Michael Jepson: Great. This is Michael Jepsen. I'm in Steinhatchee, Florida, today with Ellis Dosher and Robert Bullard. We're going to be talking a little bit about the red tide in this area, in the past and the present. This is December 27th. Robert, I'll start with you, if you could just tell me a little bit about how you got into fishing. Are you from Steinhatchee?

Robert Bullard: No, sir. I was born and raised in Ocala, Florida. I used to do a lot of inshore fishing as a kid. I kept my boat in Yankeetown, Florida. There is man there, [by] name of "Frenchie" Peltot, [who ]had a forty-foot Chris-Craft. He'd go out fishing and come back and pull out gags from twenty-five, thirty pounds. I always kept saying, "I want to do this." I got to be friends with him. So he took me out one day, and I got hooked. From there, when I became nineteen years old, I saved all my money. I bought me a twenty-eight-foot Wellcraft with twinengine motors and went fishing, and didn't even have a fish finder. We just drove an anchor around to the hook bottom, and you could see land. It was right off the Barge Canal and started catching fish. Then we just kept getting better and better and getting bigger boxes. Before long, the boat was all boxes. I actually sold fish in Cedar Keys to Henry Brown back in the '70s. He saw me gassing my boat up, and I come back. He said, "Did you do any good today?" I said, "Shoot, yes." I said, "Do you want some fish? Come over here." He looked at it, and we had fish laying all over the place. He said, "What are you doing with those things?" I said, "We give them away, clean them." He said, "Well, why don't you sell them?" "You can sell them?" "Yes, sir. I'll give you ten cents a pound for them." So I was selling gag grouper for ten cents a pound in the '70s. From there, we just kept getting bigger and bigger. I got a thirty-foot boat in the later '70s. We could go out and catch a thousand pounds of gag grouper. I wouldn't keep red grouper. There was plenty of red grouper. We got more money for gags. Plus, we didn't have to stop once we found the bottom. But we'd stop three times and have a thousand pounds of fish. So that's how I started right there.

MJ: Why would they pay more for gag then red grouper?

RB: They're higher demand, better meat fish.

MJ: Really?

RB: So they typically pay a dollar more. And they have done that throughout the times. All my buddies would tease me because I wouldn't keep a stinking red grouper because he stank. I knew I was going to catch them because there were that many fish. Back then, we never fished over seventy foot. We stayed in the forty-five to seventy-foot range and up to probably two-thousand. I never went past seventy foot. I stayed in that area because we didn't have to. We'd catch a couple of thousand pounds in a day and a half and come home. So red tide-wise, back in –

MJ: Before you get to the red tide, because I want to do this chronologically, I want to ask you what do you fish for now, and what kind of gear do you use?

RB: What kind of what?

MJ: Gear.

RB: Gear? We use electric reels. Ellis and I fish together. We use one hook at a time, two of us. We catch now – we can't target what we want to because they're not there no more. The gags have been depleted. I believe overfished. But now, we catch red grouper – thank God we've got a red grouper now – and snapper that we lease from the fishery. That's primarily what we fish. We usually catch five hundred pounds – well, five hundred, six hundred pounds of snapper a day, and maybe three, four hundred pounds of grouper a day. Is that a real number? That's pretty much a real number. Where, back in the day, if we didn't catch one thousand pounds, it wasn't a good day. That's what we're doing now.

MJ: Let me stop and ask Ellis, how did you get started in fishing?

Ellis Dosher: My first memory is a fish.

MJ: Really?

ED: I don't know how old I was. I'm from Fort Myers, Florida. I was born in Fort Myers. I lived there until I was twenty-one. I'm from a fishing family. My grandfather was a commercial fisherman, a net fisherman.

MJ: In Florida?

ED: In Florida. Close to where you were at. He fished in and out of Cortez at one time, but he was mainly from Bishop's Harbor, which is right down the southside of Tampa Bay. My mother was born on an island there. Anyway, my first memory is my grandmother and my uncle taking me to the railroad trestle, the smell of a [inaudible]. Every time I smell a sunfish, it triggers me back to that memory. When I was twelve years old, my father brought a Bandit boat, which is a grouper/snapper boat. It fishes a certain kind of equipment. He took me to Dry Tortugas at twelve years old, and I spent a week down there. I always loved to fish. I can't drive anywhere and not look at water. If I see water, I'm distracted. So I'm just that kind of person. But anyway, I got to see all the different kinds of fish down there, and I really got hooked. I knew I wanted to do that. I worked until I was almost thirty years old in Tennessee and came back to Florida. My parents had moved to this place, Steinhatchee, Florida. I came here and got a job on the back of a crab boat here. In the summertime, we'd go grouper fishing. We'd [inaudible] back in, we could trap red grouper. That's how I got started. I was on the back of the boat. I was a happy camper. I didn't know that life was any better. The fellow that I was working with got killed, and I ended up moving from the back of the boat to the front of the boat. I've been there pretty much ever since. That was in 1992.

MJ: '92?

ED: I've been fishing out of Steinhatchee, other than the six months in Naples one winter, two years in Cortez - up until the last two years, we were in fishing – we left here and went to Cortez because of this red tide. So we were down there fishing.

MJ: What is the first red tide that you remember in this area?

ED: In this area? It would probably be in the early 2000's. It went as far south – it wasn't as far offshore as the one in 2014 by any means. I was mainly in the ninety-five to seventy-foot depth that year when the tide I'm referring to occurred. There were dead fish, baitfish, pen fish, pigfish, tomtates, that kind of thing scattered all over the place, laying snappers, hog snapper, things like that. I didn't see a lot of dead grouper. I want to say the name of that fish is a sennet. Does that sound familiar to you? It looks like a small barracuda. I saw lots of those. That red tide was all the way – I say the 50/50 bottom. That's a 28/50, 83/50.

MJ: Could you take that map and draw the extent of that red tide that you remember?

ED: On that tide?

MJ: Yes.

ED: As best I remember? Let's see. Where are we at? Here. Probably from this area in here. I know it came up, and I saw stuff dead all the way up into the mouth of the river. I don't know how far out this way it went. But I was out to ninety feet, which would be somewhere in this fifteen-fathom area, somewhere in here, and then back this way. This is probably – I'm going to put a note on 2002 and a question mark because I'm not absolutely sure on that one.

MJ: Robert, do you remember that red tide?

RB: Oh, yes.

MJ: Was there anything that you saw that he didn't mention?

RB: One of the weirdest things on that red tide – I remember we'd stop into shore and catch live bait. When you got out there, the baits would be jumping out of the [inaudible].

MJ: Really?

ED: It was killing them. It was killing them.

MJ: [inaudible] got into there.

RB: Yes.

MJ: And it was –

RB: Yes. When you come through it – at first, we didn't know what was happening. Our live baits were jumping out of there and dying. Then we figured out it was a red tide. But that's what struck me about that when the baits would be just swimming around. All of a sudden, they're wanting to jump out of the water. That was weird.

