

Cape Cod River Herring Warden Oral History Project

TRANSCRIPT

Series: Cape Cod River Herring Warden Oral History Project

Interviewees: Mr. Henry Lind, Retired, Town of Eastham, Natural Resources Department Director

Interviewer: Abigail Franklin Archer, Marine Resource Specialist, Barnstable County Cape Cod Cooperative Extension Marine Program

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Abigail: So, when did you begin working for Town of Eastham?

Henry: Well, my first introduction at working for Eastham was 1971. And it was with respect to the shellfishery. And I had decided to do a summer, or rather a spring semester project for a geology course that I was taking undergraduate, and decided I wanted to look at saltmarshes. And the folks at Town Hall sent me to the then shellfish constable, a guy named Phil Schwind. We sat in Phil's living room for 5 hours and he explained to me all the things that had to be solved in the Town of Eastham, and gave his blessing that I could study the geology of the saltmarsh. And in exchange I said I could solve all his problems for you if you'd hire me for the summer. And he reluctantly agreed after several months of thinking about it. So I started working that summer, the summer of (19)71. Didn't have a lot to do with the herring runs at that time, we were mostly working on oysters. However, In the Fall of (19)72 he sent me a note and he said we need to do some work on the herring runs, and would you have some time in October? And I said, "Sure". At the time I had fallen in love with a young lady who worked for the Park Service, and she was in Eastham, so I said that's a good reason for me to come.

Abigail: That sounds good!

Henry: We started working on some rough projects to try and regulate the water flow in the run, which was based on some stuff that a fellow from University of Mass(achusetts) at Dartmouth, it wasn't named that college at the time, had done, with Phil, roughly estimating where gates should be located in order to provide holding pools.

Abigail: Cool!

Henry: What they did was run a piece of clothesline across the run and a piece of plastic draped over it, and experimentally just adjusted the height of the clothesline, and watched

what happened as the run was coming. And this was in the Fall so that they had pretty good idea of what good water flow would be.

Abigail: That sounds like so much fun. I wish I could have participated.

Henry: It was fun! What we ended up doing was taking those estimates, and washing and driving in matched 2 by 6 planks. In retrospect it was probably not the most ecologically sensitive thing to do because we painted them with stuff called Cupenol, before we put them in the water, which was pure copper. The idea was that they would last forever. And of course we had no idea what we were doing. But, and as a result of that 2-3 days working on that project I ended up with the worst case of poison ivy that I have ever...no, the second worst case of poison ivy I have ever encountered. So it started in 1971.

Abigail: I walked up the stream with Mike O'Connor and Brad Chase, I guess it was 2 springs ago, and yeah, we were walking, it was Fall, we were walking straight up the middle. But yeah, both sides were poison ivy. It was everywhere. So, when did river herring management become officially part of your duties? Was it officially part of your duties as Natural Resources Director?

Henry: It was always part of the shellfish constable's duties. The way the story evolved was I graduated from my undergraduate at Boston College. And that experience helped me decide to go into Marine Biology. So I did a graduate program at the University of Delaware, and continued working summers for Phil. My thesis work was comparing spawning cycles of soft shell clams between Delaware Bay and Nauset Marsh, which served several purposes. When I retired, yah, retired, graduated from University of Delaware, that following summer, Phil decided it was time to retire, and recommended me for the position of shellfish constable. And at the same time the town had initiated the position of a Conservation Agent, which was when the Wetlands Protection Act had first been passed. And so I took on both of those responsibilities, and part of the shellfish piece was the herring run management. The following year we combined the two positions into the Natural Resources Department and then it became part of that Department and remains so to that day.

Abigail: So Phil Schwind managed the river herring before you. Did he leave any records? Was there any formal training in managing the herring run?

Henry: Formal training? <laugh>

Abigail: Or did you figure out things as you went along?

Henry: Not exactly. Phil was an extremely creative and inventive individual. Had he continued his formal education he probably would have been a Nobel Laureate type scientist, but decided that practical was much more important to him. And so as a practical scientist he just observed. And he would have daily counts during the time when the estimate was, this was

when they would be running, calculated roughly based on tidal flow when the greatest number of herring would be showing up.

Abigail: Neat!

