Interviewee: Kim McKown
Interviewer: Madeleine Keep (MK), Cornell University undergraduate student, for New York Sea Grant
Date: February 24 2021 10:52AM • 48:16
Location: Virtual (phone)

SUMMARY KEYWORDS

lobster, long island sound, fishermen, assessment, species, southern new england, fisheries commission, crab

00:00

This is Madeline Keep of the Northeast American lobster issue initiative. Today is February 24 2021. And I'm talking with Kim McCown of the New York Department of Environmental Conservation.
To start off, can you tell me a little bit about where you work and what you do.

Kim McKown (KM): I work for the New York State Department of Environmental Conservation, I'm in the Division of Marine Resources, which is in East Setauket on Long Island.I'm the unit leader of the marine invertebrates and protected resources unit, which includes management of lobsters.

MK: What inspired you to work with marine resources and in particular invertebrates.

KM: When I got out of college, I went to Stony Brook University in the marine science department and I got a master's degree. I did one survey in the lower Hudson River, and I really enjoyed it. And I ended up taking a job at the Department of Environmental Conservation, running some monitoring surveys in the lower Hudson River and Western Long Island that focused on striped bass and other managed species. So that's how I started, I would do that for quite a while. And there was an opportunity to advance overseeing the at the time it was the crustacean unit. And so that was in 2003.And that was just at the start of the die off in Long Island Sound. And it was an interesting time to be more moving over and overseeing lobster management.

02:05

MK: Yeah, can you describe what it was like taking on that role in the midst of the 1999 Lobster die off?

KM: There was a lot of different research going on. The federal government had declared lobster a lobster fishery disaster in southern New England, and had provided

some funding for research. So a lot of universities were looking into the causes of the die off. In my unit, we were conducting a lobster survey, trap survey in western Long Island Sound, which was an area that was first hit with a die off. So for over five years, we ran a survey with traps spanning from New York, to Connecticut, three lines of traps looking at catch from late spring to late fall, and trying to track what was going on with the lobster population. At the same time that management I was involved with doing assessments with the interstate group, The Atlantic States Marine Fisheries Commission, looking at changes in lobster population.

03:37
MK: Did you find anything significant from your surveys?

KM: We did find certainly a difference in the number of lobsters from east to west where we were working. So this is all in western Long Island Sound. The western portion at lower numbers. But the lobsters were larger, and the eastern area more lobsters but they were smaller. So that was interesting. We also put some tags on the lobsters and we saw that there was at least during the timeframe we were working, there was very little movement. Lobsters tended to stay in the same general area they didn't switch from like one line to the other. Generally, we caught them in the same trawl or adjacent trawl from where they had been released. That was very consistent.

04:43
MK: Do you have any hypotheses for the discrepancies and lobster size and abundance between the two areas?

KM: Not that’s based on any research, but in general, sometimes. If there's more animals, they may not grow quite as quickly because of feeding. The whole population had declined at that point anyway. So it may be a density thing. Not sure. Also, sometimes, if you get a large lobster in the trap, smaller lobsters won’t go in. So, yeah, there's a number of different things, whether it's biological, as in physiological, or is it behavioral, that's hard to tease apart.

05:55
MK: Were you involved with developing any management actions and results in response to the die off?

KM: Yeah. Through Atlantic States Marine Fishery commission, we've done several assessments throughout the die off. The results of the assessments have been that the population is at very low levels, and some management actions have taken place. So at first, we did an increase in size on it. After that, we decreased fishing mortality by 10%.

We ended up in Long Island Sound, instituting a closed season in the fall from September 8 to November 28.

06:58
MK: And are these regulations still in place today, or have they changed at all over time?

KM: They are still in place today. In the process that we use with Atlantic States Marine Fisheries Commission is the management board will determine what sort of decrease is needed. And then we meet with fishermen to decide how to implement it. So if we need to take a 10% decrease, there are different options on how we could do it can be changed in size limit, for the season, closed areas, things like that. So for the 10% Long Island Sound like beside it, lobsterman felt that going with a closed season was the best way to do it for the fishery.

And we also manage the fishery in the ocean off the south shore of Long Island, that group of people decided also to go with a closed season, but because of the timing of their fishery, their closed seasons, actually, in the month of May. So these lobster conservation management teams tried to develop the rules in coordination with how the fisheries run in that area. And that's a little different than some of the other species that we manage.

08:41
MK: How long would you say is the typical process between identifying a vulnerable population to actually implementing the rules and regulations that protect them?