ED: Another interesting thing about that tide was that it looked like pine tree pollen on the water.

RB: Yes.

ED: That yellow, yellow. You cut through it – like, I remember cutting through it with my boat and looking behind me –

RB: Like an ice field.

RB: Yes, the green water would come up through it. So you were cutting a contrail almost through this stuff.

RB: Another thing was, too, was the turtles. The turtles were acting really weird. Most of the time, the turtles will leave. But the turtles would come up and just swim really crazy –

MJ: On top of -?

RB: - on top of the water. In fact, we took a couple of turtles and moved them out of it, just actually moved them to get them out of that water. But the turtles were really acting goofy on that one.

ED: I do remember that red tide in this way that would come and go. I could move someplace and catch live bait like he's talking about, put water in a lug so that I wasn't bringing any – didn't put them in my live well, and then take them back where I went. I would cut through some of this stuff and be able to fish. But stuff on top was mainly what was affected by it on that one.

MJ: When you say stuff on top, you mean –

ED: Like the sennets and -I don't remember if there were any flying fish or not. I do remember seeing, like I said, a lot of the smaller baitfish floating, but that was closer to home when I got home. When I got up this way, I would see the rafts. Now, growing up at Fort Myers, I saw big red tides Sanibel and Fort Myers Beach in my lifetime, where it was windrows of fish on the beaches. They would bring pay loaders and dump trucks to get rid of the mess. When they rafted up in this tide, it was like that. But it was not near as extensive or as devastating as the one that we had five years ago.

MJ: How did you have to change your fishing practices because of that red tide? What did you do? Did you just have to keep moving? Or did you have a certain area that you had to move to?

ED: Right. I had to move out. I had to move outside of it and get offshore.

RB: You couldn't fish in it. You either had to be on the east or the west of it, and you cannot fish in it.

ED: Most of my stuff is deeper than, say, this line. Inshore, Bob has a lot of stuff down this way, which is a shallower forty-five, fifty-five foot. He might have more to say on that part. But I went this way.

MJ: You went that way.

ED: Okay.

MJ: Economically, how did that affect your business?

ED: Well, it cost me fuel.

MJ: More fuel.

ED: Yes, sure.

MJ: But you didn't have to change any baits or any gear or anything like that?

ED: You use heavier weights that cost you a little more there because the deeper you go, the heavier the weight that I fish, anyway.

MJ: Bob, how did that affect your fishing practices? Were you going more inshore from there?

RB: Well, I didn't do a lot of way offshore fishing like these guys did back then. It really hurt me because I had to move to different areas. So you're talking about this one right here at this time? I just moved further south [inaudible] area. Usually, with red tides, they're pronounced to a certain area so you can move – not like this last one – you can move to another area and find fish. But this last one was so big we had to move completely out of the area. I do recall a red tide back in, I think it was, '85 off Cedar Keys. Because I fish in there so much, it was in forty to fifty foot. It was maybe five or ten miles. It wiped up everything. That fishery – you couldn't catch a runt in there.

MJ: Did it come up this far?

RB: No, sir. It was originally [inaudible] from Cedar Keys to forty to fifty foot, right from the bell buoy – has he got the bell buoy on there?

ED: It should be right there.

RB: Yes.

ED: Right there.

MJ: Could you draw that on there?

ED: You want a different color?

MJ: Yes.

ED: Okay. From the bell buoy.

RB: Yes, the bell buoy, if you run just a little bit west of it, just about forty foot, and you draw a line –

- ED: Seven and a half fathoms.
- RB: ten miles centered on the bell buoy -
- ED: Centered on the Bell Buoy?
- RB: Out -
- ED: To the west, Bob?
- RB: Yes, to west, to forty foot.
- ED: Do you want to draw it?
- RB: You do it. You can draw it.
- ED: Okay.
- RB: I didn't bring my glasses.
- MJ: They're a necessity.
- ED: All right. So ten miles out. That's going to be about to this area here.
- RB: Then, it goes about five miles wide and ten miles long. It wiped everything out.
- ED: That's fifteen miles. So we're going to say ten miles is this way.
- RB: There you go.
- ED: Something in this neighborhood.
- RB: Yes, there you go.
- MJ: You said that was what year?
- ED: 1985 is what is he said.
- MJ: Yes.

RB: '85. The fishery did not come back until 2013 when the fishery recouped. I was catching fish like old-times there. It was amazing. I was catching eight hundred, a thousand pounds a day. That fishery came back. When that red tide, 2014 – nothing. It took from '85 to 2013 before it came back because you could go in there and catch a grouper here or a grouper there. But it took that long for that fishery to recoup.

MJ: Is that typical for red tide, for it to take that long to recover?

RB: That's the longest that I have seen. You could put a camera down there, and there wouldn't be nothing – no bait, no nothing. It was a real green color. And then, in 2013, you put a camera down there, and it was just like a whole different world. It's like magic. It recouped so fast. But until then, there was nothing. And then, in 2014, when that hit, in one week, you couldn't catch nothing. I mean, nothing. It was back to that same barren – no bait, no nothing. It was crazy.

MJ: Do you have any idea why it would have been like that?

RB: Well, the only thing we figured is the red tide had killed the bottom, because the bottom, the corals and everything – when they're alive, they're vibrant, and they're dead. We also had a lot of green stuff growing over the rocks. I just figured it killed the bottom. But if there's no bait – I say this – if there's no bait, there's no grocery store; the fish aren't there. [inaudible] grocery store [inaudible], and there was no bait there, the fish won't come. That year, 2013, bait was there. Kingfish were there. Sport fisherman was catching kingfish and mackerel. It was loaded with bait, and you can't find bait there now.

- MJ: Well, how big was the 2014 red tide?
- ED: Give me another pen.
- RB: Wow.
- ED: I'm going to show you something.

RB: I never heard –

- ED: I just looked at my books.
- RB: I've never heard red tide and I can't –
- Scott: Oh, everybody's out here?
- RB: I've never seen nothing like it.
- ED: How you doing, Scott?
- RB: How you doing, Scott?

Scott Childress: Good, how are you?

- RB: Doing well. Haven't seen you in a while.
- SC: I know. I can't remember your name.
- RB: Grouper Snooper, Bob Bullard.
- SC: Yes, sir. How are you, sir?
- RB: Doing all right.
- SC: How are you, sir? Long time, no see, my friend.
- ED: You too, buddy.
- MJ: Scott, Mike Jepsen.
- SC: Scott Childress. Very nice to meet you.
- RB: Last time I saw you was 2014 out of that north end.
- SC: That's right. Yeah, that's right.
- ED: That's what we're talking about.
- SC: [inaudible] getting pushed together.
- RB: We're all getting [inaudible].

SC: We were all having a good time. I don't ever want to see it again, though.

RB: Yes, that was the bad part. It had to end. But that was a sad - it was good for a few days, but it was really a sad outcome.

