden box from which they are sold or into a tank for transporting them live by truck.*)

Julia: So is it mostly lobstermen that come down and buy them?

Rick: There's really a big demand for them when they first start running because, just like yourself, if you ate chicken all winter and then somebody offered you a steak, you'd jump on it. That's the same way with lobster. They just love the change of bait. They triple their catch when they start using alewives. So they really want alewives really bad. They're only available for a short time so they take advantage of it. This tank here is our stocking tank. The trap moves right up over the tank and we dump the fish directly into it. We have some water in the tank to cushion them when they drop in but most of the water that fills the tank is in the trap itself. It comes out with the fish.

Julia: And they don't seem to mind being moved around like that?

Rick: Oh, they're in the water so they don't even know. *(Inaudbile few words.)* ...the same turbulence from the current. They can line up. They're not just willy-nilly in there. They're all basically lined right up with the current. *(Inaudible few words.)* They survive quite well. We don't travel with too many in the tank. We know how many we can put in and get away with it. We know if we've gone too far. They come out stressed.

Julia: And you said you estimate it by the bushel?

Rick: Yes.

Julia: You don't count the individual fish that you put in there?

Rick: No. *(Inaudible few words.)* We can figure out how many fish because we know how many are in a bushel. We figure 130 fish in a bushel. So 100 bushels would be 1300 fish. Most of the agencies want to know how many fish, not the bushels.

Julia: Yeah. But they're okay with an estimate?

Rick: Well, yeah. And we've done this long enough that we can look at the trap and say, well, we have so many. And we've tested ourselves before by counting them out when we're selling them. Say, well, that was about eight bushels or something in the box and measure it and see what we have. We're usually within a half a dozen.

End of relevant conversation on first recording. Interview formally begins on a second recording.

Julia: Ok. Camera is rolling. So, thank you for agreeing to participate in an interview.

Rick: You're welcome.

Julia: So, just for recording's sake, we're here in Ellsworth at the Union River. Is there a name for this dam?

Rick: Uh, no. It's the Brookfield Power dam.

Julia: Brookfield Power dam. I'm here with Rick Welch. I have this list of questions. We don't have to follow it really closely. You can ask me questions and go off on tangents and whatnot. The first question is: can you describe your role in the alewife fishery here?

Rick: I'm officially the alewife agent for the city of Ellsworth. This run belongs to the city and through the bidding process I have it for ten years.

Julia: How long have you been doing it for?

Rick: Well, this harvest actually started in 1981, I believe it was. The previous agent, I worked with him as his partner. So I've been here since '81. This is my 33rd year. I've been doing it for 16 or 17 years on my own, since Walter gave it up. Pretty much the same thing every year. We get permits to cross the property of the power company. The city has to get permission, they have to request the rights to harvest from Marine Resources every year. That's pretty much how I got started.

Julia: Cool. So as part of that you are in charge of both the stocking and the harvest?

Rick: The fish come from the same place. My partner with me now, Alan Aferton does the stocking. He handles that end of it. He deals with the power company as far as crossing their property and stuff like that. We have a working agreement with them. Probably it's because I worked for the power company at one time, it was a conflict of interest at the time for me to take a vacation to do the stocking so he handles all of that.

Julia: Okay. So you could do the harvest part but not the stocking?

Rick: I do. I do both. But I'm just in the background as far as the stocking goes.

Julia: So you used to work for the power company, but you don't any more?

Rick: No. I'm retired.

Julia: I've heard that, like you said, this is one of the biggest runs in the state. Is there anything special about - I guess that is something that is special about this river, is that it's a really big run - but is there anything else that's special about it? Or do you have any idea why this run is so much bigger than others?

Rick: Well, from talking with the biologists, just general conversation, Graham Lake is

considered ideal spawning ground for the alewives. They like warm, murky, shallow water with a lot of grass and weeds. And that's what Graham Lake is. It's a big lake. It has a lot of tributaries coming into it and some of the lakes that dump into it are also suitable and they are accessible to the alewives. I think one of the big things that really helps these fish out is the fact that they don't have to beat themselves to get to their spawning grounds. We catch them here fairly close to the ocean. It's an easy run from there to here. And we truck them around two dams, a total run of probably three or four miles. When they go into Graham Lake they're ready to go. They're not stressed out or anything else. We've actually tracked them, in previous years the conditions were so that we could. These fish traveled ten miles in about 28 hours. And that's just clear lake, no falls, no beaver flowages or anything. I know personally because we started stocking fish on this certain day. It was the first day we did it. The next day late in the afternoon the fish were ten miles away in a brook. So they do travel fast. They don't hesitate when they come in to spawn. That's their purpose and they don't take any side trips. They spawn and that's it.