KM: For a lobster, it generally takes us about two years to complete an assessment. And once that's done, it goes to the board and management board decides that they accept it. But first off, we do an assessment, it goes out to peer review. And so an outside group of scientists go through the assessment and determine whether our conclusions they feel are scientifically correct. If it passes, it goes to the management board. And they decide whether they accept it and whether or not they're going to do management and that's usually occurs within three to six months of when the peer review is finished. And generally at that point, then the management board will task the technical committee to come up with options of how to implement whatever management scenarios are talking about. So that can take another six to nine months to do that assessment before we go back out to the lobster conservation management teams.

10:14
So in all, it could take three plus years from the point of starting an assessment to the point of when you're actually decide what management needs to happen. And then from a regulatory point of view from, I have to then write the regulations for New York. And a normal rulemaking generally takes six to eight months. So if it's something that needs to get done right away, we could do an emergency rule, but that doesn't go out to the public for public comments. So we try to avoid emergency rules whenever we can. Because we do want input from the public on whatever we do. So I'll backtrack a little bit. Atlantic state Marine Fisheries Commission process is where changing management generally lead to an addendum to the plan. And that always goes after a couple of hearing also. So there are a number of steps where we do go out to the public and get feedback.

11:35
MK: When you bring management ideas to the public, do you ever face resistance? And if so how do you respond to stakeholders' concerns and try to earn their support?

KM: Often we do get resistance because generally we're increasing management. And that has an impact on people's livelihoods. Though, there are fishermen in particular who see the management benefits of protecting the resource also, even though it will impact their livelihood. So it's a mixture of responses we generally get from the public.

From my position, I try to explain the science behind it. To hopefully have them understand why we feel the lobster population or whatever species we're dealing with needs this protection, or the long-term health of this species. And thankfully for the fishery, it makes sense to have increased management. Some people understand that and agree with it, and there are others who don't. Sometimes it's because they just don't want any impact to their livelihood. And some may be that, you know, in certain areas, they might not see what in general, the average effect of what's going on their particular area might not be quite as bad so they might not see it. So if something needs… we need to be sure where they're coming from. Does that makes sense?

MK: Yes.

13:51
Do you um, do you often collaborate with lobster men and women for instance, do you do you rely on the feedback of fishers on the health of the fishery? Will they come to you and say, we've been getting it we've been catching much few, much fewer lobsters or much fewer fish than usual. And we think you should check this out.

KM: I do get feedback both ways. Especially since the die off often I'll hear people lobsterman call me up out of the blue sometimes just to say, you know, I put my traps in the spring and it's terrible. There's nothing out there or they all have shell disease. They look terrible. And then sometimes I'll get a call people saying it's amazing. It's great out there. I'm seeing a lot of young ones. And, you know, this is the best we've seen in the last few years. So I do get that feedback from people. Sometimes if I called them on something else, and they'll talk to me and let me know what they're seeing, or I'll ask them what they're seeing out there but often they just call me up out of the blue and it's nice to have that rapport with people, hear what they're seeing out there.

15:23
MK: definitely It must be nice receiving a call saying that um you know things are things are better than ever and and doing great. When, when would you say is the last time you've received a call hearing a hearing positive news about the population of the American lobster?

KM: Last spring, I received a call my boss got an email from somebody out east and he said that last spring was great. And she hadn't seen it as well you know, the lobsters looking as good as they happen one time and I think I heard the same from somebody else saying that you know, they were seeing some nice size lobsters and they were in good health. And that was good to hear especially considering that last winter was a pretty warm winter and you know, we do feel that it increased water temperatures have affected lobsters. And certainly last summer. We had an extended warm period into late fall again this year. That's not particularly good for lobsters

16:52
MK: Do you know the exact areas that these lobstering women and men we're seeing increased lobster numbers in or the approximate areas?

KM: one person I've heard is definitely definitely fishes. eastern Long Island Sound. The other person I believe, is that I think he fishes the same general area maybe a little further west, but still. Yeah, the east end.

17:36
MK: Now are you currently involved in managing lobsters in Long Island Sound?

KM: Yes, I am.
MK: Okay. What trends have you you know been been seeing lately aside from what you what you just mentioned with with input from the from the lobster men and women,

have you noticed maybe any significant fluctuations or upward trends, downward trends, anything of that sort.