- SC: I got three good trips in. Then it was over.
- RB: Yes. When it ended, it ended.
- SC: That's all about it.

F: The guys are in there. They're going to do individual interviews right now.

ED: I'm going to include the fact that I saw fish kill all the way into the mouth of this river [inaudible].

RB: In the river.

ED: At the mouth of -I kept my boat at the very mouth of the [river]. There was stuff coming up, dying there that I didn't even know lived in that river – blennies, I don't know, eels, all kinds of stuff.

**RB**: All the way up to River Haven, this last one, it was killing fish. First time, all the old-timers couldn't believe that it killed eels and bass and all kinds of fish up the river.

ED: There's the thirty line. That's the twenty – let's see. Where's the [inaudible]?

RB: Paul and I were fishing then. We actually moved to Cortez and started fishing down there. We caught red grouper like crazy down there. Typically, they never had those red grouper, but they pushed those fish south. No snapper. We could not catch a snapper down there. We were just talking that Scott and all of us -

MJ: [inaudible] 2014?

ED: This is my personal knowledge. I don't [inaudible] – this is what I actually – I actually ended up having to go fishing in the middle grounds. Now, this is when it first happened. This is July 18, 2014. Because I started here that evening. I caught some fish. I got up the next morning, and I smelled – it smelled like what I call Bird Island, where seabirds have been roosting. I went one mile to the west of this number. This number is twelve and a forty-six. So right here. Then about a mile west, I started finding floating fish, gilled out red grouper and gags. They were blowed out. I started seeing laying snapper doing this on top of the water, lionfish. The majority of what I saw, once I got to ninety feet, for the rest of this event out here, was lionfish and jacks. Oh, yes. I don't know if it was just because they were so noticeable with that stuff, doing this in the water floating. But I didn't see – I saw some hogfish in the middle grounds in here. This tide, this red tide, it got all the way in here. I saw it –

MJ: Into the middle grounds?

ED: I saw it killing fish later, two trips after this day, all the way into here. It actually came out into here. I don't know how far it went that way. I have no idea. But it was into the twenty-seven and a sixteen in the middle grounds, which is like right down in the middle right in this area.

MJ: But you guys don't usually fish in the middle grounds, do you? [inaudible]

ED: My pattern is inshore and offshore with the fish. For years and years, I would spend most of my summer in this area, less than ninety-five foot. Like Bob taught me, and he's always said, "If we get to Mother's Day the grouper are not in this eighty-five, ninety feet or shallower, we're not going to have any year in here because they're not coming in." We haven't had one since then.

RB: No.

MJ: What makes them come in?

ED: They follow food.

RB: And water temperature.

ED: The red grouper are really food-oriented, where you - it's like the savannah. If the wildebeests are there, the lions are there. Now, gag grouper are much more structure-oriented, is my take on it.

RB: But they still – I still use this phenomenon. The fish are going where the bait is. It's just like you. You find people around grocery stores. No grocery stores, you don't find that many people. Where bait is, fish are going. That's why we went to Cortez because the bait went crazy down off Cortez.

MJ: So you're saying after that 2014 red tide, those fish moved south?

ED: They mainly moved here. You're probably going to hear this story from all these guys here. Right where I've got this line drawn here on the north end, we – Scott Childress, Bob, and Paul, me – we absolutely the red grouper for two trips. I just looked at my books.

RB: For all of them.

ED: I fished all up this way the rest of the time because anything basically outside of this line to the west was unaffected. To this day, the fishing has stayed pretty consistent once you got from here to the west and offshore deeper. But everything from here in, the first year after the tide –

RB: Ellis, the fish got better to the west because our fish went west.

ED: Yes, because they -

RB: They caught red grouper in Mobile. They never catch red grouper in Mobile. Those fish left there. Jim Zubrick, when we were fishing in the middle grounds, he was dip-netting shrimp. They had come to the top.

ED: Crabs, eels, all of them.

RB: They were dipnetting the shrimp. They were running away from that tide so bad, or whatever it was.

MJ: So it was way down. It was on the bottom, and it was forcing them to come up.

ED: Jim's going to tell you.

RB: Yeah, he'll tell you a story you won't believe.

ED: Right. Yes, I've never caught fish like we caught and those guys there. I had two-hundredand-fifty fish in one day, red grouper, in seven or eight places, in the middle grounds, in 2014. I want to say -I just looked at that, September 30<sup>th</sup>. So two months, basically, after this event started in here, and I saw it in here, the fish were still that bunched up here. But by the time I got to January 1 of 2015, I think the first trip I made was actually in February that year. I was going to the twenty-seven and the eighty-three, which was west of Venice because this was done. I spent some time that winter fishing offshore, which I always do. But as far as a red grouper fishery in the spring, I had to go down here.

MJ: How long did it take before that recovered?

ED: Okay. I have never caught, since then, any amount of red grouper inside of ninety-five foot. This was the first year. All this stuff in here in these fifteens is a bunch of ledges and stuff south of the (SMI?) tower in ninety-five foot. This is the first year I've caught fish back in there since then. That was always a bread and butter area for me. I learned that area back in the '90s when we fish trapped back in there. It's little ledges and limestone, rocks, and stuff that the fish get on. They're [inaudible] up. They have sargassum weed growing on them. The red grouper go through for the crabs, for the most part, food.

MJ: How did that red tide differ in intensity or in colors? What did you see? Was that different than [inaudible] –?

ED: I saw black water in that. I never saw any black water in this. I saw black water in this. When we read a bottom machine, right, and it's a color video sounder, most of the time, your water's blue. Your bottom is whatever color you make it. I make mine red. You'll have some oranges and yellows that tell you about differences and hardness and whether that's a fish up in the water. I was making runs home from out here to here. It was what I call redding out my machine. That only usually happens when you run over a super-bait pile or something. But it would do it for miles at a time. Then I would break at – this was at night I was seeing this. So I wasn't looking at the water's surface. I'm looking at that. Then I'd break out of it, and it'd look normal, blue. No life, but blue. My bottom's showing, and then it would red me out again for miles at a time. I was like, this is – I've never seen anything like that. I didn't see any of the yellow stuff on top like I saw in 2002, but it just looked dead. That black water just looks dead.

MJ: The species that were dying in this in 2014, were they the same as the others?

ED: Well, like I said, once I realized that this was a waste of time and I was going directly to here, I wasn't looking a lot in here, because I usually traveled at night. You know what I'm saying?

MJ: So you weren't seeing [inaudible]?