And he kept logs, as most successful commercial fisherman do. The logs end up being the record which paves the way for the future. He handed all those off to me. There are actually two runs in Eastham, and the major run is the one that goes into Bridge Pond and into Great Pond and it's a series of 2 or 3 other smaller ponds, all kettle ponds, all groundwater driven. The second one, oddly enough is in Herring Pond and it is much closer to the saltmarsh. Both of them were hand dug, evidently. The one to Herring Pond was essentially obliterated in the (19)60s, when the Commonwealth decided that Herring Pond would make a nice trout pond and introduced rotenone to take care of the species that would compete with the trout and the herring disappeared entirely. So, Phil was in the process of trying to restore that run when I became the Natural Resources Officer. And we continued that effort for a great number of years, and have had some marginal success with it, especially since the rotenone has finally disappeared. One of the things that we did do was to reconstruct that run and install far more sophisticated gates with the help of the Division (Massachusetts Division of Marine Fisheries) and Buzzy DeCarlo allowed us to use their forms and we poured concrete one winter and set up the forms. It's been working pretty successfully since then. We then relayed adult herring on their way into the Bridge Pond and brought them over to Herring Pond, and released them and the juveniles imprinted on that pond and that began the process.

Abigail: And so what year was that?

Henry: That would have been early (19)80s. 1981 through (19)85. We rebuilt the run in (19)84. That run was always closed to the taking of herring simply because there weren't enough to warrant a harvest. In the late 80s we had a pond survey evaluation for both Great Pond and Herring Pond. And the estimate, the standing crop, in the pond at that time was 20,000 adults.

Abigail: So you did the survey?

Henry: No, this was a contract with a group out in the Springfield area, I can't remember the name right now.

Abigail: And so that was initiated by Town of Eastham or was that something the state Division of Marine Fisheries did?

Henry: No, no, it was grant funded through the Clean Lakes program, and it was an estimate to get a baseline and establish where the invasive plants and all of the different things that were going on. It was actually two separate grants. One was for analysis and the second one was for

remediation. We took the populations of the herring as part of that. That gave us a little bit of information.

Abigail: At the first American Fisheries Society meeting I went to they had a mentoring session for students. I was paired up with a fisheries manager in Kansas, inland obviously. I couldn't believe...He said, "Well tell me a little bit about what you do", and so he was telling me about his duties. He said, yeah we monitor the lakes and you know we figure out the relation of predator fish to fish species that people want to catch. And you know, if it's out of balance then we just kill it out and we start over again. Wait what? This was 10 years ago now. We just put rotenone, we kill everything and we remove everything then we just restock it. I couldn't even come up with a follow up question. I was just shocked. That was the first time I had ever encountered that.

Henry: Evidently that, or a couple sticks of dynamite.

Abigail: Yeah. That was just practice.

Henry: We've come a long way.

Abigail: Yeah we have.

Henry: One of the folks that worked with us lived on Herring Pond, and he told me that 2 years after that was done, he brought some pond water up and put it in his aquarium and it killed everything within 20 minutes. The half-life is pretty serious.

Henry: To further answer your question. Before Phil managed it, it would have been the previous shellfish constables. And I would have to go back in the records to find out who they were. We did publish a paper, together with Clyde McKenzie, on the history of the shellfish constables in Massachusetts. It's on the new Mass Shellfish Officers website.

Abigail: Yes I just checked that out.

Henry: We don't have names of specific individuals, but it sort of is a chronology of how did the shellfish constable come to be in Massachusetts, because it's pretty unusual. In some towns their duties are separate and in others its combined.

Abigail: Well it's fun going through the old Town Reports, we're finding like around the 1930s, we're looking from 1900 going forward, 1930s is when you first start to see an official report from the shellfish constable or the shellfish warden. Before that, clam wardens in Brewster were listed, and there are a number of people listed. But the 1930s we started getting reports on propagation activities.

Henry: That's about the time that they passed the statutes. Prior to that it was a Fish Warden. The fish warden would be responsible for offshore fisheries as well as inshore, and shellfish.

Abigail: Yeah, we did see some references to fish warden. We were trying to figure out, what exactly does that entail.

Henry: I do have specifics on that. If they're not in the papers, give me a shout.

Abigail: Do you have Phil Schwind's records?