KM: We just finished an assessment with the Atlantic States Marine Fisheries Commission, for Long Island Sound we utilize the Connecticut Department of Environmental, Energy and Environment trawl survey. And this is a survey that's been going on since the mid-1980s. And currently, the number of lobsters is the lowest they have ever seen in that survey. Actually, I think in the fall from 2017 to 2018 or 2019. The survey didn't even catch any female lobsters which is particularly concerning. I mean, that doesn't mean there's no females out there but survey did not catch any. So we feel that population is in pretty low abundance.

19:11
Overall we use information from trawl surveys. From a number of places, south and west and off of Cape Cod. And pretty consistently the surveys are at the lowest time series and feel that population is the lowest level that we have seen since we've been tracking that since the mid-80s. It's a real concern and it's not just Long Island Sound. In general, lobsters south of Cape Cod. The information we have from these surveys inshore and Long Island Sound seems to be the worst of even the inshore areas, but inshore we're considering Long Island Sound, Rhode Island and Block Island Sound and Buzzards Bay and Nantucket Vineyard Sound. If you go offshore it's a little better. But even those numbers seem to be going downward.

20:39
MK: Would you mostly chalk this up to warming sea temperatures? Or is there anything else going on right now that you think is, is important to note?

KM: We certainly think that the warming sea temperatures certainly have added stress to lobsters, physiologically it affects their immune system it changes affects other aspects of their physiology, it may make them more susceptible to diseases, there seems to have been an increase in shell disease. And it has also changed migration patterns of other species. So there may be other predators here that haven't been here in the past or different numbers. So overall, we feel natural mortality has probably gone up for lobsters in southern New England. What the actual cost for that is, we don't know. And it may not be the same cause each year, it may fluctuate and we use annual natural mortality rates that’s estimated we've changed it over time.

22:20

We felt it was lower before the die off and it's increased. But it may be changing, you know, we're sure it changes from year to year, we just don't have the information to track it that closely. So this is something we want to do some research, for the next assessment is to look at how has natural mortality changed since we've seen this big decline.

MK: You mentioned that the lobster decline can also impact, you know, predators and other species. And I was wondering if you've noticed any overall ecosystem changes that you think are a result of declining lobster populations.

KM: We think there have been ecosystem changes that are the results of climate change. And I really have to recommend our last stock assessment, which you can get from the Atlantic States Marine Fisheries Commission webpage, and I can send you the link in detail. What we think we've seen some regime shifts going on both in southern New England and up in the Gulf of Maine. And we think we've seen a change in the regime in the lobster populations in both areas also. So it's not so much that we think a lobster is causing these regime changes. We think these regime changes have affected lobsters.

24:13
MK: are you in the midst of developing any new management plans or have any management plans been developed post 1999?

KM: The lobsters managed through Atlantic States Marine Fisheries Commission, and like I said, every time we decide that we need to change management we institute an addendum. So we have had a number of addendums since 1999. So each time we feel we need to make some significant management changes. We amend the plan.

25:02
MK: Are there any significant changes that you've made that you can think of?

KM: Like I said, you know, we put in increased size limits. We put in the closed seasons in the area around Block Island Sound and offshore, they put in some trap reduction plans. So these are some large changes that have occurred. And frankly, right now, we're in the process of working with National Marine Fisheries Service is putting in some management measures to protect North Atlantic right whales, because their population has decreased significantly, and it's critically endangered. And entanglements with fixed gear, such as lobster pots, lobster buoys, and gill nets that is one of the major factors, they believe in the decline. So there are going to be some

changes with lobster gear, due to the impact to North Atlantic Right Whale, and so we're working through that right now.

26:32
That affects more offshore because Long Island Sound is an exempted area, excuse me, because we don't see North Atlantic Right Whale going into Long Island Sound, though we do see some of the large whales have come into the Sound humpback whales, whales. And that has occurred more frequently in recent years.

27:04
MK: Once a new management plan or regulation is put into action, how long does it generally take to see results and determine whether or not the efforts were successful?

KM: Clearly, we have to go back a year or two afterwards and assess whether or not these management measures actually actually did decrease a harvest. Usually we're looking for a harvest reduction and, or a size increase a size increase in the population by changing the minimum size.
I do remember when we put in management options for the ocean fishery for that 10% reduction.

Our first option had been a V notch program where you any female lobster that has eggs, you put a little V in it. And that means that if a fisherman catches, snip a little v out of the tail, and if a fisherman catches it, and there's a V in it, they can't keep it they have to put it back in even if it doesn't have eggs at the time. So that helps to protect mature egg bearing females and females that are producing eggs at the time.