ED: But when I got out here, what I was seeing was a lot of lionfish. Now, that's when I first – when it first started, and I was in here, I saw grouper, grouper, grouper. All my friends, like Bob, he was fishing in here when it got wiped out. He'll probably draw something on down in

here because he was in here. But the guys I know out at Yankeetown, they were getting – the grouper were there. They didn't have nowhere to go. They got trapped against the hill, and they got killed. But they were seeing them. I wasn't seeing them because I wasn't staying in here. Once you get into July, those fish should be in here. The reds and the – what we look for, like I said, when it comes to Mother's Day is you want to see your gag grouper and your red grouper mixed together, and you want to find the bait they're with because that's the most productive thing for us because we're catching them both. There's fish in there. They're there for a reason. For years and years, they'd be in the same places. But after that tide, like I said, I haven't caught any numbers of gag – one winter, Bob and I went up here above this line right in this corner right here and caught some fish, gags, one winter.

MJ: When that happens, when the red tide's there, how long does it take you to - you guys probably have to - how do you know where to go and find fish?

ED: You just keep – my saying is – my bottom machine is set up if it looks right, it is right. If you don't see it, it's not – I stopped on that. When I saw that there that morning, I went out here. Before I got out of it, I stopped all in through here on places and couldn't even get a bite. There are places what I call – at least you stop there. It's a home for gap grouper. You pick one or two off of it. There was nothing there. Not a bite.

MJ: So you have coordinates, though, you check out.

ED: Sure.

MJ: [inaudible] until you finally find the fish?

ED: And patterns.

RB: Another way is you network with other fishermen. You know fishermen all up – and just like I knew fishermen down in Cortez, and they were saying, "Hey man, you need to come down and check it out. I know you're hitting it hard." It's good. That took us there. I know fishermen in the Pan Handle. That's why I can tell you that the fish moved west because all of a sudden, they're catching gags. All of a sudden, they're catching red grouper. And you get an opinion of where to go fish. One thing I would say to you that there's a tool that you can use to see how this thing affects us – is our catch history through the state and through National Marine Fisheries [Service] – check we caught up here, through our catch histories. We have to do a trip ticket. Every time we come in, we do a trip ticket. So from back below 2014, check the catchers for what we caught – gags, red grouper, snapper, which I never caught snapper up here until like –

ED: It was probably 2000 and -

RB: The 2000s. I couldn't even qualify for a permit. There wasn't no snapper here. So if you [go] back into those trips for us - and you could take each part of the state and back into their tickets, and can you see what it's done. You'll see that all of a sudden we quit catching a

thousand pounds of fish, that it dropped off to three or four hundred pounds of fish, and that we moved to Cortez down there and fished down there, and it got bad down there. –

MJ: So were you guys then going in and out of Cortez to fish [inaudible]?

RB: Yes, sir. We moved to the boat to Cortez.

ED: Well, no, we were driving from here.

RB: Yes, we commuted.

F: Driving your boat down there?

MJ: Oh, driving the boat –

ED: Driving the boat –

MJ: – down there.

ED: – down there.

MJ: Okay.

RB: It wasn't worth -

ED: And then leaving – yes.

RB: It wasn't worth us fishing -

ED: It's a hundred and –

RB: – here because we didn't have snapper now. You all continued to get snapper. It seemed it didn't affect the snapper nearly as bad as it did the grouper, gags, and red grouper because –

F: It seemed to be bottom and column fish.

RB: Yes. And they did okay. But bottom fish, the fishes' habitat – rocks and stuff, and the bait – there again, the bait left. The bait is gone. So the fish will go. They're going to follow the bait. They did okay. But if we were going to stay in the fishery, we had to leave.

F: Yes, and we didn't really do okay because -

RB: Well, you did –

F: – our catch was grouper as well.

RB: It hurt us all.

F: Yes.

RB: But they could survive with their snapper fishery, which we didn't have.

F: If you have quota.

RB: Yes, we didn't have.

MJ: Were there other fishermen from this area that did the same thing, went down to [inaudible]?

**RB:** Paul Reeves.

ED: Paul and Jamie (sp?). They were with the boats down there.

RB: (Runkle?), and everybody that was in the fishery had to go somewhere.

ED: That February, when I went down and fished off of Venice, I left here in a boat. Not the same boat that we have now, but a different boat. A guy that's not here today because he's out there fishing because he has a snapper quota that he has to catch before the end of the year. But anyway, it's a hundred-and-sixty miles one-way nautical from here to where I was fishing. Then, I took that boat down there and found fish down there. But when I got down there – to answer your question – all the boys I know from Tarpon Springs, most of them I know by the radio or seeing their boat. We were all down there.

RB: They were mad at us because we were down there catching their fish.

ED: They were thirty, forty miles further south than they usually fished. So it affected all of us.

RB: Like I said, you can back-in trip tickets and tell how it affected us because that's data you should be able to get.

MJ: Oh, yes. Okay.

F: Yes – area, depth, the whole thing.

RB: Yes, you can go to each area and pull the commercial fishing trip tickets. I don't understand why they haven't done this. They could know how we suffered from certain periods of time.

MJ: Well, then let me ask you this. You adapted to this red tide and moved down there, and you were catching fish. But the bottom line for that year, overall, it went down?

RB: Oh, yes. [laughter]

ED: Well, up here, I know where to go. Down there, I had to - and no matter how you cut it, you still have to cover the ground to find things. Red grouper -

MJ: So you didn't have coordinates and stuff down in that area?

ED: No.

RB: No. We had to go down there and look.

ED: I've got some now. [laughter]

RB: We're seasoned fishermen. We have a lot of contacts. People that didn't know, there are a lot of them went out of business. They couldn't survive, and they went out. But we had the contacts, and we had a boat that we could move and do the job. But the people without those contacts, they just –

MJ: When you went down there, did you sell your fish to a fish house down there?

RB: Oh, yes.

ED: Yes. Yes, we dealt with [inaudible].

RB: Cortez -

ED: It's Johnny Banyas.

RB: Johnny Banyas, Cortez Fish and Bait, and Karen Bell.

MJ: Karen Bell at A.P. Bell.

RB: We sold to them. I had some pictures of it, but they're in the other phone, of that red tide. When that red tide hit, for two weeks, those fish were bunched up on the north end of the grounds – probably not even two weeks. There's three lumps up there. Scott and Jim and I, we caught ten-thousand pounds in three trips. They were bunched up. We'd catch twenty-five, twenty-six hundred –

ED: I never saw anything like that.

RB: Well, you stayed down to the south.

ED: A couple of miles.

RB: But we went to the same place. When you talked to Paul while we were fishing Paul's boat, we went to the same place, three trips, and caught ten thousand pounds of fish. Went there, turned around, and went right straight back. We were fishing back-to-back trips – couldn't even catch a fish.

ED: They were gone. They went offshore.

RB: Nothing. They had pushed on. That's how fast those fish – it was like a staging area.

ED: They were acting like they were going to be wiped out, and they were starving to death.

RB: Yeah, it was –

ED: That's how they acted. [laughter]

RB: It was crazy. That's when Jim was dipnetting shrimp. They were up on top of the water, just skipping the water getting away.