Henry: I do, someplace. <laugh>

Abigail: Those would be great to look through at some point. When it gets warmer and it's easier to get to your basement.

Henry: Absolutely. Yes.

Abigail: In Eastham were there any town committees involved with the management of herring?

Henry: No

Abigail: Because Brewster has an Alewife Committee.

Henry: Correct. In my tenure I worked with the Conservation Commission and technically they had some interaction with us about management and certainly any Wetland Protection Act activities that we had. We had the Open Space Committee. We had a variety of other Committees. It was decided that we did not need a Shellfish Advisory or Herring, Alewife Committee. In light of what has happened to the Department since I retired, I think that was probably not a good decision because there's nobody left to champion and the Department (of Natural Resources) basically been dissolved. So, in hindsight that probably would have been a good thing.

Abigail: Diane and I talk about that all the time. Anytime I go down to Hemenway Landing, I still see the dome. It's like this ghost.

Henry: We're hoping it will come around again. That's the way it is.

Abigail: So, during your tenure was harvest of river herring allowed?

Henry: Yes. It was tied to the shellfish permit. So you had to have a shellfishing permit in order to harvest herring. It didn't matter whether it was a commercial or a family permit, but the limit for harvest was the same, regardless whether it was commercial or what kind of permit you had. Basically that was an attempt to track what was going on so we could see how many were being harvested. And the harvest area was limited to the very first section as it came across the beach, and then beyond the first bridge was always closed.

Abigail: So would people stand on like, the road culvert area and then catch them?

Henry: Yes. And we would do, because it was a very active littoral drift on the beach we had lots and lots of problems with having that get closed off, and putting a front end loader in, and losing the front end loader in the process.

Abigail: Oh no

Henry: Yeah. There was a lot of excitement down there from time to time. And then typically once a year we would hire a drag line to excavate all of the miscellaneous debris and stuff that had been pushed up during the winter time in order to provide a deep holding pool. And that was the harvest area. Having a deep pool meant that the fish had a little better chance of getting away from somebody with a dip net and it also gave them some, a place to rest after having come across the flats.

Abigail: So is this on the seaward side of the road?

Henry: Of the bridge.

Abigail: Of the bridge, OK

Henry: Cole Rd. And then so then harvest beyond that point was prohibited. Period. It was typically a bushel per week was the harvest limit, which is an enormous number of herring, but at the time that was standard practice. Then we limited it to a couple of days per week for harvest up until the moratorium.

Abigail: And those were town regulations?

Henry: Those were town regulations under the shellfish regulations. Under Chapter 130.

Abigail: So how often would you have to dig out the channel on the seaward side?

Henry: Typically 2 or 3 times during the Spring migration.

Abigail: So every year, 2 or 3 times?

Henry: Oh absolutely, yeah. And then typically in the Fall at least once, perhaps twice. For a number of years there was a neighbor who lived immediately adjacent to that spot. And he took it upon himself to manually clean out all of the debris on a daily basis.

Abigail: Whoa

Henry: Yeah. And he would stockpile it in the parking lot and the DPW would come by and pick it up. Mostly seaweeds and things like pieces of snow fence and stairs and whatnot that had pushed down the beach. But for the removal of the sand it was definitely, a machine had to do that.

Abigail: So as time went on and it got closer to the moratorium, did Eastham take any steps to limit the harvest?

Henry: Yes we reduced it to, I think a 5 gallon pail at one point, and one or two days a week for harvest. The major part of the run, in that run, occurred over 3 days, perhaps. And it was largely driven by the Spring tides and the water temperature. And we generally considered the 19th of April to be the magic turning point, which was a mixed blessing because it would be a little bit warmer and the fish would be active. Typically it would also be a school vacation week and there would be lots of people around, and lots of interest, and lots of complaints, and lots of people falling in and all those things that go with that.

Abigail: I didn't go to the Eastham run, but I was one of those kids. I grew up in Braintree. Our two runs, we'd visit the Back river in Weymouth, where my Dad grew up. And yeah for April vacation we'd come down and we'd check out Stony Brook.

Henry: Yeah, sure, absolutely.

Abigail: It was great. So, we talked about the specific place...was there any enforcement activity down there as people were getting herring?