28:51
And they also put in a short term, short, closed season in the winter. And when we went back and we looked at the data, they had not met the 10% reduction. So they had to go back and decide what they wanted to do to make this 10% reduction and what they ended up doing is moving the season to May. They stopped the V notch program because they really didn't see that many females with eggs. So it really wasn't giving them any credit at all. So they decided it wasn't worth doing the V-notching. And they went ahead with a one-month closure in May, which is a time period where they caught more lobsters. So they did get their 10% reduction. And again, they had to look the following year to make sure that they really had reduced.

29:53
MK: once you already have a a plan in place does it, is it easier to amend it? You know, improve it and sure it’s working or do you have to go through the same long process all over again to tweak a plan.

KM: As far as the Atlantic States Marine Fishery commission, if it's just seeing whether our changes, made the 10% we don't have to do a new addendum. But we do have to work with our lobster conservation management team, which means bringing these people together and having meetings and come into consensus on how to move forward. And then I still have to do the same regulatory process to make these changes. So that takes as long like I said, six to eight months to do that, and several months to work with the conservation management team and come to consensus.

30:56
So the ASMFC process doesn't increase the time. Because the plan is already there. We're just seeing whether we meet it. But the external process management teams and the regulations, they take the same amount of time.

MK: So while you're overseeing and managing lobster populations right now, are you also looking at different species? And if so, do you, is your work ever connected between the management of different marine organisms?

KM: Yes, I do look at a lot of different species. So from the invertebrate side, we manage welk, horseshoe crab, Jonah crab, and lobster and blue crab. And from the protected resources, we're managing Atlantic sturgeon, and whales and sea turtles. So with the invertebrates, certainly Jonah crab and lobsters are linked management wise. The Jonah crab fishery had been a bycatch of the lobster fishery. Due to declines in lobsters in southern New England, Jonah crab has become more important. But the ASMFC plan to harvest Jonah crabs you need to have a lobster permit. So these two species are tied pretty closely.

And then from a management perspective, working with whales and sea turtle, they are both impacted by vertical lines, three lines in the water. So the management of those species especially right now, large whales, is related with management of lobsters. Which is one of the reasons why protected resources that moved in my unit because there was interaction between the two.

33:31
MK: Do you like the the interdisciplinary aspect of your of your job? Do you find that you're always learning new things?

KM: I do. And frankly, my master's degree was interdisciplinary degree. So I do enjoy that.

MK: Now, are you currently, you know, facing any changes or challenges to your typical work schedule as a result of the COVID pandemic?

KM: Absolutely. You know, at this point, we a lot of the work we do is virtual, while we were doing this lobster assessment, it It started when, you know, pre- COVID so we were able to have our first several meetings together, but the majority of the assessments, we ended up having to do virtually and so this was. I think only the second assessment they'd ever done virtually. So. It was a very different way of doing it.

34:50
We've also had a lot of restrictions. With our field work, first off, it took a while to develop protocols. Last spring, before we were even able to go out in the field for our own internal projects, and then we've been very cautious about where we're with fishermen and women, both for health and safety. But there's also so in the past, we used to go out with commercial fishermen on their boat to get information on their total catch, what they would bring to shore, but what they also put back into the water, you know, sub legals or just not market worthy, and this is important information, we still are not going out on fisherman's boats, because we just don't think it's safe for either party. But during the summer, we were finally able to develop protocols that we would go into the market, or meet fishermen at the dock and get information, at least on what landed. So we've lost a little information on the spring. But it means that we're able to start collecting it starting in the summer.

36:24
So it's a shame that we're missing, getting the information out on people's boats, because that's really important information that we'll be at a loss for the next assessment. But hopefully, once we get a lot of the population vaccinated, we can reconsider our protocols.

MK: Do you think these gaps in information could have implication for the management of the lobster resource? Or do you think you can overcome this and keep things running smoothly and as usual?

KM: I think we can overcome it. That's why we're trying as best as we can to get what information we can to see if there are changes. To be honest, in southern New England, we've seen this decline and

it's been bouncing, the population has been bouncing around at a low level. So you know, some years, you might get a little bit of an uptick, but then it seems to go back down again.

Hopefully, one year won't make a big problem. I know we've had some seasons, that some of our fishery independent sampling hasn't been able to go out like the trawl surveys. You have a gap there, but you have the data before and afterwards. You're still looking at trends over time. You don't have to guess what went on in the gap. But you'll still see what where the population is going afterwards.

