Jonathan Roth: — [inaudible] working with them.

Karen DeMaria: Yes. Okay.

JR: We have had or [inaudible] 150 yards of shoreline [inaudible] high tide [inaudible]. We had that before there were clams [inaudible].

KDM: When did they put that in?

JR: I would have to look back. I'm not sure exactly when they put it in. But we know that we came back about two years after they had started the land fill, went out there, and we hit a real bad [inaudible]. My little brother [inaudible]. We trained on skiffs, politically, as well because we were here [inaudible].

KDM: When was the last time you did a [inaudible]?

JR: We have done a [inaudible] for over five years. But we didn't know that after [inaudible]. I met with people from the state [inaudible]. There were some corrective measures done. We know [inaudible].

KDM: Well, they stopped putting [inaudible] on land.

JR: [inaudible] But they were very [inaudible].

KDM: Have you [inaudible] groundwater model came from the land fill, spent a lot of time at Long Key and [inaudible].

JR: There's a lot of debris in the [inaudible]. There's a lot of broken glass. [inaudible]

KDM: Do you know if the liners were trapped? People put their traps?

JR: No.

KDM: [inaudible] from the shore line to that area, [inaudible]?

JR: From the – okay. They ran their traps out farther there, yes, pretty much the length. Pretty much the length. But there was a point where you could come out around and come back to [inaudible] all the way through there. . It's pretty bad [inaudible].

KDM: What is your mailing address?

JR: [inaudible]

KDM: [inaudible] biology?

JR: [inaudible]

KDM: Indiana?

JR: [inaudible]

KDM: [inaudible]

JR: [inaudible] We had to work pretty much through those [inaudible]. A lot of the [inaudible] over to Long Key. [inaudible] [inaudible] green algae [inaudible]. But good varieties grow, in particular early on in the [inaudible] died at around the point of [inaudible]. This year, I've been out there. They're trying to [inaudible]. There's a lot of variety [inaudible]. There is [inaudible] there. Yes. I mean, it was just like the [inaudible]. But I've never seen that much [inaudible]. But I don't know what happened to [inaudible]. I think the [inaudible].

KDM: I know at [inaudible] they are having a real bad [inaudible] the area where the [inaudible] and the sewage [inaudible]. There is no such thing.

JR: Probably [inaudible].

KDM: [inaudible] [laughter]

JR: [inaudible] But that variety was just [inaudible]. Again, I don't know what [inaudible].

KDM: [inaudible]

JR: [inaudible] It's never going to [inaudible].

KDM: He used an indicator or something? Oh, okay.

JR: It could have been an indicator or something. He goes out there [inaudible]. Because this kind, you can't find that on the reef [inaudible] scattered around but –

KDM: It is not in a dense population.

JR: – not in a dense population [inaudible] change. Now, we haven't had the [inaudible] population. I did see that this year, which really strikes me because [inaudible] what we were going to find [inaudible].

KDM: This is like a change had occurred in one year?

JR: Yes. Last year [inaudible].

KDM: [inaudible]

JR: [inaudible]

KDM: [inaudible] left me a message the other day. He was going to give me your name. Well, I had asked to think of anything that [inaudible] let me know. He said something about in the last five years, there has been a 90 percent decrease in sea horses [inaudible].

JR: Well, this is just off the top of the head [inaudible]. A lot of times, we will find that the two or three [inaudible]. We haven't found any this year. We did find one in [inaudible] ocean side.

KDM: Have [inaudible]?

JR: It was in a [inaudible]. But that's the only one we've seen this year. Normally, when they go out [inaudible]. So, I can't say [inaudible].

KDM: You haven't [inaudible].

JR: We haven't [inaudible]. But we haven't seen one this year. Obviously, we [inaudible] to other things [inaudible]. We're going to find more urchins [inaudible].

KDM: Urchins [inaudible]?

JR: [inaudible]. But again, it's not much [inaudible]. It's really the [inaudible].

KDM: At [inaudible]?

JR: At [inaudible] before they [inaudible]. There's a little channel [inaudible] channel on the other side [inaudible]. Usually, and we've been out there [inaudible] there were more [inaudible] than what we found there this year. We did find, however, a [inaudible].