Julia: How do the baby alewives get back out to sea?

Rick: They come right back over the dam. Right down that slide right there where the water is.

Julia: Wow.

Rick: The power company put that in years ago for the downstream passage. They were coming through, in the beginning, they were coming through the turbines. A few boards were kicked off the dam when they were running hard and they would come down over them. And even the ones that came through the turbines, there was a certain amount that survived.

Julia: You're saying they come through that part on the right over there?

Rick: No, they can't. That's just leakage on the boards, that's all. This one on the left hand side right there is where they come down.

Julia: Oh. It's moving so fast!

Rick: And that was put in just for that purpose. We'll actually see the big ones that we put in the lake coming back before we are done with our harvest. So they drop their spawn fairly quickly.

Julia: Right. So then they go back out to sea too. And they can come back in more than one year.

Rick: Yes. They have received in places, some up to eight years old. They've determined that from scale samples.

Julia: Wow. That's pretty old. Normally are they only a few years old?

Rick: Usually the majority of the fish come back when they're four years old. They come back into the river. The biggest percentage of them is four years old. You'll get some that might have the urge to come back in three years, but that's a small percentage. You have a small percentage that come back five, six, and seven. And a lot depends on how easy it is for them to get back out. Some of these fish might go up and some of these beaver flowages are restricted until they get fall rains and then they'll come up later on. The majority of these little ones come through on the full moon in July. So they hatch out and develop quite quickly. They're just an inch, an inch and a quarter long, but each month at the full moon you see a noticeable size difference. But the adults, we see those coming down, usually at the end of May, the first week of June, we'll see them coming down over the dam. A percentage of those will come back the following year, or two years later, or they might come back every year for two years.

Julia: Can you describe when they usually start showing up to go upstream?

Rick: Historically it's been about the third week in April when they start showing up in the river. It's not feasible to fish for them because they're not the least bit interested in running in the fishway. I don't think they're anywhere near ripe. But the birds are picking them up out here. That's an indication that they are here. But as far as actual harvesting, usually the first week in May, we usually start. It has appeared to be that over the years that the larger the run is going to be, the earlier they'll start. So if you start catching fish in the end of April you can bet it's going to be a pretty good run.

Julia: Cool. And does it also depend on temperature?

Rick: It probably does. But there are fish in here right now. The water temperature's 52. Some people would say they won't run at 52 degrees. Well, most of them won't, but some of them will. There's no hard and fast rules with these fish. We've caught them here at all stages of the tide, high tide, low tide, half tide. We've caught them with no generators going, with four generators going, we've caught them with two generators going. The water temperature I'm sure has something to do with it. Usually around 55 degrees they start trapping really well. That usually runs around Mother's Day, the 10th or 15th of May. Anybody that says they've got these things all figured out is not fully aware of the situation, I guess. I've been doing it for 33 years and the only two things I know for a fact about these fish are you can't make them run if they don't want to and you can't stop them if they do. Other than that it's anybody's guess. Some of the fishermen when we started to get thunderstorms, there'd be lightening everywhere and they started to leave and I said, where are you going? Well, the fish won't run. It's lightening out. They won't go in there. And we've caught some of our biggest days when it's lightening out and thundering. So that doesn't have an adverse effect. And then again, you've got to realize, the number of fish you're dealing with, some of them might be spooked by it, some of them might not. They're like you and me; most of them probably have the same tendencies, but they're not all the same. These fish that are coming in now seem to be bigger fish. And that's what we've noticed over the years.

The first of the run is usually bigger fish. And over the last five or six years we've noticed that the fish themselves are getting bigger. The big fish are bigger than they used to be. So something is going on. It might be just that the run is building up to a point where we're getting successful repeat spawners. That's what they are probably.

Julia: So do you take scale samples here and send them to the DMR?

Rick: Yes we do.

Julia: Have they said anything about the age -

Rick: Yeah. We got a catalog from them a couple of years ago. Each individual alewife run was listed in there about what they gleaned from the scale samples. It was quite interesting, really. They did show some that were up to seven years old. And I believe somebody had one that was eight, but that's about the limit. They're actually working on genetics now. In time they explained to us that they'll be able to tell what brook it came from if they catch it out at sea as bycatch. That will be interesting.

