

[00:00:00]

Interviewer: So, I'm going to start the recording. All right, great. So, we're here May 7 with Brad Gorst in Clearwater, Marina. And so we'll start Brad, just by asking you about your fishing operations, how long you've been in the area, what kind of fishing you do?

Brad Gorst: Mainly offshore grouper snapper fishery and charter side of it and commercial fishing. So we still have our commercial permits for pin fish or Spanish. And your prisoner snappers. My stepfather, he started fishing in Clearwater back in the 60s running the party, but we come from Panama City. And he used to fish in the old sailing scooters is what they go smack boats, used to go to the beach and fish with the hamline and nippers.

Interviewer: Yes.

Brad Gorst: So, he's got some pictures, a little video of him. It's pretty cool. I should get to you. Of being on the sailing school.

Interviewer: That's cool.

Brad Gorst: Yes. But we've been in business here since '73.

Interviewer: Okay.

Brad Gorst: And this should be the third boat here. The first one was the Voyager then the Gulf Stream and then the Gulf Stream 2 and then we had the Raging Cajun at one time and a couple other boats. We're downsizing a little bit now.

Interviewer: Okay. And always at Clearwater here?

Brad Gorst: Yes.

Interviewer: Okay. Great. So, if you can think back, we're going to go back in time and then work up to the present. So, can you think back to the very first major red tide event that you can remember occurring?

Brad Gorst: The one that I was fishing in when I first got my license was in '95-ish, I can't remember the exact year. That was some time in the 90s. We bought this boat here the Gulf Stream in '94 [00:02:00] from Mount Hazleton. I ran it by myself for a number of years and that red tide out here was, it was like coffee.

Interviewer: Okay. Can we -- so we're going to actually try and draw these on the chart here. So just take that 90s event and if you can kind of draw the space with the center of it.

Brad Gorst: Where it was?

Interviewer: Yes. So where to cover.

Brad Gorst: I only fish, you know, and this was kind of my realm in here but it's...

Interviewer: Okay. Let's take and we'll mark that.

Brad Gorst: I have to say from up in been here, at least -- I didn't go down this way much like hardly ever.

Interviewer: So we'll draw that too. So, kind of where was the end of your fishing operation, you went down of?

Brad Gorst: Let's see here. Like that and then this way. Let's see, there's Clearwater there, right, and this is *[indiscernible]* *[00:03:03]* Okay, yes and I fish all the way up in here like this, along the coast.

Interviewer: Okay.

Brad Gorst: But I remember one particular year that the worst of those like that front of it.

Interviewer: Okay. So, this was -- so what year was it did you say 95, was it? In mid 90s then?

Brad Gorst: Yes, mid 90s, I don't remember the exact year.

Interviewer: Yes, it's okay.

Brad Gorst: At the time, it wasn't that, you know, soft but it wasn't -- there was no emphasis on it, it just kind of it happened, you know.

Interviewer: So, sorry, go ahead.

Brad Gorst: No, it was miserable. Cough, you know.

Interviewer: Yes. Some respiratory and you said it was kind of coffee colored water?

Brad Gorst: Yes.

Interviewer: And do you remember kind of -- did you see fish kills or what kind of characteristics do you remember that red tide?

Brad Gorst: There was quite a bit of fish *[00:04:00]* but there wasn't like a ton, a lot of grants.

Interviewer: Okay.

Brad Gorst: Because back here -- now I have to go by what I was told back in the 70s when I was a kid. I wasn't fishing with them but it was bad off at Sarasota.

Interviewer: Okay, in the 70s?

Brad Gorst: Yes, 73, 74 somewhere in there.

Interviewer: Okay.

Brad Gorst: Max, he told me when he was running the party board out of Sarasota that he rode through a million pounds of fish floating, plowing through them like a snowplow if it was a plow. He said that I had that it was continuous groupers.

Interviewer: Groupers back then, okay.

Brad Gorst: Yes. Not much for snappers, I believe as far as red snapper go, but a lot of great grouper.

Interviewer: Okay.

Brad Gorst: Up there it's waiting right there.

Interviewer: Oh. Do you have -- well let's go, so yes, I kind of want to work back on this timeline so we haven't, you know, we want to get the information into organized format. So I think we covered this 90s event. So, you said you saw grunts killed with other species that got killed in this event or?

Brad Gorst: All the grants little porgies, there was a handful of groupers floating. On the 90s, you know, reds and blacks or gags, I guess I'd say. You see a few Goliath floating here and there [00:06:00]. The hog fish, lot of pin fish.

Interviewer: Okay. And then you actually -- you brought this up when we've talked previously about the bottom habitat. So, this event, was this sort of -- you have a sense of it was a surface loom or did this go through all the way to the water column? Or is it a bottom event or...