MJ: You could see the fish were reacting to this stuff in ways that -

ED: In ways that's totally abnormal. I call them suckerfish. They're not really a remora. They're a shark sucker is the one we have mainly here. It's not unusual in that time of the year to have five or six hang around a boat, picking up the stuff. There would be forty and fifty. I could free gaff. They would come to the top, and I could free gaff them to get them out of my - I would have to chop up chum, throw it overboard – have the guy throw it overboard as I put the boat into gear to try to get away to keep them – because you couldn't throw your bait overboard to get it down because they were that – free gaff a basket full of them.

RB: They were acting strange.

ED: So everything was weird like that.

RB: There's a couple of things through the years I have noticed that has become strange in our gulf. By the way, I call our gulf a toilet now, a septic tank. The water used to be bohemian blue when you got to nineteen hundred foot. So beautiful, it was beautiful. Now, the water looks like that, black. At night, when your lights are flashing down, you can see all kinds of – lack of the better term, I'd say plankton. But I don't know if it's dead seaweed or what. The water has completely changed. When you get out to the forty [inaudible], it's black. It's not that bohemian blue, pretty water anymore. Another thing that I find really curious is phosphorus. There's no phosphorus in the water no more. Used to, when you rode around in the summer, the porpoises looked like torpedoes. You'd see them. They'd go *whoosh*. They'd look just like a [torpedo], and then exhaust would fire up. I've got pictures of it.

MJ: I've seen mackerels do that.

RB: It's not there no more. The net fishermen use to use – they'd ride around at night, and they'd watch for the phosphorus fire before they'd throw in the nets.

ED: [inaudible] they turned their lights on, so they killed the fire so the fish can't see the net.

RB: Yes. Now, we don't have that. Somebody needs to look.

ED: It's all part of the ecosystem.

RB: Well, for forty years, all of a sudden, we ain't got phosphorus? Our water color's changed.

MJ: When do you think that – when was the first that you noticed that? What year was it, would you say?

RB: I have probably been noticing maybe a little bit before that red tide. Now, down there back in the '80s, you didn't have it. When you'd go through that section, you knew when you went through it because you lost the phosphorus; it turned on, turned off. Now, whatever this was, and I am not sure it was the red tide or not, but whatever it was, I've never heard of red tide that big. I've never seen it turn the water this color.

MJ: But it hasn't come back?

RB: No.

MJ: So it stayed that way.

RB: No. Now, this year, being honest, the bait – I'm seeing more bait, and I'm starting to see more fish. The gags, I think those rocks where that – and Jim could tell you because, because they dive somewhere – I used to dive. I don't dive no more. But when you dive down there, the rocks were dead. You could completely tell that some – and they had grown up and grown over. And gags live under structures. A red grouper, he'll live under this table as long as it's coral rock. A gag's going to be under something. Without the food and the life, they're gone. I was always a gag fisherman. Everybody called me the gag man. But there's no gags no more. I got thousands and thousands of numbers that I can show you that where we caught them, you can't catch one now. I don't care what you do. So I'd like to know why the water has changed to a septic tank color and has all this trash in it. I'd like to really know why the phosphorus is gone. Something has changed. I believe it has a lot to do with our fishery.

MJ: When you say our fishery, what do you mean?

RB: I think it affects the pelagic fish. My buddies down in Crystal River and Yankeetown that catch kingfish, they don't catch them. 2014 was the last year they caught – 2013, '14 – the last good years they had, and they don't catch them now. They bypass this area. They don't come in here. So I believe that has affected the water quality. The phosphorus has affected our fishery, everybody's. We don't catch mullet here like we used to. We don't catch [inaudible] like we used to. Are they fished out? I don't know. You can go down to Cortez and down south, and they're catching them down there. So something has happened. I have fished from Dry Tortugas to Campeche, Mexico, and this used to be the best fishery of all of it. There was not a fishery any better from Dry Tortugas to Campeche unless you were a snapper fisherman, and if you snapper fish, you snapper fish from there west. If you come here, you didn't catch snapper. So there are a few ecological questions that I'd like to see answered that I think, if we get to the

bottom of it, we can figure out what's wrong with the fishery. Does it impact us? Deeply. Very much so. I just talked to a man wanting to get into the fishery. He's got the money to get into the fishery. I'll tell you what I told him. He's crazy.

ED: No.

RB: He's got the money. I said, "Well, what's your price limit?" "I don't have a price limit. I can spend what I want to get into the fishery." "Take my advice, sir. Don't get into fishing." That's sad. Another thing is, look at the average age of the fishermen. Look at us.

F: Hey, hey.

RB: We're sixty-plus.

ED: I mean, Patty's twenty-nine. But the rest of us.

RB: But a fisherman –

MJ: I actually have looked at the average age of fishermen in the Gulf and in the South Atlantic, Southeast.

F: But we do have a new thing going on for the Young Fishermen's [Development] Act, trying to get money from Congress, and it seems to be working.

RB: The average fisherman, young kid, can't afford to dump half a million dollars into fishery to get started. Like this guy, he can afford to do it. But at the same time, here's what you've got to think of – where you going to fish at? We've got knowledge. I've got forty years. He's got thirty-something years. Where would you go today to catch fish? "Well, I fish fifty, sixty-foot." Well, that ain't going to work, buddy.

F: How do you even know to take care of your fish when you're out there catching a thousand pounds?

RB: Well, the average fisherman can't catch a thousand.

MJ: Do you have young crew that would be up and coming fishermen?

RB: You know what I do?

F: Young.

RB: I take young people under my wing. I got one now. I got a young man. He's nineteen years old. I'm helping him. Ellis is helping him. I put a guy in business down in Crystal River – Aaron (Mays?) – sold him permit dirt-cheap, gave him Loran numbers, went out on his boat multiple times, and teach him. I love to see young people get in the business to the fact that I gave this young man here – I gave him ten thousand Loran numbers to get him started. So I

certainly want to see the fishery continue on. But if we can't control it – and Jim Zubrick is the one that taught me about this fishery deal – I didn't know anything about this quota business and stuff, and he taught me about it, and he got me going. That part of it has helped immensely. But if we don't have young fishermen come along to keep the business going and thriving –

F: It's a dying industry. Yes.

RB: – everything we're talking [about] is for naught. It'll become – well, I call it a cesspool. It'll become just an aquarium. The shrimping business – in April, it was amazing. It'd be like a city of shrimp boats to here. You'd know it was about ready time to fish because of the shrimp boats. You'd see fifty, sixty of them. I haven't seen a shrimp boat in, golly – we might see one in –

ED: I might see one or two a year in up in this area. One or two a year.

RB: And they're moving through. They're just going there.

ED: Generally. I've got a twenty-year-old grandson right now who's working with me for now. Does he have a future in it? I don't see that for him.

RB: It's bleak. Bleak.

F: Does he have a passion in it?

ED: That's the thing. That's part of it.

RB: We were just saying – I asked that man, why do you want to fish? He said, "Well, I like it." I said, "Well, that's what I want to hear. Passion."