Henry: Loads of enforcement activity. <laugh>

Abigail: <laugh> That is not the case I have found for all towns.

Henry: We had two parts to that. One was obviously, being, having somebody there at the time of high tide because it was strictly a 4 hour, or thereabouts migration as soon as the water came in, and the fish would start up. However they also typically would run at night, so that meant that we had to have somebody down there at night...

Abigail: Whoa

Henry: Because fishing was prohibited at night, but that didn't mean that people wouldn't be down there at night. The second piece of that would be people kind of forget they couldn't take herring upstream from that first bridge, and so we would have periodic night patrols. Again weather dependent, temperature dependent, and tide dependent. So it was kind of a scheduling nightmare. And we also didn't have any summer seasonal staff on that early so it was up to those of us who were on year-round.

Abigail: So you didn't hire any, you didn't bring on any extra people during that time?

Henry: No, no

Abigail: It was just the existing capacity.

Henry: The budget was always for some reason strictly managed and we didn't see a need to have extra people on for that. We did have good cooperation with our police department. If they had reason to believe that something was going on they would call me...get the truck out at midnight.

Abigail: So, let's see, the question is, "Did the town receive any income from the harvest of river herring" So that would be the shellfish permits?

Henry: Yeah it would be part of the shellfish permit and that would be really, really difficult to track that, but there were very few people that would buy the permit just for the herring. But occasionally there would be somebody. That became probably more common as herring were more frequently being used as bait for stripers. Especially as the adults were running down the run, that was when stripers were showing up and there would be a few fishermen that would be interested in getting a harvest for that.

Abigail: So during your time, were people were always interested in getting them for bait for striped bass? Or was that something that started...

Henry: It seemed to me to increase between the mid (19)80's and the (19)90s. But it may well have been common before that, or they might have been so easy to get them at other places that people didn't bother coming to our little run.

Abigail: And then, so some of the other towns would, in the 1930s and 1940s, would auction off the rights to the fishery to one person? Do you know if Eastham ever did that?

Henry: To the best of my knowledge that was never done. But just as a follow up to that, good point because there was an original reconstruction of the run at Herring Pond that I was told was accomplished by a fisherman's group in town and they used wooden planking and had poured some concrete for the gates, probably in the (19)60s. So, obviously it was something that they considered important.

Abigail: Of interest then, yeah.

Abigail: So were there ever any controversies over regulating the harvest or managing the run? Did you get...

Henry: Yes. In particular, phone calls in the middle of the night that selectmen were running up and down the pond, at the run, catching herring. And when we had to reduce the harvest there was a lot of screaming, because especially where we picked certain days, if it didn't happen to be, the tide occurred on those days, there wouldn't be any fish at all. So there was discussion about that. Generally the Selectmen always supported my recommendations and they were grateful for whatever was available. Again, with the notion that it was a tiny run, but the whole is greater than the sum of the parts kind of thing. And if the runs failed elsewhere, at least we'd have one source of moderately successful fish.

Abigail: So, I guess we covered this a little bit, how, in estimate how much time do you think you spent in a year on maintaining the passage routes and infrastructure?

Henry: Spring was huge. First of, well, 15th of February, first of March was generally, probably at least ten hours a week, with one or two people, doing the maintenance, fixing up what had failed. We put gabions with stone along the shore of the run to keep the erosion from filling it in. Clearing the brush, trying to get the poison ivy out of the way. One of the mistakes that we made in that initial construction of the wooden gates was thinking that we were stronger than the water, and what happened was the water just did an end run around the edges of all of the gates, scoured out huge amounts of the banking, of course that filled that run in. Until we decided to reconvene, reconfigure rather, and put a V shape construction in there, so that as the water level went up there was greater area for it to escape. It still required sand bags and gabions, lots of different things. Every year, in the spring months. By the first of April typically it would be simply enforcement and that would be a couple of hours every day, and that would be tidal dependent. So if that was an early morning tide it would be both morning and night and if it was the middle of the day then it was just once. That would slow down after the adults had departed, typically the first of June, to the 15th of June, something like that. However, one of the issues with the tidal nature of the discharge was that if we let all of the adults out at the same time, many of them would not survive, especially in June when we would get very high air temperatures. If they stayed in that deep pool at the end of the run, there would be oxygen depletion and a very, very, messy pile of dead fish. One of the early programs that we had in town was with CEDA, which was a federal program to help people get people back into the employment side, was literally shoveling out hundreds of bushels of deceased herring.