Julia: Yeah, then you could find out where yours are going when they're out there.

Rick: From what few studies have been done on them they figure they kind of go to the Gulf of Maine and they kind of scatter out. They don't stay schooled up in bunches, they kind of spread around. The Union River bunch might be in this area, maybe hundreds of square miles. The ones from the St. Croix River might be further up in the Gulf of Maine but maybe cover a big area. But they don't really intermingle a lot. When they get ready to spawn they break off in their groups and they try to get back to where they came from. From what we've heard they go by the sense of smell. When they're born the smell of the water that they're born in is permanently imprinted in their brain and that's what they carry with them out to sea.

Julia: Salmon are supposed to be like that too.

Rick: Yes. Yes.

Julia: So you said that you're seeing bigger fish now. But are you also seeing the small ones?

Rick: Yes. Towards the end of the run typically is smaller fish. Those might be the three year fish.

Julia: And that's like in June?

Rick: Yeah. Usually by the middle of June they're done. And it depends on - besides the harvest, this is the end of the road for them. If we don't trap them out they might stay in here for three or four days and drop back to salt water and hover in brackish water for a while and then maybe three or four days later they make another run. So basically we

stay here until we fish them out. There's still some stragglers when they run the trap for salmon, but for all intents and purposes they're done by the second week of June.

Julia: So later in the summer they catch salmon here? Do they bring them around the dam too?

Rick: This whole fish trap setup was built basically for Atlantic salmon. It was built under the Anadromous Fish Act. Money was appropriated for anadromous fish. Salmon's anadromous. That's what they were focused on. They had no interest in alewives or anything else.

Julia: Oh, no.

Rick: But as time went on it proved to be more of an alewife river than it was a salmon river. So they finally recognized that and have gone from there.

Julia: So when did you say that this whole setup, the way that it is right now, how long has that been in place for?

Rick: 1973 I believe it was.

Julia: Okay. I think I remember you told me that you used to work for other dam companies, like in Veazie.

Rick: I worked here for 26 years for Bangor Hydro. And then they sold out the dams, the generating apparatus to Pennsylvania Power and Light. Before they did that they decided to automate this plant so my job was eliminated here. I had the option to go to another plant and I went to Veazie. That job was a roving operator which did the same job as this except you went from one plant to the next to the next and checked out equipment, took readings, did what you had to do, go to the next plant. It was a roving job. We managed this plant by way of computer. So it was automated but it you still observed *(inaudible few words.)*

Julia: So was there any overlap between when you worked for the dam operators and the fish work? Or was that after you retired?

Rick: No I took my vacations to do this.

Julia: Oh, okay.

Rick: I had plenty of vacation. I took it to do the alewives. So I wasn't working for the power company. Technically I wasn't working when I did this. Me, having been an employee of the company, it didn't have anything to do with me doing the alewives. That's a whole different set of circumstances, just chance circumstances. But working for the power company had nothing to do with it.

Julia: So how did you decide to get involved with the alewives?

Rick: Well, Walter Bissett *(spelling?)* was a warden supervisor in this area and he watched this river and realized there was a potential for an alewife run here. And he approached the city with a plan and they voted on it and they decided to request the rights to harvest from Marine Resources, which they did. And Walter had a friend who was retiring about the same time that he was. He wanted his friend to help him. Well his friend was so busy with other things that he said, no, I can't do it. But he said, I know a guy that might be interested in it and as a matter of fact he works right there. And I was also dating his daughter. And that's how that came about. So Walter approached me and he said, would you be interested in doing it? I said, yes I would. And that's how it started.

Julia: Cool. Did you know a lot about the alewives then?

Rick: Not really. There was a small run in here before the city started doing it. Basically because of efforts of certain agencies to eliminate the fish from the river, what small amount was in here, they figured we'll take them up to Graham Lake and we'll dump them. Everything will eat them up. That will be the end of that. Then the salmon can come back. Well they did that for about three years because the run is a four year cycle. You have to do it for four years to eliminate it. After the fourth year they had the biggest mess of alewives in here that they ever saw. Then they realized what they'd done. They'll deny it. But I worked here. I saw them do it. I know. Then they stopped doing it for four years. So when we started doing it in '81 we ended up on the tail end of the last amount that they dumped up there. So for two or three years we were scraping really hard to get enough to put in the lake to keep the run going. The biggest run we had up until two years ago was in 1985. And that was the results of the first stocking that we did in '81.