F: Yes, definitely.

RB: You're not going to get rich. It's passion. If you love -I don't have to fish. Jim don't have to fish. We fish because we love to fish. It's our passion. We go out there and get beat up and tore up and have a tough day. You know what? We shake our head and get up, and we go again. This red tide, a lot of guys quit because it got hard. What'd we do? Shook our head and looked around and went somewhere else. We made it work. We'll make it work until we can't fish no more. But there's things that need to be looked at that we don't have the knowledge or the experience, expertise to answer it. But I believe there's reasons for this.

MJ: Before we end this, I want to ask you about the latest red tide, 2017 to '18. How did that affect you guys?

ED: I didn't see any effect. Well, we were still in Cortez, and they were having fish kills. But it was right on the - it was in the bay - it was actually in the bay.

RB: In the bay, yes, down there. Yes.

ED: If I saw anything on the outside – yes, I think I did see something like a pinfish, pigs, and stuff like that.

RB: That was all.

ED: But that's not even on this map.

F: I think it was more on the beaches.

RB: On the beach, yes.

ED: Yes, that's what I'm talking about.

RB: On the beach.

ED: It's right outside the pass, coming out -

MJ: But you guys really didn't see much [inaudible] -

ED: But it was –

F: [inaudible]

ED: I wasn't back up here until '18.

MJ: Okay.

RB: Up here, we didn't. Now, I've got friends that fish down south, way south, and it affected their fishery pretty bad.

ED: Fort Myers, Everglades City, down that way.

MJ: Did you see fishermen from down there come up here?

RB: No, I haven't seen very fishermen up here at all.

ED: The truth is, I don't see many boats that I don't know. I see some guys right up here in this corner. They probably come in from Appalach [Apalachicola] that I don't know. But for every one of them I see that I don't know, I see another boat that I do know – Jim or some of the other guys that aren't here today that live here in town.

F: Or even boats you're just used to seeing -

ED: Right, right.

F: – when you're not [inaudible] –

ED: I recognize the boat. But most of these guys, I know by radio. There's only a hundred-and-some of us left.

RB: But keep in mind now, before that red tide, it was like a party here. Everybody was up here. It was a social hour. You might go to a piece of bottom, and there might be ten boats sitting on it. You could see lights. Now, you can go and maybe not even see a boat.

ED: But prior to this 2014 thing, I spent every summer basically inside here. I got more stuff in two-hundred to two-hundred-and-twenty or forty feet of water now because I spent – ever since then, I've spent so much time out here.

RB: I never went out there. [laughter] So it's a whole new ballgame for me.

F: I hate going out that far.

RB: Me too.

ED: Yes, but now you're talking about, instead of a –

F: It's so damn deep, you miss [inaudible]

RB: Well, so many things can happen to you.

F: Yes.

ED: – instead of an eighty-mile roundtrip going and coming, now we're talking about a twohundred-mile roundtrip coming and going.

MJ: And you said you have to use heavier weights for that depth?

ED: Sure.

MJ: Is there any other change in the gear that you have to use when you're out there?

ED: Well, not really much change in the gear. But your timing has to change because you still go on weather –

RB: The moon.

ED: - but you can't go out there - I can't - when the moon's around full or right around new, the current runs too strong part of the day to even really fish effectively out there. It's tough fishing out there.

MJ: How long of a trip do you make it?

ED: Three to five days on this boat. Now, the boat I was on for most of the time since that time – well, not most of the time, about half the time, we would make seven-day trips. It has more capacity –

RB: But you had plenty of snapper quota, which allowed him to fish longer with a snapper quota because snapper is the predominant fish now. Grouper's not even close.

MJ: When you say "snapper," do you mean red snapper?

ED: Red snapper.

RB: Red snapper is the predominant [species] to fish in the Panhandle now.

ED: Since this date right here and when I had snapper quota, not counting trips when I didn't have any snapper quota, and I just was keeping grouper, this year was the first time I had a catch of better than fifty percent grouper. Most of the time, my catch is sixty percent snapper to sixty-five percent snapper. I don't sit on snapper. I look for big snapper. I catch them. Then I go big bait and try to catch the grouper. I get two or three good grouper off of that place. It goes back to snapper. I leave.

F: Are you talking red grouper?

ED: I'm talking either one of them, gags or reds.

MJ: Do you have to change hook sizes when you're fishing [inaudible]?

ED: Not really. The snapper we're talking about, when I say big snapper, I'm looking for sevens and up.

MJ: Oh, really? That's a pretty good-size snapper.

ED: Yes. They're good-size snapper because that's just what I see that works for me is I pull big grouper. But I call it grazing. It's like a cattle. I'm not eating the grass all the way to the ground. I'm just getting what I get, and then I'm moving to another place.

F: Yes. Snapper are really prominent.

ED: I've got places out there right now [where] you could go catch two thousand pounds. They come up in the water. He's got video somewhere of this last year –

F: You don't even need bait.

ED: Well, he takes the weight off – takes the weight off and throws it over –

RB: Don't even need a boat.

F: Seriously.

ED: – and if one gets on there, it's on top of the water in ninety-five or a hundred foot.

MJ: [inaudible].

ED: They come up and eat it, and there's seven more right there wanting to try to get it. On top of the water.

RB: All the way around the boat. All the way around the boat.

ED: This is not a wreck, a cave, a spring. This is just one of those limestone ledges I was talking about, and it's northeast of the middle grounds.

RB: We think their assessment is a little bit off.

MJ: [laughter]

F: Well, you wonder, though, is there something else foraging their food?

RB: It's not there, Patty.

F: Exactly.

ED: The snapper are constantly –

RB: You're not seeing -

ED: – spitting up somebody's babies. I'm going to just tell you that straight out. It doesn't matter what time – whoever's spawning and trying to grow up is getting eaten, because I see the snapper. I gut fish. I don't just catch them and let the guy back there do it. I'm the fastest gutter on the boat by far. So I gut fish.

MJ: So you're paying attention –

ED: Absolutely.

MJ: – to what's in their stomach.

ED: I'm seeing what they're spitting up. When you see something about the size of your little fingernail with a black dot right in the middle of its eye and a curve, where it's already partly digested, it's probably a triggerfish or a filefish. But they're getting eaten. In the spring, you're seeing stuff that looks like the pink foam that they use to make bologna. It's somebody's eggs. That time of the year, unfortunately – we're talking about April and May – it's a good chance it's

either grouper or maybe some other kind of snapper or vermillion or mangrove because mangrove is going to spawn on April/May full moons.

RB: I fished with a fisherman. What's that guy over in Louisiana I fished with?

ED: Wayne (Warner?).

RB: Wayne (Warner?).

MJ: I know Wayne.

ED: You know Wayne. Yeah, he's from Gainesville.