Abigail: Oh my God.

Henry: From a 90 degree day, that...

Abigail: Oh!

Henry: It was awful. But we did it. As a matter of fact, I think one of the fellows that worked with me on that project is now still a Selectman in Brewster. I just happened to think of that. I have to remember to check that.

Abigail: So what would be done with the herring? Would people use them for fertilizer or anything?

Henry: At that point no they just went to the landfill. And then, beyond that it was pretty quiet until September, and then when the juveniles were starting to run it would be the same thing. We need to adjust the gates at Bridge Pond. When they started schooling at the gate, wait for an hour or so before high tide and pull the gate, let the run down.

Abigail: Wow!

Henry: Then close it off again. Essentially managing their travel. We got a fairly good percentage of them out safely that way.

Abigail: And so would you just check the pond periodically in the Fall, to see if they were schooling up?

Henry: Daily. So that was one of the patrol duties was to check it, in both ponds as a matter of fact. Then pull the gates, and then go back a few hours later and drop them back in.

Abigail: Did you ever see any elvers?

Henry: Yeah. Oh yeah. They're tricky to spot.

Abigail: Yeah right.

Henry: Very tempting, we did have one incident where there was a fyke installed in the run.

Abigail: Yeah

Henry: And the state EPOs (Environmental Police Officers) found that one out and took care of it.

Abigail: When was that, about?

Henry: Mid (19)90's, early (19)90s? So it is hard to put actually a number of hours per year, but in the hundreds, easily. A little here a little there, because with the Department doing all the different things that it did. It wasn't easy to get it in there.

Abigail: It's interesting just to hear the cycle of it. So what year did you retire from Eastham?

Henry: (20)09

Abigail: So you were still on board. So when the moratorium happened in 2006, how did your herring duties change?

Henry: Well it became entirely, you can't do this and explain why you can't do this, and then listen to the debate. And try and hope that people out there fishing didn't have a herring on their hook. But in general most of the fishing community was supportive of it, because they understood that the resurgence of the striped bass from the total closure of striped bass fishing was a success, and that perhaps this would. But the next debate was always the offshore fishery and its impact, and we're not doing anything and all of the sorts of things that go with that.

Abigail: Did anyone talk about maybe an increase in striped bass might have contributed to a decline in herring?

Henry: No

Abigail: Did anyone make any possible connections?

Henry: No

Abigail: So what were your thoughts on the moratorium at the time?

Henry: Well we had seen declining numbers every year, and so we were supportive of it. We went to the Selectmen and explained what was happening, and they agreed to modify our regulations to match the State regulations. We did have one incident where, it wasn't (20)06, it was probably (20)07. One of the commercial charter fisherman from another town decided that the spot right at Bridge Pond was ideal for harvesting. And we saw some evidence in the morning patrols that somebody had been helping themselves. And we worked with the police department and acquired a video camera from the State Police, and tucked it in the woods and set it up with a motion detector and did early morning patrols, and got the individual's identification from his pick-up truck. And went to court with the video tape and were successful in prosecuting. Pretty much stopped that. But again, they were so highly valued early on, they weren't about to make the change. That particular instance was the worst case of poison ivy that I ever got.

Abigail: Oh God no! Both due to the herring!

Henry: Trying to put that camera in so that somebody wouldn't see it, but still be able to get a good image. It worked.

Abigail: Good work! So what are your thoughts on the moratorium now?

Henry: Well, again, there are so many moving parts to it. In general I think it's still a good thing that it's closed to harvest. And then as we work through the statistics and the fisheries numbers, maybe that can change.

Abigail: What kind of data would you have to see in order to be comfortable opening up the run again in Eastham?

Henry: Consistent migration numbers in Eastham, coupled with consistent migration numbers in all the other runs, and then survey data out in the deep water where they are spending most of their time. Those are all shaky numbers. Survey data is never, everybody's got an opinion about whether it's done correctly or not. It's like any other scientific investigation. But I would rather depend on that then, "Yeah it will be fine".

Abigail: Yeah, it's better than nothing.