KDM: [inaudible]

JR: [inaudible]

KDM: Just this year?

JR: Yes, This year [inaudible]. The other thing we [inaudible]. The last two years, there have been a significant number of [inaudible].

KDM: [inaudible]

JR: [inaudible]

KDM: Okay. See, I think about [inaudible]. [laughter]

JR: [inaudible]

KDM: Yes, I know. I have a [inaudible].

JR: There are a fair number of [inaudible] not as many [inaudible].

KDM: [inaudible]

JR: [inaudible] can take any of them.

KDM: [inaudible] [laughter]

JR: [inaudible]

KDM: [inaudible] really.

JR: [inaudible]

KDM: There was not any [inaudible]?

JR: No. [inaudible]

KDM: What about that [inaudible]? Overall, [inaudible] he used to tell me about [inaudible].

JR: There is a lot of the around [inaudible].

KDM: Is that something that has been normally continuous the last twenty-something years that you have been here? Or have you noticed that recently, there came to be a lot more that you have been able to find anything?

JR: [inaudible] a lot of things in the water [inaudible]. It didn't seem like [inaudible]. It is hard. You get an awful lot of [inaudible] if you go along that bank [inaudible].

KDM: You cannot [inaudible], right? [inaudible]

JR: Yes. [inaudible]

KDM: [inaudible]

JR: You go up [inaudible].

KDM: [inaudible]

JR: Yes. [inaudible] out there [inaudible].

KDM: [inaudible]

JR: No.

KDM: It is an extra [inaudible].

JR: It's an extra [inaudible].

KDM: [inaudible]

JR: Some people thought [inaudible].

KDM: Seems to be a lot of [inaudible].

JR: [inaudible]

KDM: Yes. A lot of it changes the whole ecosystem of the Florida Bay and [inaudible] years ago. There is no doubt about that. I mean, there used to be a significant clam bed in Florida Bay. That is the point. So, it is obvious that the movement of fresh water has [inaudible]. I mean, we all know [inaudible] significantly also. I mean, the ladybug population is really down. Now, in Florida Bay, Florida Bay is like a big [inaudible].

JR: [inaudible]

KDM: Then why do we have [inaudible] the lack of freshwater flow is [inaudible] constructing a normal system through Florida Bay. Because normally, it would have high saline at certain times of the year. [inaudible] pollution coming down from the West Coast. Who knows?

JR: Well, that [inaudible].

KDM: Exactly.

JR: [inaudible]. If we've seen a [inaudible]. They are [inaudible]. I have a [inaudible]. But I do know that there's not much time [inaudible] anymore.

KDM: Do you think that maybe the collecting of them has anything to do with it?

JR: Well, that [inaudible] don't know how much [inaudible].

KDM: Most other people would say, "We have not seen star fish or grayfish [inaudible].

JR: Well, I wouldn't have thought that [inaudible].

KDM: [inaudible]

JR: I also think these are [inaudible]. I don't know where [inaudible]. Although this year, we have seen more [inaudible] than we have seen in the past two years. We have I also think [inaudible] out there.

KDM: [inaudible] refresh my memory.

JR: [inaudible] out there. [inaudible]. I've seen the other [inaudible] this refers to parasitic [inaudible]. But a lot of parasitic [inaudible]. Well, that would indicate that the whole food chain [inaudible] in pretty good shape than [inaudible] quite a lot of things out there. [inaudible]

KDM: [inaudible] over something that you really [inaudible]?

JR: [inaudible] I haven't been one [inaudible]. We know there are [inaudible] straight out from the other side of the [inaudible]. As for [inaudible], we haven't seen many [inaudible] here. It's been [inaudible].

KDM: Really?

JR: Usually, they are just all [inaudible]. The anemones, plenty [inaudible]. I've seen [inaudible].

KDM: The first year you really had [inaudible].

JR: Yes. The first year, I have [inaudible].

KDM: Remember when they had the [inaudible]?

JR: Yes. [inaudible]. If we pick up one or two, I haven't seen much [inaudible] used to be all over the place. [inaudible]

KDM: The last time I ever done [inaudible] you want it.

JR: Yes. [inaudible]

KDM: [inaudible] this year?

