Interviewee Name: Chris Petersen

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Interviewer(s) Name(s) and Affiliation: Matt Frassica (Independent Producer) and Griffin Pollock (College of the Atlantic)

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Interview Description:
Chris Petersen, a professor of biology and ecology at College of the Atlantic in Bar Harbor, ME, talks about his research on marine resources, what he values about smaller communities, the changes in the scientific community over the past decades, and the challenges faced by scientists working in Frenchman Bay

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[0:36:45.3]

MF: Matt Frassica
GP: Griffin Pollock
CP: Chris Petersen

[0:00:00.0]

GP: First to fill out—

MF: Oh, yeah, well, uh actually we can do it at the end, it's just another way we—to take a picture of everyone.

CP: Okay.

MF: So let's get your name on those um. So can you just start by saying your name?

CP: Yeah, I'm Chris Petersen, um I teach at College of the Atlantic, um I've been in Maine since 1990, I grew up in Los Angeles.

MF: And what brought you to Maine?

CP: Um a job, I applied for a faculty position that was nationally advertised for a marine biologist at COA and got the job and came here and have lived here ever since.

MF: Nice, and are you studying different things here than you did in California?

[0:00:37.9]

CP: Yeah (laughs). When I first came to Maine and my PhD was actually, um doing behavioral ecology of tropical reef fish so I was on coral reefs. Um, the gulf of California, Panama, the Caribbean, those kinds of places which I continued for a long time, I actually did work through like the first 10, 15 years I was here mostly in the Caribbean and then slowly, especially as my kids got a little older, my kids were born here, we start looking for more and more research here and I started working on estuary fishes, and now I do a lot of things on the intertidal with students.

MF: Hm. So what, what kinds of things?

[0:01:16.1]

CP: So, um—I've been working probably the longest with students on the intertidal on clams. Um, I've been chair of the Bar Harbor marine resource committee for about five years I've been on the committee for about 10, 15. Um, I've done a lot of work with the alewives and river

herring for the past decade, um especially on Mount Desert Island at Somes Meynell sanctuary, actually ended up being on the board of that, um. More recently, what have I been doing? Hanna webber and I are doing rockweed work around Frenchman Bay after a lot of concerns of our stakeholders, um I helped found Frenchman Bay Partners about 7 years ago maybe now? And starting about 9 or 10 years ago I started working with what was then called Penobscot East, and is now Maine Center for Coastal Fisheries.

MF: And, so what kinds of changes in those various areas that you've been studying have you observed over the years?

[0:02:15.4]

CP: Probably the most dramatic one is on clam flats in terms of, um the effects of what we think are green crabs on the intertidal, I mean it's—it's just incredibly dramatic, I mean we used to have years where we saw a lot of small clams, years where we didn't see too many, I've taken students out pretty much every year over the past 10, 15 years, um into Frenchman Bay and, um especially in Bar Harbor, I've done surveys and there were some years where we did, we went out in the fall and you know, the little guys coming in recruit every summer and you would kind of see the results. And some years there would be a few and some years there would be a ton. And the last four to five years, probably the last three years especially except for one exception, we've had just huge amounts of—we haven't had any recruitment. And we weren't sure why we were getting so few clams, and then the last couple years we've been putting out predator exclusion. Either boxes or nets. And when we do that, you realize that there were tons of little clams coming in, um. The first year we did it which was, must've been 2017, inside the net we had like about 50 times more clams, 50 to 100 times more clams than outside the net. So that means mortality was like 98, 99 percent. So it was dramatic, you'd pull the net behind—back and it was just full of holes, you could just see nothing but holes. You didn't have to do any data, you could just take a picture. And then this next year, we've expanded out to three sites. And so I do a lot of this work with a marine biology class, I have a freshman marine biology class that has twenty people in it, and it's a hybrid class, it's not a traditional marine biology class, we do a lot of policy work. And so all this work is done in conjunction with the town of Bar Harbor. So we collect data for them and we expanded out to three sites and saw the same general pattern. You know, tons of mortality. The same thing that Brian Beale's finding. Really analogous things. We've also done some PH work, it's very analogous to Brian Beal's. PHs are lower than you'd expect for healthy clam populations, but when you go out there and look, if they keep predators away they seem to do just fine. So PH—even if the PH seems like it should be a problem, um if you look at the literature it's not really a problem.

