Male Interviewer 1: It's that just United States as a whole western country. So, just to start can we, can you start with the sort of the introduction that you did before, before we have it on tape. You just give us your name and sort of your experience and what kind of fishing you've done in the region and then we'll get back to work. We're super interested in all of that that you were just talking about.

Bryon Holland: So, we are recording?

Female Interviewer: Yes. I just turn it on. Yes so...

Bryon Holland: Okay. I am Bryon Holland. I've been fishing for a living right here out of Johns Pass since 1984. Did a lot of commercial fishing. I've been charter boat fishing now for the last 10 years. You know, I have a lot offshore experience, just living the last 10 years or so, really that I've done any inshore fishing. And when I have say inshore, within 30 miles. And so, we did see a lot Red Tide this last year but I have spoken with some fellows that have been around for a long time. Solid fishermen in the 40s and 50s and I've heard reports of some serious Red Tide in the past.

Male Interviewer 1: So, we would like to record this, like, specific information of what you either you remember or what you heard about. And so, we like to create like a timeline and then see if we can even match some of those out because we're really trying to get as much specific information to build the picture as possible.

Bryon Holland: There is a fella named Wally (*phonetics*) that works, lives owns island waste, Dry-Dock in Tarpon Springs. He's there every day and you should talk to Wally.

Female Interviewer: Oh, I know him, I've heard of him.

Bryon Holland: He is such a smart fella.

Female Interviewer: I know him.

Bryon Holland: And he's really, you know, he's getting up there but he's got some stories and we called it he's really on his game.

Female Interviewer: I have heard of him.

Bryon Holland: And you should talk to Wally.

Female Interviewer: Okay. Thanks for that tip.

Bryon Holland: He told me a story when we were concerned -- this last year is the worst personally that I've seen it. I've seen it on a smaller scale a few different times. But this last [00:02:00] year, we had to change our five-hour trips, six-hour trips because we needed the extra time to go the extra two or three miles to make a difference. And we catch a lot

of the white grunts and the sea bass and the little head porgies on our half day trips to five-hour trip, you're restricted by time. You know, we've got a 12-mile radius that we can fish in.

And in the past 10 years, we can catch fish anywhere from 25 feet of water out to 46 feet of water but since this last Red Tide, we're struggling. I mean, typically, we had 60 people on the boat and everybody catches three or four fish. Families got a big stringer, you know, you come home with 200 head of fish or sometimes 300 head of fish. And now we're really struggling to come up with 100 and we're going right to our limit. We're still coming home late. Try to keep the customers happy and it's tough. And we'll stop inshore like once every 10 days or so and try to see if the fish have move back up in there yet but they're not. And now, we're wearing out an area, we're overfishing, where we're catching them.

Male Interviewer 1: So, you're not seeing Red Tide, it's just...

Bryon Holland: No. Now, the Red Tide is cleared up, we're not seeing any. During *[overlapping conversation] [00:03:24]* south of the sky way they had it way earlier than we did. And we were all looking at the posts and it was just terrible. And it finally got up here and there were thousands of dead fish as far out at 10 or 11 miles. You don't know how far the tide carries them back and forth. But they were fresh, their eyes weren't rotted out or anything.

Male Interviewer 1: So, can we go back into the past and then come back up and talk more about what you were just talking about? Can you -- so you said, you [00:04:00] fish commercially?

Bryon Holland: Yes.

Male Interviewer 1: Beginning in like 1984?

Bryon Holland: Yes.

Male Interviewer 1: What did you fish for?

Bryon Holland: We were -- I was stringing long line gear for grouper.

Male Interviewer 1: Okay.

Bryon Holland: Red grouper or bread and butterfish. We didn't have -- we could still fish inside 20 miles back then. And I spent, you know, 14 days at a time, all the time offshore and wasn't really involved with any Red Tide, maybe a little bit coming and going, I couldn't tell you for sure.

Male Interviewer 1: So, when is the first Red Tide event that you actually remember or have an experience?

Bryon Holland: I would say probably, it was probably seven or eight years ago, we had quite a few dead fish, it didn't last as long as this last one. But you know, even seven or eight years ago, the water used to get a lot cooler. I mean, in the fall right now, I remember in February, the surface temperature was 41 degrees, the water was green. You couldn't buy a fish. The guys would go out and have 40 people on the boat and come home with one because the water was cold and they were just heads down on the bottom and tails up in the air and didn't care. And at the same time, red grouper would come right up to the beach. And so, you can start catching and keep red groupers, you know, it shows 34, 33 feet of water, I've caught them hundreds of gags in 20 feet of water right out here, right off the beach.

Male Interviewer 1: And this in the past was the area -- was there a particular area where you fished? I mean, you didn't see any Red Tides, you didn't hear about any Red Tides during that period?

Bryon Holland: We had saw some Red Tide, where we are docked right at Johns Pass. We are the first set of boats inside the bridge. So, we see everything that's coming in and out. And we've had hundreds of dead fish in the past.

Male Interviewer 1: Like going back into the 80s or?

Bryon Holland: I don't recall as far back as the 80s, no.

Male Interviewer 1: Maybe the 90s [00:06:00] or...

Bryon Holland: Not until really, I wasn't involved in inshore until 2005 or 2006.

Male Interviewer 1: Okay. So that's when you started -- you became more involved inshore is really when you...

Bryon Holland: When it was more noticeable because I was here every day. In the past, it was 60 miles offshore every day.

Male Interviewer 1: All right. So, you remember maybe around 2005 and 2006?

Bryon Holland: Yes.