JR: Yes. Overall, [inaudible]. I've got photographs of algae here.

KDM: I mean, algae [inaudible] always talk about [inaudible] conditions [inaudible].

JR: [inaudible] All that is going to [inaudible].

KDM: Is there anything now?

JR: Nothing is [inaudible].

KDM: What is the [inaudible] second most common species of plants on the bay? [inaudible]

JR: Overall, the [inaudible]. There are areas where [inaudible].

KDM: What about the microalgae like the [inaudible]?

JR: [inaudible]

KDM: Are there indicators or anything or that is the normal...

JR: I haven't [inaudible] shallow water algae [inaudible].

KDM: [inaudible] more of the rock?

JR: Something that [inaudible].

KDM: [inaudible] the areas where [inaudible] pretty much concentrated?

JR: That's [inaudible].

KDM: [inaudible]

JR: [inaudible] bay side of [inaudible] where they come in [inaudible]. In that area, there is [inaudible]. That's the place where we [inaudible].

KDM: Do you have [inaudible]?

JR: No.

KDM: [inaudible] since he got married, said he [inaudible]. The University of South Florida [inaudible].

JR: Did he work with [inaudible] South Florida?

KDM: Yes. I think he did. Yes. [inaudible] branch. One of their [inaudible].

JR: [inaudible] head of our branch. [inaudible] five years down.

KDM: The line is really [inaudible].

JR: [inaudible]

KDM: Overall, [inaudible] twenty-seven years you have been down here or coming down here to [inaudible]. What is [inaudible] most change?

JR: [inaudible]

KDM: Yes.

JR: [inaudible]

KDM: All right. Not [inaudible].

JR: [inaudible] so much easier [inaudible] have the original [inaudible]. [laughter] It's been a hard [inaudible] to control [inaudible] to control what people do [inaudible].

KDM: [inaudible]

JR: [inaudible] Now, I think that they are going to [inaudible].

KDM: [inaudible] populations [inaudible] coming down and [inaudible]. I do not know how much [inaudible] because I am fairly a new comer. I have only been here five years. But I have talked to a lot of the old timers. Usually, the first question I ask them is, what is the most significant change that you have noticed since the years you have been here? First they [inaudible] on the water, on land, and [inaudible] significant local [inaudible]. We have a lot of the [inaudible] people would come out in the weekend and tour. Now, anybody can rent a boat. Anybody can rent a jet ski and go out. They do not know what they are doing.

JR: Well, I like to jet ski [inaudible].

KDM: Yes, but I mean, I like jet skiing too. You do not go jet skiing...

JR: [inaudible]

KDM: Exactly. They are doing things they should not be doing.

JR: [inaudible] boats. They don't know [inaudible] stay away from divers [inaudible].

KDM: [inaudible]

JR: [inaudible] going at 25, 30 miles an hour. [inaudible] my divers in the water. He wouldn't stay away. He had to be [inaudible]. He was going fishing. I thought my divers [inaudible].

KDM: [inaudible]

JR: I had to [inaudible].

KDM: And if [inaudible] you are the one at fault, right? [inaudible]

JR: Yes. You're handling it. You are out there trying to do what [inaudible], trying to do [inaudible].

KDM: Then they [inaudible].

JR: [inaudible] is all we have. [inaudible] and the reason I think [inaudible].

KDM: [inaudible] it is not like it is not normal.

JR: That's like, well, [inaudible]. We've been trying to get the [inaudible]. [laughter] We're talking [inaudible] that it is difficult to destroy an environment [inaudible]. The public isn't aware of those. They don't get [inaudible]. So, what you have are really gross changes in the water in terms of pollution of one kind or another. [inaudible] the bay is over [inaudible]. That's why [inaudible].

KDM: You still hope. [laughter]

JR: I still hope [inaudible].

KDM: [inaudible] that even usually [inaudible].

JR: [inaudible] I've been fishing out here in the channel since I was [inaudible]. Again, the [inaudible]. There are a lot of sharks.

KDM: [inaudible]

JR: We used to set lines for sharks [inaudible]. I mean, we pulled hard. I think sharks are [inaudible]. From everything I've read and heard, there are so many more people [inaudible] breeding populations [inaudible]. It will take longer to fish the other fish [inaudible].

