Interviewee: Eric Smith, head, marine fisheries division, CT Dept of Energy and Environmental Protection (retired) (edited final)

Interviewer: Nehaben Padhiyar, University of Connecticut student, for Connecticut Sea Grant

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00:00

Nehaben Padhiyar (NP): Hello, this is Nehaben Padhiyar from oral history project from Connecticut Sea Grant. Today is six, March 2021. Today with us, we have Eric Smith. So before starting recording, Eric, I would like to ask you that this audio is going to be recorded. Do you give the permission for the same?

Eric Smith (ES): Yes.

NP: Okay, so Eric, when were you born?

ES: 1949

NP: Where did you grow up? And where do you live now?

ES: I grew up in Hartford, and I live in Noank now.

NP: What were your favorite activities growing up?

00:50

ES: I like to build things, you know, model train sets and things like that and different things around the yard, you know. And then as I got into high school, I enjoyed running, so I was a cross country and track runner.

NP: Right. So, uh, describe your life's path to a career in fisheries management.

ES: Well, I originally, I wanted to be a geologist, and I enrolled at University of Rhode Island, thinking that a pathway to Oceanography in geology would be something that I look forward to. Didn't work out that way. Geology is a loaded science with a lot of

physics and calculus, and those things were not my strong suit. So I evolved into what was called Resource Development, which is largely a life science type program, and got a degree in resource development, and then went to UConn for my master's, but in the meantime, my last year at URI got fascinated with lobster behavior. And so when I enrolled at UConn at the Noank lab, I did my thesis on lobster behavior. And that experience, knowing how to handle lobsters that was fortuitously employed by the Connecticut DEP to do a contract job working with lobstermen, going out on their boats and measuring the catch. And part of it was to do a socio-economic survey of the fishery. And that turned into about a 16-month job. And that turned into a different role with the department. So I stayed with them for my whole career.

02:52
NP: Okay, so you said the measuring catch. Can you describe that a bit more?

ES: Well, it would make, it involved making trips on the vessels of cooperating lobsterman and then just take length measurements, observation of sex, claw condition, things like that, and just made trips of boats up and down the sound for that year plus. So it was a good hands on effort to, to do two things: get some biological data, but also build a rapport with fishermen. We had just, the DEP had just the year before I got hired and implemented a commercial catch reporting system. And fishermen were anxious about that. So my bosses never told me that part of my job was to build goodwill with the fishermen. But it turned out that way. So you know, I think it was good for them to have a representative of the department working with them side by side. And it was good for us to get a better handle on the sense of the fishermen and how they felt about things.

04:10
NP: So what is one thing that you like the most about the profession?

ES: Well, over the whole of my career, it was the diversity of things. I mean, you you almost never knew what was going to crop up on any given day, because we're responsible for all species. And, you know, at the end of my career, horseshoe crab management was becoming a big deal in the 1970s. Nobody cared. When I started in the 70s lobster was the biggest fishery that we managed, and by the time I left after the die off, there were some guys in some pockets in the fishery that were still fishing but I know people, you know, they left the fishery within a year when the die off happened and one of them went over work as a heating and ventilation installer, and another one went to school as a middle one for a job in middle school teaching history to, you know, 13 year olds. That's a culture shock, when when every day you leave the dock and it's it's windy, it's rough. And if it's not windy, it's beautiful. And you catch lobsters for a

living and you know, to go ashore, without having planned for it, into a totally different work environment. That's culture shock. And that's what the die off did to a lot of these guys. So the big transition in, in my career was how things changed over 30 years. And now the fisheries were different at the end than they were in the beginning.

05:47
NP: Right? And what were the challenges of being in this profession?

ES: Let me think about that a minute. You're kind of trying to satisfy the interest of the users, and at the same time conserving the resource. So you have to kind of build a trust or an understanding that they have different goals than we did, we wanted healthy resources for the future. Fishermen want to make their living. So there's always a bit of a disconnect between goals. And the challenge is to reach across the divide and make sure at least you understand each other, as you start to try and you know, adopt a regulation, for example, to try and improve prospects for the fishery or the resource.

06:44
NP: Right, as you just said that there were, you know, different goals and you had to satisfy them. And so this kind of situation. So can you recall any particular situation wherein there were, you know, difference of opinions or difference of, you know, goals, and you had to take all that situation?

ES: Yeah, with lobsters, the principal measure that most states use, and the federal government to manage lobsters was minimum length, the so-called gauge. Fishermen don't like, lobstermen don't like gauge increases, they feel it's a real has a devastating impact on their income. Biologists feel differently, they, they say that, if you put up a short term loss, you can achieve a long term gain that even over a five or six or seven year time horizon, you'll be better off. But well, it's easy for biologists to say because the fisherman has to suffer the short-term loss at the outset. So they always resisted that management strategy. And it was interesting. Right at the end of my career, we established the V-notch program, which I can talk about it more length if you want. But that was an example where the the Interstate Commission, the Atlantic States Marine Fisheries Commission, wanted the states to all adopt a minimum length increase. Changing some direction is going to be a problem.