Henry: I remember being at a New England Fisheries Management Council meeting, in Boston, in 1976, the first year I was working, talking about codfish. The debate was should we limit the harvest. And there was a board of reviewers, there were people from the fishing industry, captains, wholesalers, marketers, restaurateurs, scientists, and the regulators, and a couple

of politicians. And all of the folks in the industry said there's nothing wrong with the cod fishery, we're doing great, we're doing fine. It's just we have good years and bad years, but there's lots of money to be made here, we've got the mortgage and the shoes for the children. The scientists stood up and said the numbers don't support this kind of harvest for very long. We are in big trouble with the different year classes, and it's going to have a real problem. The politicians stood up and they counted noses about how many people are going to vote the next time they said the scientists don't know what they're talking about. And there was no change made to the regulations. And that one meeting has stuck with me for all these years. And here we are. Guess what? They were right!

Abigail: I still think, (19)76. I worked in DC for a couple years, at the National Marine Fisheries Service, Office of Sustainable Fisheries, Domestic Division. Everyone carried around their little blue copy of the Magnuson Stevens Act wherever they went. It was a great experience. But I realized federal fisheries management is not that old. Magnuson Stevens Act was 1976! And yeah, obviously there were activities before that. The view, of how far back they looked at how the fisheries populations were doing. The view was just so short. And here we are.

Abigail: What aspect of river herring management took up most of your time would you say?

Henry: I would say, probably be about 50/50 between enforcement and maintenance, and then planning for upcoming projects as well. With the Natural Resources folks we put in a couple of applications for rebuilding the pipe under the road, and doing all of that kind of work. We did a fair amount of temperature monitoring, and putting in the probes and reading them and all of that sort of thing.

Abigail: What year did that start?

Henry: That would have been in the (19)80s. Trying to come up with some sort of a prediction method for when, what's the trigger temperature for actually getting the first fish in. It was largely unsuccessful because we had a lot of vandalism. I couldn't figure out why somebody would want to steal a temperature probe that's underwater. I spent a fair number of hours, at home, nights and weekends, on the work bench, trying to build an optical counter to put in one of the runs so that we could get real hard numbers. This was in the late (19)70s. Came up with a bunch of different designs but none of them were really all that effective. And a neighbor who graciously offered us the use of his cellar so we could get, and this is very early days of computing technology and data logging, we could have power and shelter for the instruments and that sort of thing. But eventually there just wasn't enough time to keep working on those sorts of projects, so I gave up on it.

Abigail: So what was the technique? What were you using?

Henry: It was basically an infrared beam that would be in a pipe, and as the fish went by it would break a beam, and that would trigger a counter. The problem was that there was so

much debris in the water, and if a fish decided to go up and come back and go up and come back and you'd get a funny number.

Abigail: They still have those issues with the Smith Root counter. They're still working on that!

Henry: Right. Exactly. So I decided if it wasn't real good data then there was no point in spending much more time on it. I think some of the parts and pieces are still kicking around in the cellar.

Abigail: So how close was your design to the Smith Root? I don't know when Smith Root counters came to be. Is it similar design you think?

Henry: Well I don't know what the technology is now. Because I think they're mostly using ultrasonic, and not beam break.

Abigail: My understanding, but I don't know exactly what it is, but I believe it is a beam break.

Henry: Really? OK.

Abigail: At least it used to be. I don't know if they've got newer models now.

Henry: There was another design, looking at setting up a magnetic field, and having the disruption of the magnetic field changes as the fish went through it. They're not easy.

Abigail: In Bourne, in Monument River they have a whole correction formula to apply, to, they think they've got it figured out, as to what was a herring, what was a leaf or something. They don't take those numbers immediately and report them. There's a whole procedure they go through.

Henry: And that needs an awful lot of ground truth, somebody's standing there and counting.

Abigail: Right, they've got a protocol for that. John Sheppard stands there I believe with a counter periodically, or one of his techs (technicians).

Henry: Mass Bays program started counting with observers, I believe the year after I retired. That gives us some kind of a baseline for that sort of thing. And again with the narrow window of tidal influence, that's probably not a bad way to do that. As opposed to something like the Bourne run where 24/7 they could be going by.

Abigail: I think just last year Eastham started up a herring count.