Julia: So you had to restart it?

Rick: Kind of, yes. But it did. It went right from nothing in '84 to a really good run in '85 and '86.

Julia: So some of these questions are about changes that you've noticed. You're kind of already hinting at it, like back in '85 was a really good run. Did it slow down for a while and then come back again, or...?

Rick: We've tracked this, I've tracked it for 33 years. In the beginning when Walter and I were doing it we were putting a hundred bushels a year up and that was giving us a pretty good run. And then it got to the point where they started going downhill. And we started stepping up the stocking a little bit, but it never seemed to be enough. So when I took over I was approached to increase the stocking. Up until this point it was voluntary. We decided how many fish went up there. We made an agreement. We said we would increase the stocking because we would benefit from it. We went from 100, 150 that we were originally putting in. I think we went to five or six hundred in one year. Then we

went to 750 and we stayed at 750 for four or five years. Then we went up to 900 for a year or two. Now we're at 1100. You know if you put 750 in, you know four years from now you're going to get basically the results of that stocking. And basically there's no rhyme or reason to it. Some years we've got ten to one return. We've had other years where we've had two to one return based on the same stocking. So there's a lot of other factors that figure into this. Bycatch out at sea, predation, maybe weather conditions when they're releasing spawn. Whether the lake was high or low. The lake might have been high when they spawned and then dropped quickly and left the eggs exposed. There's just so many variables that you can't say you put in 20 bushels, this is what you're going to get back. No. That doesn't work. And I've argued that with people too.

Julia: So it's a combination of things that are happening at sea and things that are happening here?

Rick: All kinds of different factors affect this run. It really does.

Julia: Do you have any theories about which of those factors have the biggest impact or pose the biggest threat?

Rick: Yeah. I think the biggest one that has affected us and all the other runs in the state of Maine was the fact that back in the '80s they shut off the St. Croix River for alewife passage. Before they shut it off, the numbers that they were giving off for the St. Croix River were equal to the total of the rest of the catch in the state of Maine. So, it's like inviting your family over for Thanksgiving dinner. You've got ten people. You've got one twelve pound turkey. When they get done eating, there's not much left. If you put two turkeys on the table there's going to be leftovers for everybody. And that's exactly what happened. The predation has never changed, except maybe got worse. So if you take away half of the food going out into the Gulf of Maine, what's left isn't much. And that's what's coming back into our brooks. And now they've opened up the St. Croix and my theory is - and this is *my* theory, I could be wrong - in a few years we're going to see all the runs in the state of Maine pick up. Just because there's a lot more fish going out in the Gulf of Maine. And I think all your other runs are being managed much better than they were so the individual runs are putting more out. In the grand scheme of things I think it's going to help. I really do.

Julia: That was just a few years ago that the St. Croix got re-opened, right?

Rick: It was last year. I think maybe the year before on a partial basis they opened some of it up.

Julia: You answered a lot of my questions without me asking them, which is good!

Rick: Well I ramble a lot.

Julia: That's good. That's how you get the most detail. Can you describe the role that this fishery, or this run of alewives, the role that it plays in your local community here?

Rick: Well, in the past we've had such a run of fish that we've built up quite a clientele of fishermen. They'll come from quite a long ways to get fish. One of the reasons why they come here is because we have a set system. It doesn't change. You get a number that determines where you are in line. We don't play favorites with anybody. What your number is is what your number is and that's it. They respect that. They know that when they come here there's a pretty good chance they're going to get bait. Now sometimes in years past when there was more fishermen than there was fish, we had some that would actually come to town from some of the outer islands and they weren't going to go home at night if they didn't get fish. We had one guy stay in a motel for three nights. We've had a lot of people back before we refined our system that were waiting around. The people that were in this town that normally wouldn't be in this town for anything else were here and they had their wives with them. They'd go shopping. They'd eat out. I think in a round about way, and I don't have any figures and I know just from the amount of people that we sold to and the amount of time that they used to hang around, they brought actually a lot of business to the town. Of course the town gets a percentage of this catch so between the two it hasn't hurt the economy around here a bit. It really hasn't. We have people coming from Vinalhaven, Isle au Haut, Swans Island. Even down from Beals and Jonesport, which is a pretty good drive, because they're reasonably sure that they're going to get bait. It's worked.