Brad Gorst: No. It went all the way down because it killed the bottom. You couldn't never catch anything for like about four or five years.

Interviewer: Oh, really in the 90s. Okay. So, this was a bottom effecting event and you said the recovery was four to four to five years?

Brad Gorst: Yes.

Interviewer: Okay. And did you have to stop fishing? How did it impact your operations? Did you we?

Brad Gorst: We just went on past it.

Interviewer: Okay, so you just went around it, were you able to point to me?

Brad Gorst: We just go right through it, we get out, you can't just go to about 20 miles to fish.

Interviewer: Wow. After 20. And then so presumably it had like increased fuel expenses and things?

Brad Gorst: Yes.

Interviewer: Okay. But you really keep operating?

Brad Gorst: We marketed for and we just said, you know, we said you really can't catch much on a half day, then they need to go all day to catch anything and people say okay, we want to catch something we're going to go all day.

Interviewer: Yes, okay.

Brad Gorst: They did whatever it took.

Interviewer: Okay. And how long did this event last, do you recall? Like months, weeks, years?

Brad Gorst: I would say it was about a month or so.

Interviewer: Month or so, okay.

Brad Gorst: Yes. And then it kind of just kind of, I think, at the time when I felt that it kind of consumed itself, it ran out of fuel and there's not enough to eat.

Interviewer: Okay. It's kind of dissipated?

Brad Gorst: Yes.

Interviewer: Okay.

Interviewee: And it's like...

Male Speaker 2: Well, you say *[indiscernible]* [00:07:51].

Interviewer: Well, I mean, I can tell you what, what the fishermen have told me. I mean, again, I see a lot of patterns [00:08:00] in the data we're collecting from you guys. I mean, definitely there's a lot of concern about Okeechobee down south, although it's not really clear, you know, what about the river might impact it. And certainly there's times that they do. You know, they put out water and it doesn't resolve the red tide, so.

Male Speaker 2: Like I said, in the old days, we're talking about they go big go big, and the old guy says, that's down south, boy.

Interviewer: Yes.

Male Speaker 2: [indiscernible] [00:08:29] up here in Sarasota. And the red tide [indiscernible] [00:08:33] they didn't have it down there.

Interviewer: Yes. Do you see the events -- do they tend to come from one particular direction consistently or?

Male Speaker 2: I think it always comes from the South most of the time.

Brad Gorst: But yes, I have to say the majority of the time it's a Sarasota thing.

Male Speaker 2: Yes. They usually happened at south [indiscernible] [00:08:58].

Interviewer: Yes. Okay.

Brad Gorst: Yes. And I always -- I mean, you're right. It's happened in the winter, but it tends to -- I tend to feel that it starts more after the summer. The heat of the water. August, September, you know, maybe it carries over into the winter, but I don't think -- I don't recall seeing it in the spring ever, not that I can remember.

Interviewer: When is the last time you saw it around here?

Brad Gorst: 2013 up to the North.

Interviewer: Okay. So you haven't seen it in the last few months or anything?

Brad Gorst: No, not since the one that came up after the hurricane.

Interviewer: Yes.

Brad Gorst: See, now that hurricane, what was that hurricane Michael?

Male Speaker 2: Yes.

Brad Gorst: Hurricane Michael.

Interviewer: Yes.

Brad Gorst: It was all good until that came along. And what it did is that due to that [00:10:00] pulling that water up that little pressure drag in that water and then that hard south wind, it pushed it up and it came up the coast and it kind of, I figure kind of follow this line, because of the wind, and it went on up to.

Interviewer: So let's try out draw. I want to go the event sequentially but let's draw this out while you're talking about it in a different color. So, kind of show where the...

Brad Gorst: Well, the wind, you know, the wind was out of -- the wind direction was pretty much this way, right? So, as you had all that wind pushing all that water, you know, coming from the south here, and especially all that surface push because they had it some down here now you got your tide flushing in and out.

Interviewer: Yes.

Brad Gorst: And it could have been coincided with the tides, the fall tides, the currents, but it basically kind of I'd have to say, maybe up in here, and then this is the veteran's reef. So, it went on up to, you know, up and out in here.

Interviewer: It got off the chart a little bit? Yeah we can go, yeah...

Brad Gorst: Yes. It's off the chart, yeah. So, this is what they -- this is the south.

Interviewer: Or you can just say generally how far off like how many miles?

Brad Gorst: So out here I saw it pretty bad down in here.

Interviewer: Okay. Yes, you can circle big areas.

Brad Gorst: This is probably kind of the edge.

Interviewer: Okay. So out to, we can write notes.