KDM: Seems like in the last three or five years, before the [inaudible], there is really [inaudible] specialized to sharks. But now you have people [inaudible].

JR: Right. [inaudible] markets and everything else. [inaudible] as well as game fishing and for the [inaudible]. They are taking breeding stock [inaudible]. I know when [inaudible] world was down here, one of my [inaudible]. He went out [inaudible]. He could get sharks anywhere anytime he wanted to. So, [inaudible]. They were all over the place. [inaudible]

KDM: What about [inaudible]?

JR: I haven't seen any this year.

KDM: I know that is something that most people would [inaudible].

JR: It used to be [inaudible] down here. [inaudible] Now I know we've seen sharks [inaudible].

KDM: They are not [inaudible]. They are not good for me. They are not good for the –

JR: They are not [inaudible]. But like that, I think we still have [inaudible]. I think the [inaudible] the algae and the small crustaceans as long as [inaudible].

KDM: [inaudible] Anything overall from [inaudible]?

JR: I don't know there's anything too different as far as the clams [inaudible]. I don't know [inaudible]. I haven't seen them [inaudible].

KDM: [inaudible]

JR: [inaudible] I was told that [inaudible]. So, I don't know if we have [inaudible].

KDM: [inaudible] because of all the closures up here. It just came [inaudible] condition of the new human immigrants [inaudible].

JR: Yes. [inaudible]

KDM: [inaudible] got another boat packed [inaudible] by talking to people [inaudible] spinning around on the [inaudible]. You can see then who wants [inaudible] to do that too. [inaudible] do not speak any English.

JR: [inaudible]

KDM: What about water quality and water clarity?

JR: [inaudible] It's a whole lot better [inaudible].

KDM: When do you come down here?

JR: [inaudible]

KDM: Is that normal to know [inaudible] when you come down?

JR: Well, we have for the last couple of years, because we have come down [inaudible]. Other years, we've come down in April. A lot of times, we've been down here in April [inaudible].

KDM: So, in [inaudible]?

JR: [inaudible]

KDM: Have you heard, like in the last twenty-seven years, change in clarity?

JR: Well, I really don't think so overall. I think that [inaudible]. There are times when we [inaudible]. At times, we didn't [inaudible].

KDM: We all have [inaudible].

JR: It's been a few years since we had to the point where we could just [inaudible]. I think that reflects [inaudible].

KDM: [inaudible]

JR: Yes. [inaudible]

KDM: What about overall fish [inaudible]?

JR: Well, there are many [inaudible].

KDM: Right. [inaudible] prevent everything. [laughter]

JR: Yes. Barracuda is something that [inaudible].

KDM: [inaudible] looking for five different [inaudible].

JR: [inaudible] many [inaudible]. I did see [inaudible]. But we haven't seen any really big ones [inaudible]. The snappers, small ones, pretty much all over the place [inaudible].

KDM: The snapper, the mangrove snapper, [inaudible].

JR: We haven't [inaudible].

KDM: [inaudible]

JR: [inaudible] We haven't really [inaudible]. We were out there in [inaudible] just fishing the [inaudible]. We'd catch as many as twenty snapper [inaudible]. But again, we [inaudible].

KDM: Anything could kill off the bamboo.

JR: – making it pretty hard [inaudible]. I haven't seen any parrot fish in years [inaudible].

KDM: [inaudible]

JR: Yes.

KDM: Even in the food market.

JR: The food market [inaudible].

KDM: [inaudible] They have a market for angels and all the others [inaudible].

JR: [inaudible] They worked longer I guess. I'm not sure what they were [inaudible] size. They had a [inaudible].

KDM: Did they have a [inaudible]?

JR: Yes. I think they were cross breeds.

KDM: Yes. They have [inaudible].

JR: They weren't marked [inaudible]. There were several of them [inaudible] several varieties [inaudible].

KDM: [inaudible] again?

JR: No. [inaudible] I've added antibiotics for the last [inaudible].

KDM: I am [inaudible] like you do not try to catch unless you know how to do it. [inaudible]

JR: [inaudible]

KDM: My husband [inaudible].