Julia: So for them there are other rivers that are closer to them but this one is more dependable?

Rick: That's right. They know that when their turn comes they're going to get their bait. Nobody's going to be jumping in line in front of them. Nobody's friend is going to come up and get the bait instead of them. We've found, dealing with these guys that they get very excited when they spend the night to be in line and somebody jumps in line in front of them and drives away with all the bait.

Julia: Especially if they're coming from an island!

Rick: And they get nothing. After that they don't respect the operator. They wouldn't get fish from him if he gave it to them. And they've told me that. Said, I wouldn't go down there and get bait from him if he gave it to me! And I've had a number of them tell me that. So we've found that just by playing fair with them, being up front with them and just telling them the way it is. We tell them, look, if you don't get fish, it's not our fault. We can't make fish. If we've got them and it's your turn, you'll get them. They have respected that. We're dealing with a bunch of people that as a rule are a pretty diversified bunch of people. They're really good people. We've had good luck with them and we've had no problems with them. In 33 years you'd expect to have something go wrong. Knock on wood! So far they've been good people.

Julia: So how do you assign the numbers?

Rick: In the past we would do our stocking and when we saw that we were getting our

numbers up there and we were going to be able to sell we would make up these little cards like business cards and they'd have a number on it, one through - we used to put out 150 cards, one through 150. And we'd say we're going to hand out the numbers at such and such a time. In the first of it people would show up maybe noontime if we were going to hand them out at 5 o'clock to be first in line. If they get here first they naturally assumed that they were here longer they should be number one. So they kind of kept track of where they were in line until we handed out the numbers. Well then it got to the point where they were showing up in the morning. And then the next year it might be the day before. And last year it was three days. They were camping out at this place where we were going to hand the numbers out to be first in line. So this year we asked them how they'd like to do it because we can't keep doing it this way. We're getting 100 people in one spot for three days. It's getting a little dicey. So we told them this year, we said, look, when we get our stocking done we'll put the word out to everybody. We've got all your phone numbers, we'll call you. All our regular customers, we'll let you know, give you a couple of days notice. But the numbers are going to be handed out at a certain place and it's going to be between 7 o'clock in the morning and 4 o'clock in the afternoon. You come in and you draw your number out of a hat. So there's no reason to come three days early because it's not going to be to anybody's advantage. The last guy there at the end of the day might get number one. They all thought that was fair so we're going to try it this year. Hopefully it will work out. One of the big problems we used to have was congestion down here. You have a small area and you can't have 75 cars down here lined up the road and blocking access. You can't have that. We understand the power company's concerns about doing that. So we've kind of got away from that. We're going to try it this way and see if that cures that problem. Plus there's no need for them to be here. If you've got number 100 and we're starting fishing today, there's no reason to be here. They're not going to get bait today. They're not going to get it tomorrow of the next day either. We have a phone here. We have everybody's phone number, what number they have. We tell maybe the first ten numbers, bring your stuff up, leave it, we'll fill it and we'll call you. So we don't have all the congestion, all the people standing around. When they come up their bait is ready. They can take it and go. We've eliminated the congestion part of it. Every year we try something different. If we have a problem we try to do something to eliminate it. This is the biggest one that we've tried is drawing them out of a hat.

Julia: I think it makes sense because it's definitely fair.

Rick: You know, surprisingly, most of the people were in favor of it. Everybody wants number one, but they're willing to take a chance. We hand one number out per person. You can't have one guy come in and get a number, take off downtown, come back and get another one. We tell them, we don't care who you are. If you want a number, come and get it. We don't care if you bring your kids, your wife, your grandmother, your steernman. They want a number, we'll give it to them but we'll only give them one. So even though their kids aren't fishing they've still got these numbers that might be better than the one they've got. These guys get together, they swap, trade numbers. That's all between them. We don't want to know about it. We don't care. When we call a number, that's the number we're going to fill. They actually get quite a kick out of that because

they try to figure out how many numbers we're going to go through today and they might not want bait today but they might have a number that's coming up this afternoon. What do I do? If I don't want bait and they go by my number, then that's it, the number's no good. So they'll take their number and they'll trade up with somebody that does want bait. It works. Everybody's happy. It seems to.

Julia: They usually want their bait to be really fresh, right? So it's not like they'll get it and hang on to it for a while?