MF: Hm. I saw uh—I saw a panel on findings like these last year, did you give a presentation?

[0:04:45.2]

CP: No, I was actually in New Zealand last year (laughs). So I've missed—I've come to the fisherman's forum for about, oh 10, 15 years. The past two years I've been out of town when it's happening, and I was out of the country last year, so I wasn't here.

MF: Um, so—uh, so you don't necessarily know what's eating them, just that something's eating them.

CP: We don't know what's eating them, but where we are—so the two most likely predators, you're right, are green crabs, and there's this thing called the milky ribbon worm that a lot of people talk about. There are places in southern Maine where they talk about doing, um, when they go digging they do one turn of a hoe and they'll get up to, like, five of these milky ribbon worms. We'll maybe see five in a whole tide's worth of work. And so, much lower density of those. On the other side, green crabs are just huge, huge numbers all through these flats. I haven't kept track as well as Brian does, so Brian Beale when he looks in his traps, his little—his little predator exclusions, 'cause sometimes green crabs get into them as larvae. And when he does that, he notices it goes down a lot, in terms of the number of clams that are there, living. And so that implies that the crabs are actually being the predators. We haven't really noticed that as much, but we haven't been keeping track of it as carefully as he does.

MF: Uh, but it's interesting that there are, there are clam larvae. There are tiny baby clams out there—that the, um, the crashing population hasn't led to uh there being no babies—

[0:06:17.8]

CP: It doesn't seem like it, it's—it's kind of amazing 'cause, like we—um clammers talk a lot, they use a term "dead mud" a lot, and so they use this term which to them means that a flat is like, used to have clams and now no longer has clams. And the kinds of explanations that they use to—have traditionally used over the past five years, our clammers, they've talked about worrying about PH, they've talked about worrying about mussel dragging, and we've put one of our sets of nets in between Thomas Bay and the Twinnies in Bar Harbor which was a place where people specifically said "dead mud." That was a place where our recruitment of clams was 1200 a square foot, I think was the average.

MF: And is that a lot?

CP: So, a square foot, now imagine 1200 clams in there (laughs). That's a lot. It's just—that's a buttload. It's a scientific term that means a lot. And so, just amazing numbers and you looked outside and there were hardly any. And so you're gonna go "Oh, it's—it's not producing clams, but the reasons it's not producing clams is that something is taking them out."

MF: It's not dead mud, it's murdered mud!

[0:07:24.3]

CP: It's murdered mud, yeah it totally is. And so it's—you know, because—and with clams, you know what, what's really fun, you go out there with clammers, and clams are really a nice fishery to work on because there's two different things going on ecologically. There's like, the pattern that you see which is, you know, the "what," and then there's always the "why" question of what's causing it, right? And this is—you were alluding to this earlier, well it could be green crabs or it could be something else. And in some fisheries like groundfish, or shrimp or

something there's even an argument about what the "what" is. Right, there's argument about how many ground fish are out there. Clams are easy, you walk out on a clam flat, everybody can look at the holes, you can look at how big the holes are. The "what" is out there, is really straightforward. So it gives you—I like that fishery because it gives us a common ground to be able to talk to people so that we can agree on that. And then you come up with the "whys" and the "whys" are kind of cool because those are the hypotheses that you can then, as a scientist, go out and test. So it's really—it does provide—it makes it an easier, to me, conversation to have with fishermen, trying to figure out what's going on.

MF: 'Cause you can agree to a certain set of facts?

[0:08:31.4]

CP: Yeah, exactly. You know, like, in a shrimp fishery for example, has been closed here—you know, there's people out there going "There's shrimp out there, we should be fishing them." And, and the managers are saying "No there aren't." And so it's really hard to get past that first stage where you can't even come to some agreement. Um, yeah and so—and so I like intertidal fisheries because they're much more obvious what's there. So that makes it a lot better, and they're a lot easier to work on with students too.

MF: Um, and what about, what about something else? What about the alewives, how have they changed?