Male Interviewer 1: Do you remember any specific Red Tide events at that time or you just have a kind of a recollection?

Bryon Holland: Kind of a recollection. If I went through some log, I keep a logbook every day. I have a computer but logs don't crash. I might have put in Red Tide notes.

Male Interviewer 1: Oh, okay.

Bryon Holland: I'll take some time if you could give me a card. And I got a garbage bags full of books and I take notes.

Male Interviewer 1: Yes, that will be fantastic.

Bryon Holland: I'll take a look, probably I have something in there, it wouldn't surprise me.

Male Interviewer 1: So, you said the first one that you really remember is maybe around 2010, seven years ago?

Bryon Holland: Yes, about the time that I've really started charter boat fishing.

Male Interviewer 1: Okay.

Bryon Holland: So, where I was on the beach every day. And then it's not every year, and you might go a couple, three or four years without and then all of a sudden, you'll have a small incident. I mean, really it didn't last a week or 10 days, but they didn't have to pay people to clean them up.

Male Interviewer 1: All right.

Bryon Holland: You know, like this last time around.

Female Interviewer: Yes.

Male Interviewer 1: So, you don't – so, are there any that you recall specifically before the most recent one other than just...

Bryon Holland: Not specific, I think it was never so bad, right.

Male Interviewer 1: In a certain area or you remember get into an area or...

Bryon Holland: It's never really -- I've never really heard of it getting much further north of here. I think because historically the water was always cold. It's not right now, the surface temperature's 64 degrees, it's [00:08:00] February.

Male Interviewer 1: And normally you fish North, you don't fish South, you fish North?

Bryon Holland: I like to fish West and north.

Male Interviewer 1: West and North, okay. So, you had heard in the past about Red Tides as far as North...

Bryon Holland: It was always south of the bay for the most part always, always south of the bay. We'd get it to here and maybe as far as Clearwater, this last year I've drove the boat down from Tarpon Springs in October. And we're watching gags strangling right off the beach as far up as Dunedin.

Male Interviewer 1: So, in terms then of the recent one because it sounds like that's...

Bryon Holland: That's the most, yes.

Male Interviewer 1: The one that you really remember?

Bryon Holland: That's when everybody really started talking about.

Male Interviewer 1: It's just right this one, yes.

Bryon Holland: Yes, because it was bad.

Male Interviewer 1: Right.

Bryon Holland: There is a lot of guys that have done a lot of inshore fishing for a long time and they're the ones you should really talk to.

Male Interviewer 1: Right. Yes. Well, we're going to...

Bryon Holland: Everybody that you could... [overlapping conversation] [00:09:02]

Male Interviewer 1: Everybody that might have information for us because we wanted to, you know, use that to build the picture. Can you tell us, would you be able to describe in more detail or maybe map out the areas where you saw Red Tide this year?

Bryon Holland: This time, this last year?

Male Interviewer 1: This last year, this last event?

Bryon Holland: Okay. Where they pass here?

Female Interviewer: Yes.

Bryon Holland: Okay. Out to 11 miles...

Male Interviewer 1: Could you draw it, just you don't have to worry about it being super precise, just...

Bryon Holland: About as far as I go on a half day trip would be from here and it's about 12 miles, this is an 83. It's about this. And then as I came down from Tarpon and it was all the way to Dunedin.

Male Interviewer 1: Right.

Bryon Holland: And that's about as much as I personally...

Male Interviewer 1: And it would go all the way?

Bryon Holland: Yes.

Male Interviewer 1: To the shore...

Bryon Holland: Dead fish, all the way.

Female Interviewer: [00:10:00] All the way to -- how do you spell it? Sorry. Dunedin,

what is it?

Male Interviewer 2: D-U-N-E-D-I-N.

Female Interviewer: DUNED – okay.

Bryon Holland: And that's how much I was but we could get past here. And like we'd have to be out at an 8256 or 57, no further than that. And 08301 is where we were fishing because nothing...

Male Interviewer 1: So, you would get out past here?

Bryon Holland: Yes. Every day and when we have caught fishes far in, you know, butterfish, grunts and bass and stuff as far as eight miles up here, it will be four miles off the beach.

Male Interviewer 1: To catch a fish?

Bryon Holland: Not now. And it's worse up here, we weren't catching anything up here.

Male Interviewer 1: So, can you -- let's get a different color. And you can maybe draw the areas where you haven't, where you found that...

Bryon Holland: From here to the north.

Male Interviewer 1: From north?

Bryon Holland: Yes, from right there. There were there were no fish in the deeper water up here. And then the Clearwater guys fished about out here because we're always running into them close to that rack, and they weren't catching anything either.

Male Interviewer 1: This is all this past year?

Bryon Holland: This past year.

Male Interviewer 1: Now, has any of this...

Bryon Holland: I have not caught a fish up here yet.

Male Interviewer 1: Okay.

Bryon Holland: We are fishing down here. I'm sneaking a little further south all the time.

Female Interviewer: Can you kind of draw where you're fishing now? You're don't have to give us your favorite parts....

Male Interviewer 1: So, here you're saying in here they're...

Bryon Holland: Nothing.

Male Interviewer 1: Nothing. And then all up here, there's nothing.

Bryon Holland: Nothing.

Male Interviewer 1: And this is what you initially witnessed yourself?