Rick: It used to be mostly that. They still want it fresh. They put it on fresh. But now a lot of these guys are getting freezers and they're freezing the bait so they'll have it at the end of the summer of later in the fall or whatever. It doesn't work so good and bait is sometimes in short supply at some times of the year that they're finding that it's worthwhile to freeze it, even paying the cost of running the freezer, to have it available. I'm going to say probably 80 percent of it probably is used fresh. These guys, we limit them to 30 bushels. That way they get more than enough bait for their needs for a day or two. Some of these guys only use 5 to 10 bushels. They'll still get the 30 and they'll get two or three other guys in with them, which cuts down on the congestion in here. So that part of it's worked out real well. But I'd say most of it is used fresh.

Julia: For my masters thesis research I did interviews with halibut fishermen and most of them said that alewives were the best bait and they liked it really fresh.

Rick: Early in the season, like right now, a lot of your fishermen aren't set out yet. They haven't set their traps out so they'll do halibut fishing. In the beginning probably some of our bait goes for halibut. We've seen some pretty big fish caught with it.

Julia: Do they send you pictures of what they caught with your bait?

Rick: A lot of times they'll come up here trying to sell it to a restaurant or a hotel or a motel or Maine Shellfish. We've seen some that have filled a pickup bed.

Julia: So I've heard that there are two types of river herring, one is alewives and one is bluebacks, and that they are really difficult to tell apart. Do you ever try to distinguish between alewives and bluebacks?

Rick: No. It hasn't been an issue up until the last few years. They kind of tried to determine that the bluebacks are endangered. And they might very well be but from the research that I have read up on and from what I've been told the blueback are more prevalent in the southern part of the state and as you work north there's less and less blueback herring with the alewives. When you get way down east they probably don't know what one looks like. To look at them, if you're qualified and you deal with it all the time you can look at it and you can tell. But when they're coming out of the trap at 100 miles an hour, they're fish. I guess if you cut them open the meat is darker on a blueback. It's very obvious if you cut them open, which we don't do. But the scale samples that we've sent in, they're just random, we don't bother even looking to see if

we think they're blueback. We give them the scale samples and they tell us.

Julia: They can tell from looking at the scale?

Rick: Yes. Very few of them are blueback. Very few.

Julia: Do you know if they come in at different times?

Rick: I think their theory is they come in later, towards the end of the alewife run. They might be mixed in with the alewives. They certainly would be up here where they're not so prevalent on their own. It's probably a small mixture. Like I say, I think it gets greater as you go south. Up until the last year or two they've never been asking to distinguish between the two. They were considered trash fish like alewives.

Julia: Oh. Times have changed.

Rick: Yes.

Julia: Do any other species get in the trap?

Rick: In years past we've caught sea run trout. We've caught shad. Mind you these are very small amounts. If we got one or two sad a year it would be a miracle. Striper, we've never got in the fishway. And I don't whether it's because it's not in their nature to run in the fishway. We've never had a striper. We've gotten suckers. We've gotten perch. A lot of bass, smallmouth bass. Once or twice we've gotten small salmon, like this. They were too small to be anything that was introduced. They had to be wild. A few years ago I think we had a rainbow trout in there. I figured that came out of one of the other rivers to the south. They had a run of - I can't remember if it was a natural run of those of if they had an aquaculture farm where they were raising them and they escaped. It was one or the other. I can't remember. We've had a little bit of everything in here. But no great amounts, just one every once in a while. And they all go back into the river. We've had many offers to get rid of some of the more popular species. Why don't you take that home and eat it? I said, number one, we're not supposed to. Number two is I don't care for fish anyway so it makes it a lot easier.

Julia: You're not tempted.

Rick: No. Not at all.

Julia: And that's a condition of your harvest plan, your harvest rights -

Rick: Yeah. Every other species that is caught goes right in the river. And actually the power company has a separate truck with a tank on it set up so that if we did get a salmon, in years past, we would notify them and we would transfer it to the tank and they would take it up to Graham Lake or take it up to wherever they wanted it to go, the hatchery or Graham Lake or whatever. But since they stopped stocking the river that

hasn't been an issue.

Julia: They don't stock the river with salmon anymore?

Rick: No.

Julia: Is the hatchery still there?

Rick: The hatchery is still there. They've got a few small programs, schools, classes, experimental raising of a few salmon. They've allowed them to do that and they put them in the river up there but it's very small amounts and I think, truth be known, they've probably got a few back from that, but it's such a small amount that it's more of an experiment than anything.