So the Atlantic States Commission lobster managers wanted to increase the minimum length. Fishermen were dead set against it. And they very successfully lobbied the legislature for an alternative program, which was the V-notch program, essentially mark the tail of an egg bearing lobster, throw it back when the eggs drop off that lobster can't be taken. It's marked, it's prohibited from being taken. And the theory goes that, before

it can be caught in the fishery. It will have egged out again, so you've increased the potential spawning stock size by that program. And what was interesting is, with the legislation, we ended up with a working group of lobstermen, educators from three of the Connecticut coastal high schools that have marine science programs, a very key senator in the legislator, Senator Gunther, Sea Grant. You know, there were a lot of moving parts, a lot of players.

And we all came together and developed a plan that did two things. From the fishermen point of view, it kept them from having to suffer the gauge impacts that they were so concerned about. From our perspective, we designed it so that it had what's called conservation equivalency. Mathematically we had to show the Atlantic States Commission that the conservation value of the V-Notch program would be no less than the program of the gauge increase. And that took some doing, you know, it's a mathematical exercise to show that but we did it. It was successful in the sense that the commission approved it. And so the lobstermen didn't have to suffer the gauge increase. We got equivalent conservation value. And the beauty of it was, we built a lot of goodwill between the legislature, high school educators, lobstermen, and regulators. So, you know, you seize those opportunities when you can, to work together and try and achieve a common outcome. And it worked very well, in all four of those facets.

The problem with it was it was very expensive. I mean, the lobstermen were masterful at this, because they developed a rapport with the Speaker of the House in the Connecticut General Assembly. And he allocated a million dollars to this program. And, you know, we used it for the variety of expenses you would expect with this. But essentially, the program was high school students made trips on the vessels of cooperating lobstermen, they did the V-notching, they got an educational opportunity out there, and the schools got good press and and we got our conservation value and their financial loss that's winning all around.

11:38
The downside is a million dollars is real money, even today. And the speaker didn't run for reelection. And within a few years, I think the money dried up and you know, those kinds of programs are also always very sensitive, do you have a budget surplus. How would you like to use it? You don't have a budget surplus. Nobody's getting a million dollars for lobster V-notching. So it wasn't, in the long term it wasn't sustainable at that expense. And I had retired by then. So I honestly don't know, what happened to the program, how it was revised or whether it exists to this day. I suspect not.

12:22

NP: I think you talked about the V-notching. But do you want to add something about its effectiveness? Or do you want to add something else on that? Before I move on to another question?

ES: In terms of effectiveness, I would measure that by whether the lobster stock recovered, whether conservation value is sufficient to rebuild and that I don't believe that's the case. But I also don't believe that, you know, fishing pressure really had anything to do with the die off. So it's very hard to try and say, a conservation program would solve the problems caused by some other issue other than fishery manage, fishery mortality.

13:13
NP: As you were talking about the transition in your career, so is there any particular discipline change or process change that you that you have observed during your career?

ES: Now we're, from the beginning to the end of my career, we got much more technological. I mean, when I went to work for DEP in 1974, we had one calculator in the whole office, and it was one of those that you pull a crank, and it turns all the wheels and the gears inside. And that's how you add, subtract, multiply, divide. By the time we left, we had computers and high technology devices to record data, what they do on our trawl survey now. All the data they collect is keyed in on board, they that we used to bring samples ashore and then somebody would sit in a lab and process all the samples. Now most of that is recorded right on the boat. So by the time the boat gets back to the dock, the data has already been uploaded. It's it's in the database, subject to some things that have to be done on shore like age and, you know, aging hard parts, for example, fish scales, things like that. You'll always have some lab work, but like everybody else in the world, over that 30-year period, things got very improved by the availability of technology. I mean, when we left the world of that crank fed calculator, the next thing people got in the office were Texas Instruments calculators, which were either desktop or handheld, and you know, they were frightfully expensive, and the technology was what they had developed for the Moon Program in the 70s. So that was the technology transfer into the retail world from from the science of government. And it was fascinating to to see that happen. And then we just got more and more conversant with it as the years go on. And so yeah, that that's a big transition. Are you going to ask about the die off program?

NP: Yes.

ES: Yeah, okay, good.

15:38
NP: Yeah. So. So my next question is that in what capacity were you working as a resource manager during the American lobster die off.

ES: So now is good time. I was the assistant director of Marine Fisheries Division. So our office was down in Old Lyme. And we had you know, a trawl survey and our lobster monitoring program and fisheries statistics. So it's a small program, but it had, you know, four or five different major elements to it.