RB: Wayne, as far as I can figure, has it figured – he's a very knowledgeable fisherman, as you know. He's fished over here. He's fished there. But Wayne made me really think. I fished with him for seven days. He said, "I want you to think about something, Bob." I said, "All right." He said, "In your time fishing, you never caught snapper east of [inaudible]." "No, I didn't." He said, "But yet, to the west, you catch all the snapper you want." "Yeah." Well, I always thought because the bottom characteristics is why you didn't catch snapper over there. Well, they got more bottom than we got. It was crazy. I said, "Wayne, how come you don't catch no gags? He said, "Bob, the more snapper you have, the less grouper you have because the snapper forage their – when they spawn, the snapper come in there, and they eat their eggs. That's like caviar to them." He said, "So the more snapper you have, the less grouper you have. If you can't thin those snapper off on your side, you aren't going to have any grouper." You know what? Ever since these snapper have come in here, it's exactly as he said. The more snapper we got, the less grouper you have. And when they spawned, we can see the eggs in their gills and their stomachs when they spawn. Can't you?

ED: Oh, yes.

RB: And we've told the -

ED: We wanted to collect it for the biology people. I haven't had an observer in forever.

MJ: Really?

F: None of us.

RB: Well, we tried to get – we had a meeting with Congressman [Ted] Yoho and the head of the research department [at] the University of Florida, and he was so excited to talk to us. His data is three years behind. When he gets it from the observers, it's three years behind. He was so excited and said, "Listen, if I can get permission and the grant to let people come go fishing with you, can I do that?" I opened my arms agreed that I would let them dive, do anything that they needed to. I've yet to hear from him again.

F: Yes. It's that word grant.

RB: Yes, yes.

MJ: Well, it could be, if he didn't get the funding.

ED: Right.

F: Wayne is a very knowledgeable guy. He attends all the -

RB: Oh, he is very, and he's a great fisherman.

F: – Gulf councils meetings. He's testified.

RB: But he's right.

MJ: Talking about the red tide, is there any suggestions that you have that management could change that would help you with the red tide? Is it just that you think more research needs to be done? Or is there anything that could help you fishing-wise?

ED: I'm not sure that that was all red tide. Jim will tell you what he saw when they saw that stuff on the -I never heard anything like that red tide.

RB: Not that big.

ED: I saw areas that the water wasn't rusty. You know what I'm saying? I didn't see that down in the flagellate. I'm curious, like Bob's saying, what else was involved? It seems like there were more factors than just the red tide. Now, as far as helping us, the quicker they can react to circumstances, the better. And yes, more data needs to be collected.

RB: Well, there's nothing you can do. That's a phenomenon just by God or whatever. You can't control red tide.

ED: No.

RB: What can you do? Turn and put a shade over it to cool the water off? It can't be controlled. The only thing that you could do to help a fisherman is tell these fishermen in the area that's impacted that they're catching fish north of the area, they're catching fish south of the area – is the only thing you can do, other than give them some type of assistance for income assistance, where it affects their livelihood because these guys – fishing's like farming. You're providing food, and it costs money. Boats cost money. Everything in the fishery costs big money. Just like Patty and we're all – every year, we've got to update. Diesel motors cost big bucks. So when you say help us, well, I think you all are studying. I know one thing we solved during that impact is a ship. NOAA [National Oceanic and Atmospheric Administration] had a ship doing oxygen analysis all out there. Everywhere that ship went – and I have a buddy; he talked to him. He said he would tell you, "The oxygen levels here are terrible. You need to move to here."

ED: That would be a help.

RB: He was out there. And it was Kirby [Klys].

F: Kirby Klys.

RB: Yes. And he would tell them where that red tide was, and to move, and the biggest blight – he would move further offshore.

F: That'd be great for the website, that kind of information and data.

RB: Yes. Kirby got to be good buddies with those guys. But they stayed up in this area quite a while, going back and forth, getting oxygen reviews, and would tell him where the better oxygen was for them to fish.

ED: We're going to run into this problem anytime we have the right factors come together because that thing is present at two-hundred foot all the time, right?

MJ: [inaudible] they say it's down there.

ED: They say it's out there on the shelf. And then when we get prevailing – we get El Nino year, you get prevailing west winds, right? So it piles this water up, piles this water up. This stuff's on the surface for the most part, right? But as it gets piled up inshore, it starts settling down until it fills the water column up. If it gets into the shallow water and explodes like it did in here – because that's what we really had was, it exploded in here because it is so shallow when the sunlight reaches down so far. The water, when it gets pushed, keeps – that warm water went all the way down.

F: But since we don't really know what causes the red tide -

ED: We know what causes it. But don't know what makes it bloom.

F: Yeah. What about all the wastewater spills?

RB: And the fertilizers.

F: Yeah, it's got to add.

ED: It can't make it better. I agree.

RB: Another thing, when you talk to Jim, that Hurricane Katrina, his diving buddies – he said this water, the bottom quality] after Katrina turned to really bad. Jim knows all about that stuff.

F: And Scott [inaudible] diver.

RB: They're divers. So they saw a big impact off Katrina when that water came this way and muddled up everything. That's where we started seeing snapper, and we started seeing –

ED: Well, that's when we had the grouper decline.

RB: That's right. The gags left.

MJ: [inaudible] Katrina.

RB: So I think a big problem is – water quality is a big issue. But I think better than that, that water quality on the surface controls the bait. I can't buy sardines no more. I used to never have problems buying April sardines, all I want. You can't find them. There's no sardines.

MJ: So you want sardines versus thread herring?

RB: Well, either one, thread –

MJ: Either one?

RB: But I prefer sardines. Me. Every fisherman prefers -

ED: Here's the thing. In a healthy environment out here, you're going to have thread herring up in here. They'll go all out to forty feet or so up in this area. You're going to have scale sardines in the same area. But once you get to about forty feet, this is mainly sardine and cigar minnows. You're going to have [inaudible] as in and out because they don't seem to be affected. They're not as pelagic. They'll move in and out, but they won't move south like the threads, and the sardines do. But in a healthy environment, you get out to one-twenty, now you're running into chub mackerel and a different kind of sardine. You don't see so – or a hundred-and-fifty. You don't see so many scaled sardines, or gold stripes is what they actually are.

MJ: Are you guys catching your own bait?

ED: Not anymore. But it looks like I'm going back to it. I got the netting.

- RB: We're geared up -
- ED: I used to do it for –
- RB: to go back.
- ED: I used to do it all you can't get the bait.

MJ: Well, there's not very many bait fishermen on the west coast of Florida.

ED: Well, it's (Raphael's?).

RB: Yeah. Oh, there's big time.

- ED: It's Karen and it's Johnny.
- MJ: That's it.
- RB: They used to provide all the bait we needed.
- MJ: But now you can't do that anymore.
- RB: Now, they have box cars.

ED: I called (Raphael's?). And you know what they've got in their freezer up there? Cigar minnows from Vietnam.