As far as the data we get from the fishermen. Like I said, we're getting some of it. And hopefully as soon as we can get back out, we'll get out and get both what they're harvesting data from us and harvesting and what they're releasing. But, you know, we don't see the population changing that quickly. So I don't expect there to be big differences of what we saw before and what we saw after.

39:03
MK: Do you have any long-term predictions for the lobster industry, either within Long Island Sound or you know the east coast as a as a whole?

KM: Well, we've already seen that. A lot of lobstermen in Long Island Sound and Rhode Island and Massachusetts have started to rely on other species. So you asked about direct actions. I forgot to bring up welk, a lot of the channeled welk fishery is by pots and it had been a bycatch in lobster pots. Some of the fishermen have modified their gear or you know even just set out lobster pots and are harvesting also, that with their welk be, and some of them have moved and become more welk fishermen than lobster fishermen these days.

Out in the ocean, it's definitely a mixed fishery with Jonah crab and lobster fishery and that has increased over time as the lobster population has gone down. And black sea bass populations have increased they seem to be expanding their range possibly due to climate also and some lobster fishermen harvest black sea bass that is a bycatch in their fishery if they're using the proper vents. So we're seeing, at least in southern New England, the fishery is relying on more species than just lobster. And I expect that to continue.

40:57
MK: Would you say that most lobster men and women rely on a, you know, a second catch to supplement their income? Or do some still stick solely to lobsters?

KM: Good god no. Okay.

MK: Do you have any main takeaway messages from your career as a resource manager that you would like to share?

KM: I guess I just I enjoy the science, I think it's important to do our best to try to determine what's going on with our populations out there and to put in management when we need it, to help protect our resources. And I also think it's great having the interaction with the fishery to get their perspectives on what is going on. And also, their perspective on policies. And often there's options if we put in one type of management may affect people more than something else. So they may rather go for in Long Island, a closed season, rather than changing size limit.

42:41
MK: To I wanted to, you know, end on a nice positive note, and I was just wondering if you have any management success stories from your career, either related to lobster or another marine species that that you'd like to mention?

KM: Um, yeah, I worked with striped bass resource. When I started with striped bass, they were at very, very low levels. And they took some real significant management measures, and the population it rebound, and now the population's at pretty high levels. So that's a real management success story. I also worked with Atlantic sturgeon. Unfortunately, the population when I started working on it was at very low levels again. But we ended up closing the fishery. Because it's a really long-life species, sturgeon can live up to 60 years old. And the females in this area don't start spawning until they're 15 to 20 years old. So it can't take a lot of mortality, but we are starting to see is particularly the Hudson River sturgeon population does seem to be on the increase. And so that's really good.

44:18
MK: That's great to hear. Is there you know, is there anything that you think makes a management plan particularly successful? Or is it sort of up to some things up to chance? Or is there sort of a recipe that you can follow, that that can help maximize the efficacy of a regulation or a management plan?

KM: I think number one, making sure that if you're putting in adequate management that you think will help turn around any declining trends is important. But right now, we certainly are in a period where there are a lot of changes going on out in the ocean due to climate variability, and that's affecting the marine environment, more so than even the terrestrial environment. And so it's made it more difficult to be a manager during this

time period. And some population centers near us, they seem to be shifting northward. And that needs to be included in the management. And so I think we're in a pretty tricky environment, especially for those species who seem to be more vulnerable to impacts of climate change. And these are things that I know when the interstate group Atlantic States Marine Fisheries Commission, we are starting to work with. And again, I really have to say recommend looking at the latest lobster assessment, because these are some of the things that we do bring up in the assessment is these changes we think are going on. Certainly, that seem to be impacting lobsters. They seem to be impacting North Atlantic right whales.

46:49
So it's not an easy answer. So I guess, that's my big take takeaway message at this point. And anything we can do to help slow climate change, I think is really important.

MK: Definitely.

KM: This is something I know that our governor is working on. He thinks it’s very important.

47:21
MK: I agree. And I really hope we can, you know, halt the rising global sea temperatures, at least to a to a degree, so that we can protect the marine resources that so so many people rely on for their livelihoods. It was really great talking with you today. Is there any any last thing you would like to add?

KM: No, I just want to thank you for doing this project. I think this is really important and glad you're able to capture people's thoughts on what's going on with the lobster fishery.

MK: Thank you. Well, I am very fortunate to preserve your experiences throughout your career. And thank you again for being a part of this interview and giving us your time.

KM: You're welcome

End