16:19
NP: So I would like to know more about the lobster monitoring program, if you can give some details on that.

ES: Well, at that time. We had fisheries statistics, which was catch reporting by lobsterman catch effort, area of the fishery. And we also had an early life history monitoring program. So at one point, scuba dive sampling for juveniles, where they'd go out make night dives, and look under rocks for juveniles. And that was a hard one to quantify because it's very subjective, you know, where you go, where you find them, hard to be repeatable in the data you produce. The other thing they did was a larval sampling program for several years where they, they look for lobster larvae when when they're in their sea surface stage, the first four stages of life history. So we're always looking for indicators of future success in the fishery or future problems.

17:29
What nobody saw coming, just like the pandemic that we're living with today is, government's not real good at predicting crises that come about on the spur of the moment. And therefore not government's not real good at responding to it. Because you often don't have the right kinds of people or the right numbers of people. And, you know, this whole thing came up in the late 1990s. By 1999, it was very devastating. But when we look back and talk to people with the first indications of it were in 1997, and then 1998, more so by 99, about the western third of the sound was highly impacted. And I don't know, I don't pay attention to it anymore, but I'm not sure things have recovered yet.

18:25
And they may not we can talk about the prospects for recovery in a bit if you want to. But that came up as an issue of non-fishing mortality and mortality. And those are almost impossible to predict, and hard for government to respond to quickly. Yet it did,

as a matter of fact, because, you know, Congress was impressed enough by the impact by New York and Connecticut officials and fishermen, that they allocated a large sum something like $7 or $8 million for combined economic assistance for fishermen, and also a research program to try and get at the underlying causes of the die off. So the fishermen benefited somewhat by the assistance that kept them from going under right away. And there was a half of that fund went to New York and Connecticut for researchers to try and figure out what the cause was and hopefully be able to design a solution or something that could at least prop up the resource.

19:51
NP: So what were the the management challenges or barriers that you experienced as an extent of this die off?

ES: Well, When there was a communication challenge there. Fishermen became convinced that it was the cause of pesticide spraying for control of mosquito borne disease carrying mosquitoes. The research showed pretty convincingly that was not likely to have been the cause. Fishermen have a hard time, humans have a hard time understanding a scientist that says no, it's not your preconceived notion. It's actually this other reason. So, you know, there was a communication problem there and trying to get to an outcome where everybody accepted, you know, what the cause was.

That kind of thing is always challenging, doling out the the economic assistance was a challenge. We kind of tried to work with a sister agency and work through the How could you objectively allocate assistance to people depending on their need, and their relative involvement in the fishery. And we did all of that our staff prepared the algorithms to, to blindly look at need. So it wasn't, we wouldn't be accused, I still marvel at the fact that we were not accused of somehow playing favorites that people we knew got more money than people who didn't, that whole thing that can happen with government, you know, trying to allocate assistance. Nobody ever made that claim, which was good, because, you know, what we designed was a system that just looked at behavior in the fishery and didn't have names associated with it. And if somebody was a large operator proportionately got a larger share, and somebody who hardly had any catch at all, get a lower share. And that's our view of objectivity. So that part of it worked pretty well. I, frankly, have drawn a blank thinking about this interview, how the research funding was allocated. I suspect Sea Grant was pretty involved in that part of it. But it really, it was a very multi-dimensional program, and people were looking at all facets of the science of what could have caused this to happen. What's the projection for the future? And I thought that work, it's embodied in that book that came out at the end of the project. I was always very impressed with what the scientific community had done in in very short order, putting together projects that actually produced some very meaningful results.

23:02
MK: How did you collaborate with your counterparts in New York, and what type of management strategies were developed to counter the effects of die off?
ES: Well, independent of the die off, we always had, we always had a good get, I'm getting feedback. I don't know if your listeners are going to hear that. But we always had a good rapport with New York Department of Environmental Conservation, one of the values of being involved with the Atlantic States Marine Fisheries Commission, each of the 15 coastal states have a three-person delegation, there's a agency manager, there's a legislator, and then there's a governor's appointee. So we saw these people frequently at meetings anyway. And so we could always collaborate in in not coming up with things that were at cross purposes. So and I think the same thing happened with New York Sea Grant and Connecticut Sea Grant. So there was always a lot of communication and interaction across the sound. And of course, the fishermen do that all the time, because they're out there fishing side by side. So they all know each other. When we had meetings at our lab, with the fishermen, they would often all pile into a 42-foot lobster boat and just take the trip across the sound and, you know, they they come to the dock and the whole after deck was just loaded with guys standing up.