Henry: Yeah. Data.

Abigail: Data.

Henry: Money in the bank.

Abigail: Yup.

Henry: Never know when you're gonna need it.

Abigail: Even if you don't see an immediate use for it, it'll be useful at some point.

Henry: That's right. My advisor actually, that's his mantra.

Abigail: What did you find the most challenging about river herring management? Besides the poison ivy perhaps.

Henry: People's attitudes.

Abigail: Yeah. Huh.

Henry: Without a doubt. That I'm not doing enough or I'm doing too much or am too regulating. You should be able to take any fish any time. I just eat the roe and I throw the rest of it away and it doesn't matter. And look at all the fish that have been partially eaten by seagulls and racoons and what are you going to do about that? But that's a part of being in public service, and you need to know that that's the interface and try to approach it in a cooperative manner and say, "Yup, that is a problem". But I'm not about to go out and trap racoons.

Abigail: My boss, when I was working for (National Marine) Fisheries Service said when everybody was mad at him, that's when he knew he was doing his job well.

Henry: <laugh>

Abigail: When the environmentalists were unhappy and the industry were unhappy then he figured he was finding the middle ground somewhere. But that was his indicator of success.

Henry: Well that's interesting.

Abigail: As long as you don't get an ulcer.

Henry: Our benchmark was if half the people in town, the citizens thought we were doing the right thing, and the other half thought we were wrong, then we were spot on. But the problem is that not all of them are going to voice their approval. Or disapproval, they go to the coffee shop.

Abigail: What did you enjoy about river herring management?

Henry: Oh just watching. Just fabulous, just to be in awe that they could figure this all out.

Abigail: It's one of my favorite things to do in the world.

Henry: Yeah. Their persistence. And consider the fact that millions of years of evolution has brought us to this point, and not because of anything we've done. But we're part of the program now so we're doing what we can.

Abigail: Have you ever heard anything in the history of how the Eastham herring runs came to be? Is there any oral history of who dug them, or when?

Henry: This book that Alan had suggested that it was hand dug in the 1850s.

Abigail: Cool.

Henry: And they had to be hand dug.

Abigail: Yeah.

Henry: There's some evidence that that whole area of town was probably a tidal creek at one time, at least for a few hundred feet into where the pond is. The evidence of that comes from believe it or not, Wiley Park which is a little bit further to the north and east. When we started building the so called 1651 forest, which is a 100 year project to recreate the forest species that would have been there when the town was incorporated in 1651, by replanting on a gradual basis. Not an instant forest, because the forest doesn't grow that way, but introducing those species that would have been there. When we started doing that work, we noticed that there are very distinct wave patterns of sand throughout that whole area, which would have been dune material. When you dig into it, it's all beach sand. It's probably at least a 1/3 of a mile back from the beach.

Abigail: Wow

Henry: So it was probably clear cut and that became a dune field, and then has revegetated since then. That obviously happened after the first settlers showed up, but some period of time in there. And that would have been 100 years after the settlement that somebody decided to just to continue digging. Now it may be that that was the protocol at the time, where they would lease out or auction off the rights to the fishery. And my suspicion is that that's probably what did happen. But without going through back through all the records...

Abigail: We'll see what we can find. I'll let you know.

Henry: Yeah. Should be fun. And again, I don't really have a specific on what that publication was, but I believe it may be the one you were talking about.

Abigail: Yeah, before you leave I'll pull it out.

Abigail: So do you have any favorite moments or experiences in your time managing herring?

Henry: Probably working with the fellow who decided to, in his retirement, to spend all day every day, in this time of year he'd be out there in a wetsuit, and just seeing the sheer joy that he had in knowing that he was helping us a little bit. And even though it was shoveling sand against the tide, he was very confident that he was making a difference. One of the other great fun parts, prior to the moratorium was watching children with their dipnets, chasing

back and forth. People would complain, that the child would pick up a herring, and look at it and put it back, and then you had all of the issues of would it survive and everything else. And Phil had this wonderful expression, “Children are more important than herring”. So we’re going to let them play with them right down there. We’re not going to let ‘em up there. And of course the dog issue was always another one, the dogs would go in there and chase the herring.

Abigail: Oh really

Henry: Oh sure

Abigail: Oh interesting. I haven’t heard anyone talk about that!