Bryon Holland: And it seems to be right now, you have to be in 44 feet of water. All this bottom up through here is 38, 39, 40 feet, nothing. Down here 43 feet, we're catching some fish, we're wearing it out. And now we're doing 46 feet, it's spottier bottom, there's a lot of sand. I keep trying to sneak in here and try to get a hold of a little piece and there's nothing, a couple. And the machine [00:12:00] looks like there would be fish there because when my machine -- when the bottom gets fuzzy that's where you want to stop, beyond hard bottom and it's fuzzy with fish and a marken fish (*phonetics*) and I'm not catching any. We're not catching the grass porgies or the tomtates or. Here is where -- this is basically where we've been catching fish.

Male Interviewer 1: And that's all 44?

Bryon Holland: 44, 46, 50, Captain Frank has been getting out is up here further west staying out late, he does a lot more of the trips than I do. And he was fishing as far as 55 feet of water. Nice, greater fish out there, which we could reach it on our half day all the time but we can't.

Male Interviewer 1: These are half day trips that you go?

Bryon Holland: These are five hours trips that have now it become six and a half, you know, when they go. We don't have two trips in a day, the first one will stay late. Make sure nobody's got a plane to catch.

Female Interviewer: Yes.

Bryon Holland: Right. And so it's costing us fuel, we're way up on our fuel consumption. And that's one of the things we always have to hear about by the boat. You're burning too much fuel. But this year, we're just...

Male Interviewer 1: Just because you have to go so far out?

Bryon Holland: Because we have to every day. And then it takes time, you know, I mean, we don't run the big boats much more than I go, really to get out there because you're burning 10 gallons an hour per engine anyway, you're trying to make living doing it. But then you're running an extra hour every half-day trip. And running a little bit harder, you want people to be able to fish.

Male Interviewer 1: So, when did you first noticed that fish started becoming scarce in those areas?

Bryon Holland: First week of September. First week of September, we took one of the big boats goes to Tarpon Springs every year out to the water. So, I was up there for three or four days, came back down here or down here early one morning before I went to grab tools and stuff at the shop, and that's when I saw hundreds of dead fish from [00:14:00] our boat to the bridge.

Male Interviewer 1: Okay.

Bryon Holland: And that was the first week of September.

Male Interviewer 1: First week of September and that's sort of when the Red Tide...

Bryon Holland: Yes, that's when it moved north of the bay. Then the guys were reporting seeing a handful of dead fish but it was the first week that I saw that it was bad.

Male Interviewer 1: Okay. And was it already sort of out in this whole area?

Bryon Holland: I was out of the water for a month. Correct. We were at Dry Dock for the month.

Male Interviewer 1: Okay.

Female Interviewer: And I'm curious about what you're saying about still having to go that far. So, the Red Tide, there's no Red Tide here, but you're still having to go out...

Bryon Holland: I'm not catching anything inside that zone. And we try all the time because it's easy if I can only go seven miles and drift across that shallow water and 60 people are just scooping up fish.

Female Interviewer: So, do you think that would you have any idea why the fish haven't come back? Do you think they move out and haven't come back or...

Bryon Holland: I don't know. I thought they moved out, we still do well with our target fish, you know, the white grunt. You get them out as far as, you can get them as far as 85 feet of water. And there's quite a few out there because we're not targeting out there every day, every day. I don't know why they're not back in there, like I said my machine, my bottom machine showed me fish.

Female Interviewer: Okay.

Bryon Holland: I wouldn't stop no matter how hard the bottom is, you know, if it doesn't have fish on it.

Female Interviewer: Okay. So, they're there, they're just not...

Bryon Holland: Maybe, I'm not catching them.

Female Interviewer: Yes. It's interesting.

Male Interviewer 1: So, you say there are fish there but you're not catching?

Bryon Holland: I might be seeing this marken fish, you know, we use GoPros a lot.

Male Interviewer 1: Okay.

Bryon Holland: We should get a GoPro on a boat and go out here and stop on some of this shallow water bottom, we've rent you guys a boat. So, apply the GoPros. But we have to go out there and drop the camera down and look.

Male Interviewer 1: Right.

Bryon Holland: It's tough to do this time of the year because with all the cold fronts, the water is dirty. But right now, you know, it's been nice for a week, the water is probably [00:16:00] pretty clear, it'd be a good time to try to get a picture. Is there fish on that bottom? So, you just drift across some of that hard, you know, it's hard shelly coral and rocks and sponges. You'll see the fish or you won't.

Male Interviewer 1: So, you know, it first started in September?

Bryon Holland: Yes.

Male Interviewer 1: When did you notice the Red Tide begin to dissipate with the color, the redfish and...

Bryon Holland: It was -- wow, it was like it was Christmas. It was late, it lasted eight weeks. I think we had a full solid eight weeks of nasty and it's a good thing, they cleaned up what was around because then it would have been a lot longer. It was eight weeks, I was back in the water by the first of October and it was still dead fish for about another four weeks. They weren't as thick in the past as they seem to be right off the bat.

Male Interviewer 1: Well, you're already taking people out into this area at that point?

Bryon Holland: Yes. I had to. And while the captains, they've been running all the month. They've been going further course, I'm obstinate and I thought I could get some over here but I couldn't.

Male Interviewer 1: Right. Was it smelly and all that? As you said that, when you went through it I mean was it – did it had a strong smell or...

Bryon Holland: Down at the past, it was terrible. And my throat, I don't have allergies pretty fortunate, but my throat was tickling every day that I was down at the Pat every day. And people that are susceptible, just wouldn't – just past with empty, more like it goes down. People weren't coming to the beach, there's always 20 kids hanging around under the bridge and people fishing and there was just nobody around.

Female Interviewer: Wow. This was back in late October?

Bryon Holland: It's the mid-September and October.