[0:09:01.8]

CP: The alewives, so—the little run in Somes Sound that um, there's—it's um, it's in Somesville and it was—the land was owned by a land trust. Somes Meynell Sanctuary. And they were just kind of, like, preserving land. And they finally kind of went "Wow, they've got—there's this old fish run here," and we actually had somebody that had harvested it in the '70s who was still around, a guy named Dennis Smith who was great. And he was really interested in kind of conservation, and so the sanctuary actually went out and got money through a bunch of sources to kind of rebuild the fish ladder. And then the first year that they just kind of got partial counts, they only saw about 300 fish. And now, about 12, 13 years later, over the last four years we still don't have tons of fish, but compared to 300, it's like thirty to forty thousand. And so, and so it's, it's done much, much better. And—and so now right now that still isn't being harvested but we still do a lot of educational work out there. I've been out there the last few years in April, usually on Earth Day with students and we, um, we basically go out there, try to shut down the flow and kind of try to rebuild the ladder as best we can so that it works. And then you have fish running up it, it's—it's fun. We're not as successful, there's been some amazing success stories in maine in terms of alewife restoration, and there's been really successful fisheries. Um, even in our area, in Taunton bay, Gerald Young takes care of a couple of runs and um, we've had some—some good management there. We've had a DMR person, Claire Enterline, who was really good about being out in the field and working with people. And the fishermen realize if they had the run for multiple years, if they had—so the way alewife runs work is you can, a town can actually lease that run to somebody to catch some of the fish and sell them, um and when they do that, if it was on a one year basis, there was no conservation incentive for the person to have that. Cause they

could just fish it that year. So what Claire started doing with DMR, they started giving people five year leases, at least, on these places, or encouraging towns to do that. And so somebody like Gerald's a perfect example. He goes up, makes sure the river's clean, does conservation, some years he won't take as many fish because he's really got a much longer term kind of thought process. And so alewives are fun. And the other thing I really like about clams and alewives is, um, so what—how do you make clams, how do you increase clam numbers, and abundance, and fishery? Well you do it mostly by cleaning up pollution sources. And, um, who doesn't want to clean up pollution sources? And so, what happens when you increase alewife runs? Well, then you have more bait for fishermen. And so these are both situations where the conservation people, and the fishermen, and the local citizens are all on the same page, and they all want the same thing. And so there are fishery examples where conflict, that initial conflict that you sometimes have doesn't really exist, and it's like—can be a win-win. And so I really—I'm not a big fan of conflict, and so I really like finding places where what I'm working on them, everybody can kind of see a positive gain. And so these are two fisheries where that really, really, clearly happens.

MF: And is that the case with rockweed? Or is that—

[0:12:18.8]

CP: Rockweed's different, rockweed's a complicated one. Because rockweed—the state has owned this, that they haven't done very much management on rockweed. The only rules about rockweed is that you have to leave 16 inches standing when you cut it. And rockweed people are concerned about rockweed because we think it's a habit—well, among other things and just beyond rockweed, we think it's a habitat for a lot of other organisms. And so when we're turning it into a 16 inch lawn, and we have plants that get 5, 6 feet high, like how is that changing that dynamic? And some landowners Downeast were really concerned because some of the harvesting which can be mechanical where it sucks up the plant, they thought that in some of the shales Downeast, that it was actually pulling the plant up by the holdfast and was really wrecking things. And so the local landowners were really trying to get rockweed—it had been working to try to make rockweed part of their land. Because in Maine, you have this ability to have the lease down to the low intertidal which is really unusual. Almost everywhere, the whole intertidal's public trust. And in Maine it's not. In Maine, like in Massachusetts, the exception it—to the low intertidal is the upland land owner's with the exception of fishing, fowling, and navigation. And so the question is, "so does that include rockweed?" So, is rockweed like a clam? Is it a fishery, or is it like a tree? And if it's like a tree, then, you know, when you go to somebody's land and cut their wood down, you pay tipping fees and stuff. And so, is it their own private property, or is it something that came off, um, is it something like a fishery that really comes out of the water. And so, that's turned into a really interesting dynamic between the landowners and the fishermen. 'Cause the landowners, if it ends up becoming the landowners land and you have to get permission from every landowner, it's really gonna pretty much gonna collapse the fishery I think. And would also potentially collapse other fisheries like edible algae which is another one. 'Cause rockweed really isn't used to just eat, per se, it's used for supplements and things for cattle feed and food. Or for agriculture. Um, so it's an interesting one because most conservationists I know, which I would count myself among, believe very strongly in public trust, we believe that it's a public responsibility to keep—keep track of air and water, that those