Julia: Okay. You might have already touched on this a little bit, but have you noticed anything different about the alewife run this year as compared to previous years?

Rick: No. No we haven't. The only thing we have noticed, like I mentioned before, is the fish are bigger. These are very big fish out here. The earlier they start, it seems the bigger the run's going to be. I've noticed that. This was a fairly early start. We're hoping this is going to be a big year. You really don't know for sure until you're all done and you add up the numbers. You just can't figure it. They act the same every year. They do the same things. There's really not much change. Like I say, you like to form an opinion on what makes a difference and then you find out that no, it doesn't. So we've given up trying to figure them out.

Julia: Yup. They just do their thing when they want to do it.

Rick: Yup.

Julia: What do you think Downeast Maine would be like if there were no river fisheries?

Rick: Your fishing out in the ocean, the bottom fish, the halibut fishing, would suffer. I think it already has. I think they've noticed a definite decline in the groundfish when they closed the St. Croix River off. Of course you could blame it on anything. But if you do something today and you notice the results tomorrow and it's pretty obvious from what you did yesterday is the reason why it is that way today. Sometimes you've got to use common sense. You can study till the cows come home and still not know anything. Just because these things are so hard to study unless you follow them around out in the ocean, and they don't. There's a lot of things in Mother Nature that do affect other things. And alewives being probably the bottom of the food chain, it shows. It shows in the fishing out in the ocean.

Julia: So do you think reopening the St. Croix River and the stocking efforts that you're doing here and what's happening on the Penobscot - do you think that could help the groundfish?

Rick: Oh I would bet on it. But because there's so many different things going on at the same time it's hard to point your finger at anything as being responsible for this. You can speculate. You can speculate on pretty good information but it still isn't etched in stone. Sometimes you have to read between the lines a little bit. I do think that the opening of the St. Croix River and the efforts made to preserve these runs and keep them sustainable is going to show up all around.

Julia: Yeah it seems like there's a lot of good things happening for these runs throughout Maine.

Rick: Well just the fact that we have a run shows that we're doing something differently than has been done elsewhere.

Julia: Well, I think those were all my questions. Do you think there's anything else that I should know about? And this is my first interview so if you have any advice for if I should ask different questions or if you think I'm missing anything that I should ask people in the future?

Rick: Well, you hit all the high spots. One thing I will say is the power company historically has been very cooperative as far as equipment and stocking and everything. They've kind of bent over backwards, which you wouldn't really expect from dam owners but that has been the case here.

Julia: So are there multiple different power companies that operate in Maine? Like does this same power company own many other dams?

Rick: They own them all now.

Julia: Oh. Okay.

Rick: I think you'll find that most of the power generating dams in the state are owned by Brookfield Power. They're a very big outfit.

Julia: Well that's good that they realize that this is important. Probably partly because they have to, right?

Rick: Well, I should say power companies in the past - this company hasn't been around long enough so we're still waiting. But previous owners have been very cooperative, they have.

Julia: Cool. That's good.

Rick: These people might prove to be just as cooperative, just we haven't been playing with them long enough. We don't know. We hope they do.

Julia: Well, so what's going to happen next with this is I'm going to do up to 10 interviews total with both alewife and eel fishermen and then we're going to, like I said, make short educational videos and things like that. I'll send you copies of what we make so you can look it over.

Rick: Yeah. That would be great. Sure.

Julia: I don't have a pen on me but there's one in my car. I'll get your mailing address so I can send you stuff. And now that the interview is over is it okay if I share everything that was said on here with my bosses at Sea Grant and NOAA and use any of it for anything?

Rick: Yeah. No problem.

Julia: So I think what's going to happen is I'll pull out snippets of things. But we might decide in the future, my boss at Sea Grant thinks it might be a good idea to put the whole interview somewhere, like in an archive or something. But if we do do that we'll double check with you and you might have to sign something.

Rick: The College of the Atlantic has one that I did last year or two years ago. They said they archived it. So it's there. The thing of it is, up until the last five or ten years there's been very little interest in alewives. They could care less. Now because of what's happening in the other states they're taking more of an interest. Now there's more attention being given. The fish don't act any different. Just the people who want to know about them, I guess.

Julia: Do you think that's going to be a good thing that people are paying attention to them more?

Rick: We'll find out. It can be. Or it can't be depending on how they want to use it. It's like anything else, if there's an agenda to be had and what I say doesn't fit in the agenda probably a lot of it will be deleted.