Female Interviewer: Yes.

Bryon Holland: Yes.

Female Interviewer: So, did the business has take any...

Bryon Holland: We suffered, we didn't make a lot of trips. We try to make at least one five-hour trip every day, 45 people on the boat. Twice a week, we've got a 10 hours boat [00:18:00] that's going out. People were still going on the 10-hour trip, but only half as many people because people didn't -- they didn't like it.

Female Interviewer: Yes.

Bryon Holland: It was pretty bad. Well, my throat tickles every day for hours and I don't ever get hay fever or anything.

Male Interviewer 1: What were the species that you saw that were, you know, primarily affected by the Red Tides?

Bryon Holland: One of the silverfish, the little croakers or whatever they call them. I saw porgies, a lot of the flower mouse, the tomtates, some lizardfish. We saw some grouper, we saw some snook. The guys up in the bay or buddy of mine, Bryan Spade (*phonetics*), you should talk to him, he did a lot of cleanup. His family's been fishing here for generations.

Female Interviewer: Bryan Spade?

Bryon Holland: Bryan Spade, his dad is Bobby.

Female Interviewer: I know his dad, yes.

Bryon Holland: Yes, everybody knows Bobby. Well, Bryan is running the fish house up here in St. Pete. He's all over Facebook, you could find him, you really should find. And he did a lot of the cleanup, so he can tell you what he was scooping up and he knows how to identify every fish.

Female Interviewer: All right, great.

Bryon Holland: I'll give him a heads up, you're looking for him.

Male Interviewer 1: Yes, yes, yes. Let people know because we'll be in touch.

Female Interviewer: Yes.

Male Interviewer 1: Yes. So, are there any fish that you think may be more susceptible to this kind of Red Tide?

Bryon Holland: You know, I didn't really see too many of the grunts on the surface because we were looking, maybe they were able to migrate offshore. There's what my feeling is because fishing has been good further offshore. So, I think maybe they're fast enough to know what's going on or able to get out of the way. But mostly I saw the bait fish or the trash fish were all the dead ones that we're floating. I didn't see personally, maybe two snook and a couple of grouper, [00:20:00] gag groupers, right up on the beach. That's all I -- my nephew, Anthony drives one of our boats and they saw a live group or those struggling. And that was down by the shipping channel, we catch quite a few goliaths down there. People want to go catch a goliath. We had a big one living on the bad beach reef for about 10 months, one year. I must have sold that fish six times. So, it finally

moved along, you know, but pulling them off shallow, you know, she's only 25 feet of water.

Female Interviewer: Oh, yes.

Bryon Holland: Maybe 180 or 200 pounds.

Male Interviewer 1: Wow.

Bryon Holland: People want to catch one, not this one.

Female Interviewer: Yes. I've heard a few pat goliaths living under piers and things, yes.

Male Interviewer 1: Were there any other signs that, like Red Tide might be coming or is there anything that you noticed...

Bryon Holland: Just all the reports we were getting from south of the Skyway and we'd go down there. I tried to go to [indiscernible] [00:21:01] is right on the river down there and it was just terrible, didn't even stay for dinner, you know because it was bad. It was like more of a dead animal smell down there. I can't smell anyway, have been salt and bait in the barrel for years and really ignore the smell after a while. People don't, it was bad.

Male Interviewer 1: Right. But it had been south for a long time?

Bryon Holland: It was south for at least a month or six weeks or two months. And then they were putting pictures on the news and then all over Facebook and it was -- and we rode down Skyway a couple times and said, yes, it's pretty bad. And then finally, you know, creeped up this way.

Female Interviewer: Do you know what brought it up? Was it just current or do you have any other feeling of what?

Bryon Holland: Currents maybe. Currents or water temperature, it's got to be hot enough for this stuff to grow. I know in the winter that's when you get the clearest water, the water is cold and it's clear. You can see forever, [00:22:00] you fished 85 feet water and see the sand and the hard spot, it's not like that. Even when the water is blue, it's not clear, it's not cold enough to be clear. You know, so it's warmer stuffs growing, it's my thought anyway.

Female Interviewer: Okay.

Male Interviewer 1: Is this something that's just for this year or is this something like something that you've noticed over time like the water getting warmer and...

Bryon Holland: I've noticed probably for the last, we used to be able to target red groupers on a half day private charter because they're little bit faster boat, you can go 14 or 15 miles. We catch grouper every year, starting September, all the months that end with an R, September, October, November, December, good grouper fishing months. Not for the last three, four, maybe almost five years, they're not coming this far. You have to go, you know 25, 27 or 28 miles so. And I think it's because the water is not cold enough to bring them up in here.

This year, we had a real good gag fishery going on but they weren't in 19 feet of water, they were out in 45. But that's where they stopped when they migrated up inshore, they stopped right there because maybe the water was cold enough for them. And when we killed the gags for a couple of months before the season, you know, before the end of the year, right before the end of the year, the last two or three months or two or three weeks. But we were getting them in 46 feet of water. And historically, you could get them, you know, two miles off, 19 feet of water, they come all the way up in here. Anymore, the ones you catch here right on the skyway or any of the bridges or anything, those are the inshore fish anyway, they don't go offshore.

Male Interviewer 1: Have you noticed any other changes since you started fishing? You know, what are some of the major changes that you've noticed in the fisheries?

Bryon Holland: Since I started...

Male Interviewer 1: Yes.