Henry: Oh yeah, early on that was a big problem. The whole family would come down, this was prior to leash laws and knowing the importance of that, and poop pickup and all that sort of thing. So that was always a challenge. But having the children enjoy it and see what they were doing. That was great.

Abigail: I spend a lot of time thinking about that trade off. My parents were very strict with me. Herring were not toys. They were fine on their own. They could get to the pond on their own. But we would just spend so much time watching them.

Henry: Sure.

Abigail: That little bit of interaction a kid has with a herring, yes it might decrease the herring’s chance of actually making it up there possibly. But that kid’s going to care about herring, which probably in the long term is better for the herring population. Maybe. I don’t know. Different people have different opinions about that.

Henry: Exactly. In some ways you’re watching children that are so desensitized to violence, that they wouldn’t have any problem picking a herring up throwing and throwing it in the woods. So those youngsters needed a little bit of extra help.

Abigail: A little guidance.

Henry: That’s the human condition.

Abigail: Interesting. Any other herring things you want to record for posterity?

Henry: One of the fun projects that we had was, where the pipe went under the road on Herring Brook Rd, the pipe was too small, and it was falling in.

Abigail: When was that one?

Henry: Had to be in the 60s. It was a challenge because a branch or something would get stuck in it. One year we decided that we were going to solve the thing once and for all and we recruited the fire department pumper truck to come down. Everybody just got totally soaked,

to the bone. And we never figured out what the problem was. It was someplace in the middle of the pipe. And it finally rotted away and the fish started going through again and the water flowed fine. We had a good time trying anyway.

Abigail: Cedar Lake run, in Falmouth, I was doing some water flow monitoring when I was working for the District. A neighbor came by. She said, “Oh we used to clean it out, every year we would bring the fire department in and they would just lay their hose in the stream and just blast it out to the saltmarsh”. That was how they cleared every spring before the herring came up.

Henry: It was a good drill for them, made sure the pump worked.

Abigail: I’m sure it was efficient.

Henry: Now that I’m thinking about it, we had a doctoral candidate from WHOI (Woods Hole Oceanographic Institute) who was working on...you may have run into her. I’ve lost contact with her. She was looking at the anthropogenic effects of development around the spawning areas in a variety of ponds, actually it went up through the Boston area and I think through into southern Maine.

Abigail: I am blanking on her name. Was it Maria? I have her thesis.

Henry: Oh do you?

Abigail: I lost track of her. I really wanted to hear that data. Just a couple of weeks ago I found it and I went, I guess it was SUNY she was at.

Henry: Yeah.

Abigail: SUNY...I forget the campus. She was working with Karin Limburg. I found, the Internet is wonderful. I found a copy of her dissertation but I haven’t read through it yet. As far as I know I don’t think she published anything on it. But I would really like to have her come back and talk to River Herring Network at some point. She worked with everybody on the Cape.

Henry: Good point, yeah. I got a phone call from her, we were sailing in Maine. She was getting married the next day. It was a very poor phone connection and I didn’t answer it. I wasn’t, the phone wasn’t working for me. It was a voice mail. That was the last time we touched base. If you could send me that link too I would appreciate it.

Abigail: Yeah, I’ll do that. I saw her maybe like 3 years ago at a conference.

Henry: Cool. That was gratifying to know that our little run had something to do with that bigger picture. The other interesting thing to look at is the Herring Pond run, the Herring Pond was selected for a remediation project a couple years ago. And was used for an alum treatment. My concern at the time, this was outside of my work, I was retired by the time they

did it. My concern was how was the alum treatment going to affect the habitat for spawning. At the time nobody had any hard evidence that it was either positive or negative, so the project went forward. And to the best of my knowledge it has been successful in terms of looking at the phosphate numbers in the water. I don't have any good feeling for how that has affected the population. That would be something else to look at.

Abigail: Yeah I heard a little bit about that. I think we covered all the questions.

Henry: I think so! Very complete!

Abigail: Excellent.

Henry: If you have any other questions after you look at it.

Abigail: I'm sure I'll come up with three or four more.

Henry: What did you really mean by that?

Abigail: Thank you!

Henry: You're so welcome, thank you for doing it. I think it's great.