are like, those are things that people shouldn't own. I feel the same way about the intertidal and the resources. Most of the people that are pushing against it are probably—most days would call themselves conservationists, but they have land that they own where they see something going wrong. And so what it really means to me is that the state hasn't done an effective job in managing it. And the upland landowners don't trust the state to manage it, so they want to take over the management of it themselves. Which is really more of a—of a state stewardship problem than it is anything else. And so, it's one of—and the state, I mean the entire rockweed harvest is one person's side job in the Department of Marine Resources. And so it just doesn't have that kind of—they don't have the manpower, they've been getting cut left and right. Um, they just don't have really the ability to do it, and I think they acknowledge that. So it's a—and so what we did is: the harvesters hadn't really come into Frenchman Bay yet. We knew they were coming, we held the meeting where we brought all the stakeholders together as Frenchman Bay partners, we had about 70 people come to Sullivan two years ago—three years ago. And um, out of that, one of the really clear things is that we had no idea what the resource was like in Frenchman Bay. There were all kinds of different estimates about how much it grew, how much biomass there was. And so Hannah Webber and I, and Hannah's at Schoodic Institute, started a project where we've just been going around the bay and doing the basic biology. And so a lot of times what I try to do in my work is not necessarily to try to, um, go directly at the policy questions, but to try to supply the background information that can inform those policy decisions.

MF: Um, but you also, you also live there.

CP: Yeah.

MF: And so, I mean, you—there must be things that, not necessarily about rockweed, there must be things um that as a resident and as a member of the community, and somebody who's raised children there, there are things that must concern you about changes.

[0:16:54.5]

CP: Um, you know, yeah. I mean, for me the—uh it's—I mean I go out, and I kayak all the time, um, we spend a lot of time out on the water, and we're on the shore. Um, we spend a lot of time on the island, I probably spend—I don't know, I probably spend close to 100 days in the park every year, between biking or hiking or doing something, right. So I'm out there a lot, um, except this winter which has totally been horrible. But most years, a lot. And so, um, I enjoy being outside, I enjoy being on the water, um, most things that are happening on the water, um are, I think, a little more hidden. And so, I don't think you necessarily walk on a clam flat and realize how much it's been depleted by predators, you don't—you know, some of the other things, I mean in Bar Harbor, cruise ships are a big issue. Um, it's a really interesting problem, um, so we're—one of the things we're doing there, again, is the biggest complaint about cruise ships is—so this is a complicated question, because people are concerned about cruise ships, and this is what happens to me as a scientist a lot. People will come to me, so I've had people come to me and kind of go, "Ok, we would like you to do a study to show why this aquaculture facility that they want to put in is gonna be bad biologically so that we can't have it put in." I kind of go, "That's not what I do" (laughs). And I think what's sad is that um, people—I think the biggest concern about cruise ships isn't the effect on the bay biologically or chemically, the biggest

concern about cruise ships are aesthetic problems and quality of life problems that gets overrun with tourists at time from these cruise ships. I think they feel that that element of their concern, um, doesn't have any force in the policy discussions. That they feel that that's treated with less value than a scientific answer. And so, they come at it by kind of going, "We wanna show the cruise ships destroy water quality. That they have bad water quality, they have bad air quality." And so we look at those data and we kind of go, "No, there's actually very little evidence that water quality has been impaired." And one of my graduate students is updating the Frenchman Bay atlas right now to, to show that. Like, we have pie charts with and without cruise ships, and they look remarkably similar. Um, but at the same time, you don't want to use that to stop the conversation. You want to use that as a starting point to go, "But there are real concerns." They may not be about water quality, but your concerns about aesthetics, your concerns about quality of life are real, but you should be honest about those concerns and, and go from there. And, um, I don't think they feel that their voices are heard on that. And that's, that's the hard part about that discussion. We actually, Frenchman Bay Partners, we're going to have a meeting in June this year to talk about water quality in the bay and that's one of the ways we're trying to think about how can we both present the scientific information that shows when things are a problem and when they're not, but leave room for, um, those aesthetic concerns, those quality of life concerns that are so important for people who live in the bay.

MF: I guess people know there's such a thing as an environmental impact statement, but there's not necessarily an aesthetic impact statement.