Bryon Holland: Fish are a lot smaller than they used to be. You know, you catch all the big breeders and you're targeting the big fish. [00:24:00] Especially, when we were commercial fishing, you're targeting the big fish. And I watched the gag population dwindle and it was part of the problem when we used to string long line gear, and I was putting 1000 hooks in the water on three miles of cable, four or five times a day. Sometimes if the fish rejoin, you're just working around the clock but it's up for an hour. Yank it, bait it, set it, do it again, do it again.

We all switched, I paid for my boat, my business hang with these two foot leaders. And then by the time I was done -- and I used to come home with -- I would come home, I'd be gone for 10 or 12 days, I'd have 3500 pounds of red grouper and 1000 or 1200 gags. Every trip, every trip, every trip, I switched to the long leaders and there's a learning curve, right maybe a couple of months to get used to handling the longer leader and get your crew doing it. And then I was coming home with 4000 gags and 3000 red groupers. And I wasn't the only one doing it and I'm fishing the same place that I always fished. But we killed the gags, everybody -- and that was a...

Male Interviewer 1: This is more or less when like what period of time?

Bryon Holland: I would tell you here in a minute, 03 or 04, maybe that's when all the guys before they gave up the quota and put a handle on the long line permits. When I first started in 1984, you'd see one anchor like two weeks, it was great. And by the time I finished, there were boats that were stringing 10 or 12 miles a gear. And so, they tie up the whole 40 break, like right after a storm, the storm pushes the fish up into the rocks, they're easy to find. You go right to the 40 break, wherever that storm cross the 40 break and you're putting 1000 pounds a day on a boat like [indiscernible] [00:26:00]

And boats had the whole break would be -- I mean from Clearwater to Key West, you couldn't have -- you didn't have room to pull in on the break because guys were stringing such long gears. And then I started, hot shot years, I put a little half mile a years and with a couple hundred hooks on it, scoop them above of that rock because I going to see them for half a day.

# Male Interviewer 2: I have been recording.

Bryon Holland: This is for entertainment purposes only. But that's when we heard the gags, that's here we heard gags. One thing the longer leaders catch a whole lot less short red grouper, we used to -- when I first started, like I worked out a big boat, 65 Thompson. And we were putting a lot of hooks in the water, you know. 3000 hooks, three times a day and it just lots of little fish sometimes. But the longer leader, you start catching the smaller red grouper but you caught all the gags. And then, you know, the big ones are gone. Little people grow little babies, big people grow big children, right? Big fish grow big fish. I think when you have the whole, the whole biomass gets smaller than they're going to be smaller. They shouldn't be able to keep anything over 30 forage, that's the breeders. And then when we got digital, the differential GPS, we got accurate.

And at the same time, everybody bought a computer programs that never forget the marks. I used to use a little digital plotter, it holds 1500 marks, you'd save them on a chip and the battery would die and you didn't really have them saved unless you had them written down. But with a computer, it never forgot a mark. And so, you just, you know, you scoop and finish up, marking all the hard bottom. I fished in Nicaragua for seven months, one year. We were down there catching the silk snappers right on the [indiscernible] [00:28:07] where it drops off. So, you had to drive back and forth across there and mark that shelf so, you knew exactly where you wanted to put your gear because it falls down on the deep side, it's hard to get it out of there. So, I learned how to plot bottom.

So, when I got back up here, a fella hired me to run his boat. I went out there and before I'd put a single hook in the water, I would draw a picture of the hard bodies back and forth. And you get a little break and it's like – and it move it up to tense and mark it again, mark it again, marking when the guys are sleeping, mark it again, mark it, it splits off, you know, gets wider over here. And once you got it all marked out, you just string -- we used to string gears like this. Like Marlon Furrows (*phonetics*), you know, just that's how you used to do it. You can do it that way because there are a lot of fish.

Now, I'm tying up that little gravel boat with for quarter mile lakes on it. And then jumping over a half mile of sand and shooting up a ridge and coming back down and on 30 feet on the other side and tying that rock up right there. And the fish didn't stand a chance. And once you've got it on your computer, you've got it. I've worked -- first time I ever fish 50 something fathoms out here west of the elbow. I was there at the right time where the fish were showing off the bottom. And we were scooping them up and I was marking it and it took me six or seven days to get that piece of bottom figured out. It's more of a Swiss cheese bottom, it didn't really show up hard. And if the fish aren't showing it off, you don't know what's there. But now I can -- I've been out there years. I'd go out there and tie that bottom up on it with one gear because I got it on my computer. And then the guys had all their daddy's marks for 30, 40 years. Put them on a [00:30:00] computer, buy another boat, send somebody out there to connect the dots. That's what happened with the fish.

Male Interviewer 2: Have you seen a change since they moved the long line or so?

Bryon Holland: I didn't start running a boat until after they put the fence, the boundary in. So, I had no experience of where I was or what I was doing up inside the fence. And I was never able myself personally, you know, to work in.

Male Interviewer 2: Right.

Male Interviewer 1: When did they put the boundaries?

Male Interviewer 2: 2009?

Bryon Holland: Was it that late? No, it was earlier than that.

Male Interviewer 2: Well I'm talking -- yes, pushing them outside 20 fathoms.

Bryon Holland: The long line boundary.

Male Interviewer 1: Yes. I think it was 2009.

Bryon Holland: Yes, because we'd have all the way points. And then you got -- that made it tough on us because you're working right up on the fence. And you know, there is a rock, right there, the other side of that bay. It's just loaded with things.

Male Interviewer 1: Interesting. So, were there any other changes that you noticed that you can think of, in terms of...