JR: [inaudible] quite a lot of opportunities.

KDM: Not for me. What is the point of [inaudible] that likes to jump out of the water?

JR: [inaudible]

KDM: [inaudible] Have you noticed that a lot more [inaudible]?

JR: [inaudible] stray populations [inaudible].

KDM: [inaudible] people make comments about how [inaudible].

JR: Well, the [inaudible]. Well, after all, [inaudible].

KDM: Yes. I think we have pretty much covered everything. Is there anything that you would like to tell me that you think would be beneficial?

JR: No. I have a continuing interest in [inaudible] whether they are surviving or not. I think [inaudible].

KDM: Have you noticed a difference with the birds at all?

JR: Well, I know one thing, here on the Key, they are not [inaudible]. I don't know where [inaudible].

KDM: [inaudible]

JR: Well, I [inaudible]. I don't know whether they are just [inaudible] here at [inaudible], or they are [inaudible].

KDM: I think they are at [inaudible].

JR: [laughter] [inaudible]

KDM: [inaudible]

JR: [inaudible] and these are populated areas [inaudible] all over the place.

KDM: I happen to be [inaudible]. Then I have got a pile of stone for [inaudible]. I went to the [inaudible] a couple of weeks ago and brought a bag of small – we have big shells. We have a lot of tiny shells [inaudible]. I put crow shells out. Six hours later, it is all [inaudible] is gone.

JR: [laughter] Well, that's great.

KDM: So, my [inaudible] because we have the land [inaudible]. We have got one [inaudible]. He is huge. He never goes far. He is always right there on the property. [inaudible]

JR: [inaudible]

KDM: Well, there is something [inaudible] came down here a couple of weeks ago. About a month and a half ago, they came down here [inaudible] on what is going on [inaudible]. Only bird they found in two days. They were out on the boat and [inaudible] area, got one bird. It was dead [inaudible], floating on the water. The only bird they saw [inaudible]. Now, they were [inaudible].

JR: I don't understand [inaudible].

KDM: Well, I do not think they count [inaudible]. [laughter]

JR: [inaudible] I'm not sure what [inaudible].

KDM: [inaudible]

JR: [inaudible]

KDM: [inaudible] People are telling me one of the things [inaudible]. People on Key West all [inaudible]. They have never seen this much bird life, wading bird and the others. They have never seen this much bird life that they have seen this year. Bait fish, all the fishing [inaudible] all the birds, there used to be more people [inaudible] and stuff. Everything is down on Key West now. Everything got pushed down because of that bad water. Maybe it is [inaudible] all go back. But everything has been pushed down [inaudible].

JR: Well, [inaudible].

KDM: [inaudible] significant amount of [inaudible].

JR: They [inaudible] something.

KDM: Louisiana and [inaudible] too.

JR: Yes.

KDM: Louisiana.

JR: [inaudible]

KDM: Yes. They [Inaudible] check out the navigators more.

JR: Well, we had a [inaudible] interest in the [inaudible]. Makes it easy to [inaudible].

KDM: Oh, I know [inaudible]. If you have a book like this [inaudible].

JR: [inaudible]

KDM: I [inaudible]. That is the one thing that is so hard to find. [inaudible]

JR: Well, the [inaudible] is going around [inaudible]. Well, you've got to know the terminology to begin with.

KDM: Yes. [inaudible] when I am out in the field something [inaudible]. But when I go out, I do this [inaudible] evaluations. Now, I can have that on the boat. I can figure I know exactly where to go to find the names and everything. I have got that some of the names with [inaudible].

JR: Well, a lot of these are easy. But again, a lot of them are [inaudible] are closely related to [inaudible]. Last year was the first time I really identified how [inaudible]. I find [inaudible]. So, I had seen before.

KDM: [inaudible]

JR: After [inaudible]. It gives an idea of what it looks like [inaudible].

KDM: Is it [inaudible]?

JR: Yes. It [inaudible] you'll find in the same rock conditions. Center mark will indicate nitrogen.

KDM: [inaudible]

JR: [inaudible] same areas will [inaudible] reef. It could be a [inaudible].

[end of transcript]