[0:20:19.9]

CP: Yeah—and you know, it's, it's that when things—if I can put a number on something, than it seems to have much more credibility in the world than if I just have an emotional response to something, and emotional response are important, and they're real. And um, trying to make sure that those find ways to fit into policy decisions in real ways is sometimes very hard and frustrating for some people. And so, they um, and so they do. They come to scientists or other people and kind of go, "We want you to show—" and it's just like, that's such a non-starter for me, right. And so I've had that with aquaculture before. Um, and aquaculture's the same thing, it may be that, you know, there—some aquaculture has very little impact. I mean, some aquaculture has pretty strong impacts biologically, you know, fin fish aquaculture is really different than shellfish aquaculture. But, if somebody's living in a neighborhood that's residentially zoned, and you have the moral equivalent of a factor 100 yard offshore, that is—that's a legitimate concern. This is not—I did not expect to have a factory offshore. But how do you—but those same people in the morning at 5 o'clock, when they hear a diesel engine coming by on the water, they think that that's a perfectly good aesthetic because it happens to be a lobster boat, and that's what's happened there. So, it's a—it's a hard dynamic to work on. And trying to talk to people about—what is—how those things affect them personally is really a difficult conversation to have.

MF: Um, what about things that, um, things that you're concerned about. Like, you mentioned that you're outdoors a lot, you're in the park a lot. Um, are you concerned about more, you know, having lots of tourists in the park? It's um—

[0:22:13.7]

CP: You know that—it bothers me a little bit, but not too much, because even when I'm in some place like the park, I can go someplace and only see a couple people on a hike in August. But I don't go to—I won't go to Cadillac Mountain in August, right. When I'm hiking I'm going other places. And so, I know—I mean it's a tough question. Do I try to concentrate all the tourists in one place? I mean I feel for—Bar Harbor creates this kind of, like, tourist shadow, like a mountain range. That all the tourists kind of come up from the South and stop more or less at Bar Harbor, and then you get this desert of tourists behind them. I think that one of the things that would be really great is if more and more tourists started going Downeast, because the more time I spend Downeast, the more I think that it would be wonderful if more tourists were going down there, I think that there's a lot of economic development that could happen down there. And Bar Harbor gets pretty damn crowded. And so, it would be nice, I mean Schoodic's trying to develop that, those are not easy things to develop. But um, that would be a great thing to see. I mean, what I'm probably more concerned about is when I start seeing things like last summer, lobstermen starting to pull out of the top of Frenchman Bay early in the summer because the lobster are leaving, because the temperature's in the mid 60s. And so—and that's just unprecedented. And so, seeing those subtleties that are caused by, um, temperature issues and stuff, and so really the warming of the Gulf of Maine is probably, um, you don't necessarily see it every day, but when you do see it and you look at where lobster catch is going, and you look at by county—I've shown students really clear graphs of by county, and you can just watch the southern counties go down and the more eastern counties going up. And it's really clear that right now the, the concentration is in Stonington, at the way we're going, 20, 30 years it's gonna be in Jonesport. And, and all of that—that—a lot of that is going to go away, and there's a lot of people buying a lot of big boats, and it really scares me for those people and those communities. 'Cause, Downeast Maine, a lot of these little towns, if they lose like, clamming and lobstering, I, I just don't know how those towns still exist really.

MF: What did you think about that report from GMRI last year about sort of the long term forecast, lobster forecast?

[0:24:40.3]

CP: Yeah, you know the—so the—I don't know, Matt, exactly which one you're referring to, but they've done a couple—GMRI has done a couple of interesting things. And I also know Rick Wally pretty well, who does the lobster settlement index. And um, one of the problems is a lot of our old data—so you're trying to—on fisheries data you're trying to forecast by backcasting to try to figure out what things used to be like and then look forward. But the world's changing, and so the back casts aren't necessarily good predictions of the future anymore. So, like, with Rick's lobster settlement index, it used to give a really good predictive ability of what the future in lobster would be, 'cause lobsters take an amazing long time to get to legal size, about seven years, so you actually know what's coming. And the lobster index has been doing horribly, this is the number of little settlers. And it implies that there's just a disaster about to happen. But the other thing that's happening is where lobsters settle has probably really changed. And they're probably now with temperatures over a much wider range of bottom. And so, it's possible there's just as many lobsters settling, but they're just less dense over a much wider area. And so,

because we don't know that, we don't know if the new predictive ability going forward. Is this lobster index just going really just do exactly what it says it's going to do, have this major collapse soon? Or, is it going to, um, not be a good predictive tool anymore because of the way larvae behavior has changed? And so that makes it really, really tough. And, you know, and so I, I do believe that, you know, lobsters are going to continue to move Downeast and those temperatures are going to continue to increase, um, how much it changes the lobster industry is gonna depend a lot on whether or not if there's anything catastrophic happens, things like a shell disease outbreak or something could really have a major impact on the industry. And those are just incredible unknowns. We think that they're more likely to happen when temperatures get warm, you look at a place like Long Island Sound. Long Island Sound is a very different place than it used to be for lobsters. And it would be—it would just be catastrophic if something like that ever happened in Maine.