I often wonder if they have floatation devices for every one of them. You know, we never had a tragedy so I guess I didn't have to worry about. So we worked very closely together I would not say that we adopted co-aligned management strategies. For example, they did not do a V notch program. They they didn't see the value of it in the same way. I honestly don't recall whether they had to do a gauge increase, I suspect they did not. Because to have Connecticut and New York fishermen sharing the sound, fishing on a different minimum length would have been a real problem. I mean, you could just think of loads of ways fishermen could beat that regulation. So they probably profit in New York, probably profited off the conservation value of our V-notch program. So they were the beneficiaries, even though they didn't wouldn’t add money to the program, which is okay. I mean, if you achieve your conservation value, in a way you hadn’t anticipated, you still call that a win.

25:44
NP: What was the management strategy that you just described?

ES: The V-notch program.

NP: Yeah, the same strategy used for lobster die off, right.

ES: Well, that V-notch program was our management strategy for the Atlantic States Commission conservation need. It was superimposed on the same time, that well, 10 years after the die off, so it kind of was an effort to achieve a growth in the lobster stock, regardless of the cause. The Atlantic States Commission's approach was to engage increase, our approach is do a V notch program. Either way, you're trying to accommodate the fact that the lobster stock died off. And, you know, some estimates it was at a 90% reduction in the biomass that would have been out there in 1997 or so. So at that point, however, you get there, you try to get there.

27:03
NP: Right. So do you recall any specific management strategies that resulted in great success?

ES: Well, other than what I just described with the V notch program? I don't know. I mean, we're not talking just lobster anymore, right?

NP: Yeah, the lobster die off.

ES: So yeah. Oh, no, I can't think of any management strategy that came out of, we got more success out of the research program, and the economic assistance program. The money that came from Congress wasn't really designed to, to help solve the lobster conservation need. It was intended to figure out why the die off occurred, and to help fishermen. And I think both of those were very successful, but they didn't spill over into helping the the conservation need, which was why the Atlantic States Commission proposed what it did and why we responded with the V-notch program.

28:08
NP: Right. So would you like to add something more on the strategies before I move on to the next question?

ES: No, I think I'm good with it.

NP: So how did you address the needs and concerns of the lobstermen who relied on the important commercial fishery fisheries at that time?

ES: Just keeping communication channels open, I think, you know, as I alluded to earlier, they were, their mindset was pesticides did this. And I suspect a lot of that was because they were planning on suing the pesticide industry. And, you know, if you're going to do that, you have to have a reason. So the die off was the reason. The research showed something different. So right away, there was a disconnect there. And

I think, communicating with them, eventually. A lot of fishermen, you know, bought into what the research produced, but not all of them. Some of them probably to this day figure. It was pesticides, research that otherwise but they're entitled to their view.

29:29
NP: More than 20 years have passed since the die off. So, so can you describe any long view have have on the American lobster resource and the fishery in Long Island Sound?

ES: Yeah, I have to two views on that. One's an optimist and one's a pessimist. Optimistically, if lobsters evolve in response to a changing environment, and essentially that's largely what the scientific community, was the beginnings of the cause. So if lobsters evolve, and they become more hardy to the changing environment, and we start to see, you know, higher survival, larger biomass, then the fishery will recover. If they aren't able to evolve to the changing conditions, and we'll see what we're seeing now, which largely is you will always have some lobsters out there in the sound, but they won't be on the fishable biomass that is like the fishery was in the 1990s. So, you know, evolution happens over long periods of time. And we're really talking about a snapshot here, even though it's been 20 years.

So this is not the first time lobsters died off in the sound. It happened in the 50s, where everybody went trawl fishing, because they just didn't have any lobsters. And who knows why that was, but I fished with guys in the 70s that said, Oh, it was awful. No lobster was around. And then in the late 60s, they started to come back. And by the time I was out there, on their boats in 1975, you know, things were getting better. And they got much better over the next 20 years. So not the first time they had a die off. This one is the one that I lived through. So the pessimistic view is it'll be, you know, a resource out there, but it won't be official biomass, the way it once was. The optimist is they'll recover. And it's been 20 years. And my sense is it really hasn't. I'm sure some fishermen in some places still have a fishery, and that's in the deep water, cold water, places of the sound where they still have a biomass to fish on. But if you get down into the Western sound, I have not looked but I would suspect there's not a lot of successful fishing like there was 25 years ago. That'd be an interesting thing to look at.

32:07
NP: Well, is there anything else you'd like to share about your career in in state fisheries?

ES: No, I think I would leave it at that. I made notes based on what Nancy had sent me. Out of order, but I think I've covered everything that I had expected you to ask. So I'd say I'm good to go.

NP: Well, that was all from my end. Eric, thank you so much for your time and attention.

ES: Okay.

NP: Great talking to you.

ES: Nice to do it. Take care.

End