Bryon Holland: For the Red Tide, I think that's all I know. Talk to Wally because he can tell you, he can give you some historic data of it happening on a major scale before. And maybe the timeframe that he thinks it is, maybe we had a warm year or something, you know, they've got weather for a long time so it might coincide for you right there, maybe.

And Bryan knows a lot about the inshore stuff. Call him. Talk to him too and both those guys know somebody.

Male Interviewer 1: Yes.

Bryon Holland: Right?

Male Interviewer 1: Yes, yes, yes. No, this is great. We're going to follow up. So, I have two, I think two more questions. I don't know if these guys may. And you have a couple more to -- so, I have, why did you switch from the commercial fishing to doing the charter?

Bryon Holland: I was getting old, tired and I got a lot of quota. So I was [00:32:00] at a point where I could actually make a profit like selling the business.

Male Interviewer 1: Okay.

Bryon Holland: And then when I got my license and now I get to go fishing every day but I don't have to catch them to get paid. And that's a young guy's game, boats or beach yacht.

Male Interviewer 1: Yes.

Bryon Holland: It's tough way to go. And I did it for a long time.

Male Interviewer 1: So, you sold your quota or you'll...

Bryon Holland: I sold up, I sold my quota, I didn't like the way the industry was going. And it's like, quota, it used to be, you'd sell your fish to one guy all the time, year after year. No problem, he loved having your fish. He's making money on your fish, he's making and you're making money. If you build a motor and a boat, they write you a check to fix the motor and they take it out of your next two loads of fish. Once everybody had quota, they weren't front checks no more. They'll buy some of your quota. So then you're going to end up having eight guys on the quota. I know investors that bought quota. They're like, I'm making 14% of my money, I was like you never fish a day in your life, right? So, I think the quota that's being leased ought to be allocated to the guys that are catching them.

I mean, right is right. I know that's not right and that's the way the industry was going. When I started it was wide open, you know, and that's the way I liked it. And we always bitched about the rules and regulations but hey, we still have a lot of fish in the Gulf of Mexico because we got rules and regulations. And now I'm on the other end the charter boat. Yes you turncoat but -- so, you know, that's the way I see it.

Male Interviewer 1: So, how does it impact -- I mean, have you had to make any other adjustments to your business because of the Red Tide and having to go fish so far out and the impact that you...

Bryon Holland: No, we've been -- typically, November is our slow season anyway. In November, you get a little boost at Christmas, and then it's real slow until spring break. So, it's been our slow period. Generally, when we can still fill the boat every [00:34:00] day this time of the year, we do group-ons and all that. Get as many people on the boat as you can, keep your mates working, right?

Male Interviewer 1: Right. So, you're...

Bryon Holland: But I'm not the business owner, I know...

Male Interviewer 1: Okay.

Bryon Holland: Yes, I'm not the owner.

Male Interviewer 1: But the number of trips hasn't necessarily decreased that much but probably...

Bryon Holland: Not since...

Male Interviewer 1: Just the length of the trips, the cost of the trips is a little bit more? Okay. Yes.

Bryon Holland: And the production is down. I mean, people aren't leaving as happy. But our Hogfish (*phonetics*) fishery is doing well.

Female Interviewer: Okay.

Bryon Holland: There seems to be a lot of Hogfish.

Male Interviewer 1: Okay.

Bryon Holland: And there's an extraordinarily amount of mangrove snappers this year outside, right outside that dead zone.

Male Interviewer 1: Right outside the dead zone.

Bryon Holland: Yes. Like you go out there, you can fish 50 feet of water, 55 feet, there's a lot of mangroves around this area. So, that's a good fishery right now. Right. Now, another thing historically, the yellowtail snappers were always way south of here. I never remember over time catching any quantity of large yellowtail snappers. They're all over and we've such a good...

Male Interviewer 1: Oh my god.

Bryon Holland: And as soon as the commercial guys figure it out, they're going to be, they're going to be scooping, they're going to be switch the light tack and learn how to use it. Because we have phenomenal man yellowtail snappers and mangroves. I had a 44-hour trip a month ago, full noon trip. I leave at 10 o'clock on a Friday morning. We start fishing by seven o'clock at night and fish until seven o'clock the next night and then bring them home. We have sleeping accommodations, you're allowed a two-day back then. Great, good for us. So, we do these overnight trips all the time. A month ago, I was fishing 70 miles west of here and I started at seven o'clock at night and we put 100 fish an hour on the boat [00:36:00] all night long and it was medium vermillion, three pound vermillion snappers, nice fish, mangrove snappers and yellowtails every stop all night long.

Male Interviewer 1: Oh my gosh.

Male Interviewer 2: So, those mangrove are they always out there or do you think they were pushed that way?

Bryon Holland: They're always out there, we're just having a good year form. Maybe it's one of those seven year things or something. But I know the kids that fish in these little Carolina skips and stuff, the local boys that run offshore, they had these army tanks that are right up and down the coast. And they do well with mangroves, almost all the time. They'll have spring break in a minute, they'll be coming home every day with a cooler full of fish. But they're real good at using light tackle. You know, they grew up here.

Male Interviewer 1: So, these are smaller charters are these are the big head boat type?

Bryon Holland: No smaller charter.

Male Interviewer 1: Okay. Then you're going out overnight.

Bryon Holland: Oh, no, no, no. It's a big head boat...

Male Interviewer 1: Those are the big? Oh yes?

Bryon Holland: I'll take as many as 44 people. I think that month ago trip though we did so well. I had like maybe 25 anglers on the boat. We got our limit 20 mangroves snappers, 20 other snappers.

Male Interviewer 1: That's why you always fish the big with the big...