MF: Um, uh, we have these sort of general questions—

CP: Mhm.

MF: —that we're asking everybody. So, what, uh what do you value about your community?

[0:27:06.0]

CP: What do I value—what I value. That's an interesting question. I value—the things I value about my community, one of the things is that in relatively small communities, individual people can make huge differences. So there can be champions for things. And um, the communities that I work around and the people that I work with are champions. And those people make huge individual differences in their presence, they're just—you can just see impacts of individuals, so you can see impacts of somebody like Dwayne Shaw who works for Downeast Salmon Federation, what he's done in terms of increasing river connectivity, increasing the health of rivers, increasing alewife runs, having the potential to bring salmon back. You can see it in somebody like Jane Disney who's gotten all of Frenchman Bay interested in the health of the bay. You can see it in all of these individuals, you can see it sometimes in like, people like DMR employees that work really well one-on-one. They're clam people, they have three clam—they have three people who focus on clams who meet with all the town committees, and there are 70 or 80 town committees. And so all of them are going to like a meeting a day, and the one who comes to our meeting, Heidi, lives in I think Perry or Pembroke. So, Bar Harbor to Pembroke's a long drive, and she's doing that all over the place, all the time. And um, she comes into those meetings and she's a great resources, and, and, you just really appreciate those people who are coming out there and interacting with folks and treating them with respect, and you just see that over and over again in these communities. So I think I appreciate the individuals, and especially those individuals that really, they clearly care about those communities, and they make a difference. And I grew up in Los Angeles. Maybe it was happening in Los Angeles, but it was a little harder to see how an individual could make a major impact. I'm sure it's happened at times, but it's a—in a small community you just really see that over again. Bailey Bowdoin in Penobscot, Gary Edwards in Sullivan. There's just these people over and over again in these communities that make an incredible impact on their communities. And that's just within this one area of kind of natural resources along the water.

MF: Um, what—how do you think your life would've been different if you had stayed in Los Angeles or if you had ended up somewhere else?

[0:29:31.4]

CP: So, when I came to College of the Atlantic in Maine, I came because—so I was, and sometimes I think I still am, I'm a research scientist, and I'm pretty good at it. And so I do good work. And when I came to College of the Atlantic, it was a very specific, um, decision to come and mix teaching, especially with undergraduates, with research. And so, my resear—I would be, if I were at some place like the University of Connecticut or Scripps or somewhere, I would be much more of a researcher, much more of, of working with, um, you know with graduate students, working on just—on much more abstract, evolutionary biology questions. Where coming to Maine, working with students, working in a very interdisciplinary atmosphere where it was really important to give students practical applications. Most of my grants that I write now are about getting money for students to go out in the field and do work, and often in community, and often with people. So probably the biggest grant . . . we had a foundation come to the college about nine years ago and said, "We want you to solve fisheries problems." And I went, "We can't do that." But there's a lot of good places around here working on that, and we've pitched about three places to them, and they decided because they knew Penobscot East, they would pick Penobscot East. And so we started with a three year grant to Penobscot East when Robin, Aldin and Ted Ames were still the directors there, um. And what it turned out to—so we were sending students there for internships, they were coming in and giving talks and interacting with our students, and that just kind of opened up this whole 'nother level of community work with students on fisheries and natural resources. And we've kind of been just growing since then in places like the Downeast Fisheries Partnership, and other things we've been doing.

MF: Hm. And so, you must know people who you went to school with or did your training with who, uh, teaching undergraduates and doing community stuff was probably not, like, their fantasy.