- RB: Yeah. Everything.
- F: (Raphael's?), too.
- RB: Peruvian bait. It's imports, all of it. It's all junk.
- ED: But see, we're limited. There are only so many of those permits for that purse seine.
- MJ: The state.
- RB: Even Karen and Johnny, they're not getting sardines no more.
- ED: Yeah. They're catching more threads than anything.
- RB: They catch thread [inaudible], and they're not doing that good.
- F: [inaudible] –
- ED: But they don't send their boat out past forty-seven foot right there.

RB: But it all boils back down – water qualities, grocery store. No grocery store, no people.

ED: It wasn't unusual in the summertime, or most of the year, from April until October, to be going in and out of here in daylight hours on calm days and seeing big pods of bait.

RB: Oh, you could smell them. There were just many – smell it.

MJ: You could smell it?

ED: I saw a couple last year – inshore, you're going to see the threads, and you're going to see that it's a gulf menhaden. We have a lot of those up here in the [inaudible]. You're going to see those shimmering, but once you get out to fifty or sixty foot, you don't see much of it.

MJ: Are there any mullet fishermen here anymore?

ED: Oh, yes.

RB: No.

ED: They had a terrible year here, though.

RB: Yeah.

ED: That's pushed by the roe business. So they had one of the worst years they said they ever had. Now, they caught fish up here, up towards Rock Island, up in here.

MJ: But that wasn't because of red tide or anything.

ED: No.

MJ: It was just a change in [inaudible].

ED: My buddy that does this sat for two days [inaudible] that bad weather front a couple of weeks ago, waiting for those fish to come out. There's some in the river, what he's looking for. They came out, went around that island. He said he made one lick with a legal net, caught three hundred pounds. He said I'm looking for something a little better, and the next thing he knew, he said they were there. He said he called his father and another buddy they fish together with. Before they got there, he said he looked, and the fish went down. The rain started, and they were gone, and that was the end of it for this year. There were fish there, but –

MJ: They didn't hang around like they used to.

ED: They got outside. They took that north – when that wind shifted to the west, northwest, they went with it and left. That's the end of it for this year for these guys. So we have some guys - I have a couple of guys that silver mullet fish for me if I can get them to, [and] if I can gather up some of those just for bait. But it was a bad year for mullet fishing.

RB: They're having the same problem now down south, Cortez – no bait, no fish. Same deal. The red grouper fishery down there has always been a lot better than ours. We've got buddies that fish down there, and all their boats are fishing deepwater because they can't catch nothing in under two-hundred foot. They have to go to a thousand foot to deepwater fish. We've never caught deepwater [inaudible]. We can't find deepwater quota now because that's where they're going to.

F: Do you want some more coffee?

RB: So I think water quality is a big, big deal. It's not so much the bottom. It's up in the upper levels. No bait.

F: But I do think that that big red tide did mess up a lot of the bottom.

ED: Absolutely.

RB: Oh, yes. Well, there's no doubt it messed it up.

F: So, a lot of our bottom feeders are still in jeopardy.

ED: Those ledges where I said the red snapper were -

RB: Well, look at how long it took from that one tide down there to come back from '85 to 2013–

ED: - the next year that I went out, before we went down south -

RB: - and took it - I was amazed. I said -

ED: – I didn't catch nothing –

RB: – thank God it's finally back.

ED: - I didn't catch anything on those ledges -

F: And then we got that [inaudible].

ED: And they're gag grouper places.

RB: And I'll probably not see it in my time.

ED: They're squared off -

F: Me neither.

ED: – ninety-degree vertical breaks.

RB: We're probably done now.

F: So that's why it's hard for us to get new [inaudible].

RB: Absolutely.

ED: Sand perch and small red snapper. That's what was on those rocks the next year.

MJ: So that makes me wonder - red snapper, are they more resilient to red tides?

RB: Yes.

ED: I think these were all smalls, like I'm talking about.

RB: Evidently, they have to be. I think they're more prone to move.

ED: They might know to get – like Bob said –

RB: They'll move.

ED: – they'll get up and get away because those red grouper we all caught out here, they were fleeing, obviously. They were fleeing.

F: The red grouper fishery in that area is still –

ED: Nah.

F: - excuse my mouth - shit.

ED: There's lots of little –

F: Little guys.

ED: I see it coming back.

F: Yes.

ED: Little by little. For years, it was mainly red snapper. Even in here, where did the red porgies go? There were some vermillion snappers after that tide.

F: But now it's all of that.

ED: The healthy stuff that you usually see, the tomtates, the lane snappers, the red porgies, the white porgies, the trigger, the mangrove snappers – I'm starting to see that kind of mix. These places are coming back to life and not dominated by one species. So it seems to be a little more healthy. But every year, it's a little better. The red grouper are getting a little bigger. We're getting into where we don't have to throw as many back.

MJ: So did this rebound in 2002?

ED: Quick.

MJ: Did that rebound faster than -

ED: Absolutely.

MJ: Much faster than that did.

ED: But I never thought this thing was as much to the bottom.

F: It wasn't.

MJ: Okay.

ED: As this.

MJ: Okay. So the 2002 wasn't [inaudible] -

F: Like Ellis said, that was black water.

RB: This one down here was catastrophic. You couldn't go through there. You'd throw up. It was like you took an ice breaker and went through. There were so many – every kind of fish there was, from little tropical fish to flounder, everything that was there died.

MJ: That was the one in '85.

RB: Yes, sir. It took it that long to recoup.

MJ: You said when you went through, you almost wanted to vomit or something like that, did you have those same reactions with these other types of red tides, like in 2014?

ED: This one right here, yes. That's not a pleasant smell.

MJ: All the time, you're going through that.

ED: I didn't notice the smells. But once I got up that morning and saw those dead fish, I made a jump of about thirty – as I recall, it was like sixty miles from here to here.

RB: I fished in there a lot that year, and it was more of the tropical and baitfish, not so much the grouper. But they left. It does something to the bottom, and they leave.

ED: Now the guys I know in town here who dive recreationally said that this 2014, that they went to wrecks out here in forty and fifty foot of water and the shells were open, bleached out, growing on the wrecks. At the bottom was just – that the fish you saw on top wasn't anything compared to what was laying on the bottom.

RB: Scott will be the best to talk to –

ED: Yes, he'll tell you.

RB: – you about that. I have GoPros back in there. I would drop them down and actually see them. And I saw the difference with the GoPro. They got hands-on, looking-at experience. That's what I can tell you.

MJ: Well, that's all I've got for you guys. Do you guys have any questions for me?

- ED: No. I appreciate this opportunity.
- MJ: Okay.
- ED: It's nice to meet you.
- MJ: Thank you very much.
- ED: I hope to see you again.
- RB: Yes, sir.
- MJ: Thank you very much.
- RB: Yes, sir. Will we hear any response if there's any response back to this?
- MJ: So we'll upload these interviews on -

-----END OF INTERVIEW------Reviewed by Molly Graham 6/25/20 20