Bryon Holland: Mostly I do, yes. I like the big boat. It's a lot more comfortable, you know, little boat beat you up. So, I do about half of our overnight trip so we were doing some 63 hour deep drop trips for a while. I anchor that boat as deep as 960 feet of water.

Male Interviewer 2: And you're catching?

Male Interviewer 1: You're not doing -- okay.

Bryon Holland: Snowy or the snowy grouper, yellow edge grouper, barrel fish, a funny little snapper that I'd never seen before, it may be called a glass ice snapper or it's yellow and red and yellow with real silvery eyes [00:38:00] and long top tail fin. I'm sure if you look on our Hubbard's posts, we have pictures of them.

Male Interviewer 1: Are there fish, I mean, do you tend to target certain fish or there's a sort of like a pattern of what you go fishing for during that trip or...

Bryon Holland: Most of time, most of time we know what we're going to catch because we've all been doing it forever. You're going to catch what you caught here before most of the time. But I'm like our deep-water trips, we were trying to target the grouper. We'd go out and drift 1500 feet with strobes in the water and we'd land up lane and one swordfish couple years ago. Get it tuned and trolling between spots. We had a yellowtail a while back, we catch those little black fin tuna all the time.

Male Interviewer 1: But I mean, for the...

Bryon Holland: For that, we target that the mangrove snappers that occur in the night. And then, if any when amber jacks are open, we'll target the amber jacks because everybody's allowed to and then we'll grouper fish the rest of the day and then we'll finish up because the mangrove snappers is more of a nocturnal fish.

Male Interviewer 1: Okay.

Bryon Holland: If you catch two mangrove snappers on a rock during the day, you'd catch 25 of there tonight.

Male Interviewer 1: And is there reason that you sort of start with one and kind of go...

Bryon Holland: Because the mangroves bite better at night and 20 fish on the stringer is a lot of fish.

Male Interviewer 1: Right.

Bryon Holland: So, if you can get everybody 20 fish before daylight, it makes your day go a whole lot easier. And then red snapper season, you know, we throw that in. When red snapper opens up, gags are open and amber jacks are open. You come home with a lot of fish. You could lower the bag limit on them recreational fishery, it wouldn't hurt a thing. My people come home with a two-day bag limit. You got to go to Sears and buy a freezer.

That's a lot of fish. But you know people are up north all winter long talking about going fishing and they want to take the freezer home.

Female Interviewer: Yes.

Bryon Holland: A freezer full home.

Male Interviewer 1: Right, right.

Male Interviewer 2: So, a lot of these are seasonal snowbirds coming down or... [00:40:00]

Bryon Holland: We have a lot of regulars, we have a lot of local regulars that do it. And but, and now a lot of people that you'll see that certain week every year. Every year they'll be here for two weeks and they're fishing with us every day. Go for the two weeks that they're here and that's where they leave the condo and the next group pulls in. And we've had kids fishing with us since they were eight and are now 18 or 20. Ready to bring their kids out and go fish.

Female Interviewer: That's cool.

Bryon Holland: Yes, we try to put on a good show.

Male Interviewer 1: That sounds good. I'm ready to go myself. Where's that group on? What's the group on? Let's all get group ons, what you said you had a...

Female Interviewer: We've seen here about, yes we go down to Hubbard's, yes.

Male Interviewer 1: Do you had a couple more questions you said?

Female Interviewer: Yes, I wanted to ask you about what you've heard from the others you've mentioned some historical Red Tide events.

Bryon Holland: Okay, Wally who I was talking to in Tarpon, we were complaining about it. He's like, yes, it's supposed to be all the way up to the panhandle. They were handling some off of the beaches up there. He goes, well, they're blaming it on the sugar people that's going off. He's like, man, he goes, we didn't have big sugar bag in the 40s.

Female Interviewer: Yes.

Bryon Holland: And he remembers where it wipe out everything up and down the coast. He's always been -- he used to, back in the day, he'd have a big net boat for the mackerel for the king mackerel and the mackerel. And just tearing it up, you know, weigh hundreds of thousands of pounds. But he remembers a couple times when they really had a statewide almost statewide, nobody could catch a fish.

Female Interviewer: This is back in the 40s?

Bryon Holland: Yes.

Female Interviewer: And will try and talk to him...

Male Interviewer 1: Yes, it sounds like...

Bryon Holland: Talk to him, I would definitely [overlapping conversation] [00:41:42]

Male Interviewer 1: If he can go back to the 40s, that's super.

Bryon Holland: He's been fishing right out of Tarpon area his whole life.

Male Interviewer 1: Oh, my Gosh.

Bryon Holland: He's been a lot all over. He was one of the first guys to ever have it etarp, saved his life. He's got some stories. Back when you had to know how to navigate. [00:42:00]

Male Interviewer 2: He's a [indiscernible] [00:42:02]

Bryon Holland: Yes, no fooling in a led lines, see how deep you are. We got it easy now huh?

Male Interviewer 1: I guess.

Female Interviewer: We'll have to talk to him, it's a great...

Male Interviewer 1: Yes, yes sounds like, yes.

Bryon Holland: Yes. And he's sharp, he's still sharp too so you definitely talked to him.

Male Interviewer 1: And he was saying that these events back in the 40s were long lasting. I mean, were they short or they did they...

Bryon Holland: Well, to kill that many fishes but it never just all starts blooming at once but it starts somewhere and moves. I would think it was long lasting. You'd have to talk him.

Male Interviewer 1: Yes, yes. Okay. Yes. We'll talk to him.

Bryon Holland: Yes.