[0:31:31.4]

CP: No, totally. I mean, but you know, an interesting thing happened. So when I first started grad school, I was in grad school in the '80s. And when I started, doing something applied was really looked down on. And, and, doing—I remember I had a graduate, a friend that was a graduate student that got a summer internship to go work for NPR and be the science correspondent as an intern. And, um, and his committee, his PhD committee said, "Why would you ever want to do that?" 'Cause that's just such a dumb thing to do, I mean you're not gonna be a scientist. And, um, and you just—you look back on that and you go, "Oh my god, what an incredibly cool thing to be doing." And I think starting in the late '70s and early '80s, people started saying, "You know, if your work, if it has applications to conservation, that's not a bad thing." And I think now, in my field, in behavioral ecology and evolutionary biology, almost—the majority of people are now looking at conservation and more applied aspects of their work, and so it's been a really nice change in the field that, um. And so, I think that most of—I don't know how many of my friends went through the same transition. I think some of them do, it's almost like a scientist

midlife crisis is, um, you do pure research and then you get to about 50 and instead of buying a corvette, you kind of go, "What is the work I can do that now matters to the world?" And I've seen that in a lot of people. Where they've, uh, slowly transitioned to where they actually, they're happy to make differences in their field, but they wanna go beyond that. And so they start doing more applied work, more conservation work, more work with community.

MF: And, what about, uh, I mean, now that you've had uh, you've had this—you've had this whole lifetime in Maine, you've raised kids here, would you want, would you want them to continue living in Maine, or do you think they would be better served moving somewhere else?

[0:33:38.2]

CP: So, um, my kids love coming back. Which is awesome as a parent. I love it that my kids love to come back home. My daughter's actually just finishing vet school at Tufts. She's a large animal vet, she actually has a fame grant that pays off if she comes back to Maine and is a large animal vet for four years. So she's right now looking for jobs to come back to Maine and work. Um, and so, she could easily become a large animal vet in Maine. Um, my other daughter went to the west coast for college, she went to Lewis and Clark in Portland. She loves Portland, Oregon, I don't know if she would move back, but if her best friend who is her older sister ends up living in Maine, she might come back too. Um, I would—you know I'm happy—I care, you know, what you care about as a parent is if your kids are happy. And if they can be happy in Maine, I totally want them to be in Maine. But I want them to be—just find that place for themselves and know where they want to be.

MF: Um, I—uh, spent my high school years the town over from Grafton, Westborough.

CP: Uh-huh.

MF: And uh, so we'd go to the uh, the—Tufts at least used to have this annual sort of open house thing—

CP: Yeah. Mhm.

MF: —where you could go. Very cool.

[0:34:46.2]

CP: No, it's great, and we've actually at College of the Atlantic we've actually been sending almost a student a year to Tufts the last two or three years, I'm really proud that we're uh—for a college that you don't think of having these kind of—it's all interdisciplinary, and not really these specific programs, the fact that we have students that can be pre-vet there is really kind of cool.

MF: Yeah, um, Griffin, do you have any, do you have any questions?

GP: No.

CP: Okay.

MF: Yeah, I think what we um, we've hit our half hour, but um, do you have any other, like, sort of issues, or worries, or topics?

CP: No, I think I, I think I got stuff in okay. Let's—what, what I'd say—I'd say is that, you know, one of the most fun things to do for me is: it took a while to be so, and I'm on clam flats with people now, they tend to know me. The fishermen, like I know a lot of commercial fishermen. And what's really happened, it's been fun, is that—well at first they, they showed an amazing amount of deference to me because I have a PhD and I'm out there and they expect me to know everything, and I don't. Because they spend a lot more time on the flats than I do. And so, they have a lot of knowledge. And so, I spent actually a fair amount of time just kind of making it clear that, like, they have a lot of knowledge that I didn't have. And so the most fun thing to do on a flat now is when a fisherman comes out there and they want to show me something, and they show me something, and it's kind of cool, and they tell me about it. And then they show me something else and they go, "And I don't know what this is. Do you know what this is?" And I'll go, "Oh, that's like a worm egg mass, that little gelatinous ball that's sitting there." And they'll go, "Oh, I had no idea. I've been seeing hundreds of 'em." And so you get this exchange of knowledge back and forth, 'cause there are things I know that they don't know, and a ton of things that they know that I don't know. And that—that respect and exchange of information really is a wonderful thing that I really appreciate about the fishermen that I've been out there with.

MF: Hm. Excellent, thank you.

CP: You're welcome.

MF: Um, can we get you to, uh—

CP: Sign one more thing?

[0:36:45.3]