Female Interviewer: Do you have any sense for these events of these little patter blooms? Do they always come from the south or do you have any sense for that?

Bryon Holland: I don't.

Female Interviewer: Okay.

Bryon Holland: I think we always hear about it South first, even if there's a small patch, it's Anna-Maria or something right there.

Female Interviewer: Okay.

Bryon Holland: I don't think I've ever heard of one coming from the north, then again I don't know...

Female Interviewer: Yes. And I was just curious if there is sort of a pattern to how they emerge in a little [indiscernible] [00:43:04]

Bryon Holland: Wrong guy.

Female Interviewer: Okay. Thanks.

Male Interviewer 1: I think that's, I guess.

Male Interviewer 2: When the yellowtail, do you think it's because of the warming of the water?

Bryon Holland: I do.

Male Interviewer 2: Coming up north.

Bryon Holland: I do, the same reason that the grouper aren't coming all the way up to the beach anymore. I really...

Male Interviewer 2: Or the temperature.

Bryon Holland: Yes. The whole time I've been fishing for a living. I think a lot of it is water temperature. And I used to red groupers or like my bread and butterfish, right? We targeted ray grouper and my buddies were catching them in 150 feet of water. I went 250 feet of water because that's where the biggest biomass of the bigger fish. If they were catching them in 200 and it didn't matter where they were, it's the depth. I don't care where you are catching and how deep for you, that's the secret number. How deep were you. Because if you're catching them in 90 feet of water, I'm going to 90 feet water and it don't matter if I'm [00:44:00] 10 miles north or south you unless you just ran right out of the fish, that's where they are. The temperatures right, it's holding the food, the fish is

comfortable. And it's a little chilly and they're aggressive, you know, but and it's always how deep were you. Standard answer, always the bottom. It's over my head. Where did you catch them? A quarter mile, everyone one of them, don't give up your depth.

Well, when I started charter boat fishing of running the little 40-foot boat. And once again learning curve get used to look at the bottom at 30 feet of waters instead of 130 feet of water. But you just keep working at West every day until you get that first stop. You roll across the sand and it gets hard, put on the brakes. Stop, swinging around, keep the red groupers, you don't go any further. Go north, go back into the sand and either drive north or south for a couple hundred feet. Turn it back west and go back across and then rolls down and hard again, stop. Catch more red grouper, it's a depth. That's the secret of. And it's always been that way, really.

Your buddy's catching the yellow eyes snappers, the silk snappers. How deep were you? How deep were you? It doesn't matter how far north or south you were. Except for the fish that specific. I bet the yellow eyes snap, I bet you the silk snappers are moving north too. We used to catch them down there west of Pulley Ridge and to the north a little bit. I bet you they're moving north now to 63 fathoms. The magic number for those.

Male Interviewer 1: What is it?

Bryon Holland: 63 fathoms.

Male Interviewer 1: Oh 63.

Bryon Holland: I have to get out here and try some of that down there off of Fort Myers. You might catch some or there's more.

Male Interviewer 2: Did you vent the fish with any internet or computer?

Bryon Holland: Oh yes, we always when we were long...

Male Interviewer 2: Devices. [00:46:00]

Bryon Holland: We haven't started using those yet. But we do vent and we supply vents for everybody and we give them classes. And it's pretty common to see a couple fish floating away. You can't save them all but venting works. I can't tell you how many fish I've caught red snappers and groupers gag groupers that have two or three scars on them from being vented before. And now, they're illegal fish, a lot. So, it works. Some people want to poke them into those like, no, you can't do that. Because you know, then you got a bacteria issue going on.

And I think water pressure has a lot to do with sealing the wound on a fish. I really believe that, I've seen fish that were so scarred up, you know, where shark or Kuda (*phonetics*) got ahold of them, and maybe the water pressure sealed the wound, especially a little puncture

when you vent them. I think the water pressure seals the wound. I've had grouper that had four or five -- you got another hole in you. But it works and we haven't started using the dissension devices yet. I'd have to take a class. I'm trying to figure out how to use a new VMS.

Female Interviewer: How about the -- so my question on the temperature is, has it changed the spawning behavior too or do you notice any of that?

Bryon Holland: No, because I've seen fish spawn just about any time in a year depending unless it's real cold but fish have eggs in the bubbles all the time. Not, not all the time, red grouper or grouper row gets. But I've seen the gags seems like they've been spotted earlier. When we've been starting to run into hundred head stops that it's a migration thing but running up the southeast side of the middle grounds in March every year. Now we started to avoid that spot because the season's closed. You don't want to wound though. [00:48:00] You know, you don't want to hurt them for no reason. But you can work up and down to there and get 100 head of gags in March. And I think it's because they're going up in their spawn.

Female Interviewer: Do you guys have any other questions?

Bryon Holland: But I am a fisherman. So, I might be lying.

Male Interviewer 1: We're going asked a lot, we're going asked a lot and they will see...

Female Interviewer: Well we're doing a hundred of these interviews so the lies will balance out.

Bryon Holland: Yes, we're all liars.

Male Interviewer 1: This goes down to, down to here right this?

Bryon Holland: Yes.

Male Interviewer 1: Yes, so we....

Bryon Holland: Yes, I don't fish.

Male Interviewer 1: You don't fish okay, so it's just...

Bryon Holland: But like that.

Male Interviewer 1: Sort of this area and over here.

Bryon Holland: That's where I'd seen dead fish from Dunning South, we brought a load off from Tarpon.

Male Interviewer 1: Yes, it's been off in that area, like that. Okay. Wonderful.