Brad Gorst: Okay.

Interviewer: It's often and out to how far like with the landmarks or how many miles or?

Brad Gorst: 20 miles.

Interviewer: 20 miles, okay.

Brad Gorst: And about -- kind of went out like this.

Interviewer: Okay. We can get the bigger map. Actually here [00:12:00], you know what, let's do this. This will be easier. I bought a small version of that map. I can draw it out. Oh that's something [indiscernible] [00:12:10] We can go far enough north. All right, it's all right, we'll go off the notes then.

Brad Gorst: No, I've got here, I got this one.

Interviewer: Okay. Well, I need a different piece of paper just to have to be reference, the chart, so I need another different piece of paper, oh perfect. All right, let's go do this. I don't get another. All right, so you can draw that and can draw out the [indiscernible] [00:13:04] 2018 in.

Brad Gorst: Okay. So I've heard now is it was out to 60 foot which is the 10 fathom and there was a lot of bottom down in here, down and that's right there, but I understand it was about like this. But as it came up here, [00:14:00] it kind of killed up in here. [indiscernible] [00:14:37] I can't comment down here because I don't go down so that's kind of south fill this in. But the one from 2013.

Interviewer: Yes. Let's put that in red color. I want to make some notes on here.

Female Speaker 2: Is this 2018, this is Bosman hill?

Brad Gorst: Yes, yes.

Interviewer: Okay.

Brad Gorst: [indiscernible] [00:14:59]

Interviewer: Yes. I'll actually have to because we print them off in different sizes, sometimes I'm actually going to trace the coastline so we have it as a reference. Because when we digitize it all. You have to take pictures of it on top of the chart. But if we trace the coastline then, it'd be enough to get it where it's a lot. So you can go ahead and plot out, 2000, what is that 2014?

Brad Gorst: Yes. Now that one, the best I can recollect. Now we took [00:16:00] Charlie Christ out in a boat, we took the ride up to the cold. They did an article on it, so there's actually a video in the newspaper.

Interviewer: Oh yes, will you send to me?

Brad Gorst: I don't have it.

Interviewer: Oh, really? I'll look for it.

Brad Gorst: Yes, we took him out on a boat ride and Haywards Matthew, you know Haywards Matthews?

Interviewer: No. Who's he?

Brad Gorst: Dr. Haywards Matthew, he is a professor at SPC, oceanography.

Interviewer: Okay.

Brad Gorst: He's done a lot of research on it. Actually, he's done a lot of research on red tide back then.

Interviewer: Matthews.

Brad Gorst: Hayward Matthews.

Interviewer: Okay. Yes, yes. I got the recording in, I get it, yes.

Brad Gorst: Okay. So and I was talking to Stevie Maazel. He said, out here up to pretty much. Now this up in here, it gets a little fuzzy but just kind of went down here like this. Okay. Yes, it kind of went down this way like this all the way back in. From what I understand it was way up in the...

Interviewer: And was this you know, sort of bottom death or surface bloom or?

Brad Gorst: All the way down, no. I was talking to Stevie, so the divers were diving in the middle ground Jim Zerbrick.

Interviewer: Okay.

Brad Gorst: He runs out of steam hatches and he commercial fishes a lot of fish up in here. They were diving in and there was a black sludge on the bottom out here in the grounds.

Interviewer: Okay.

Brad Gorst: And that was here at the workshop.

Interviewer: Yes, he told me about it. Yes.

Brad Gorst: And then there was that one guy there that they [00:18:00] did push a lot of fish out too, so some of the fish move but I don't think that all of them get away.

Interviewer: Okay.

Brad Gorst: Obviously because you see a lot of them floating.

Interviewer: Yes.



Brad Gorst: But this here, this whole area it still can have a catching be up in there. Commercial fish up inside up in here this year and this is just nothing.

Interviewer: So you think its loss have recovered since this event?

Brad Gorst: No, because the area is so big you know, what's it going to -- I mean for crab to get pushed up into the middle here and for the fish to follow them and you know, with the currents like you say, you know, this is the estuary and all your little gag here, first they grew up up in here.

Interviewer: Okay.

Brad Gorst: That's estuary in my opinion.

Interviewer: Yes, yes.

Brad Gorst: And then they started, the season they start traveling south and it seems like we say back in a day we could catch in here. We're catching a couple of the little bridge right here, little guys, so hopefully it's starting to come back but.

Interviewer: Yes. Do you see *[indiscernible]* [00:19:17]

Brad Gorst: They're usually some not a whole lot. Most of our trips we then just mackerel and king fishing in here and any group or to be caught right now are pretty much like you know, there's a handful kind of in this area.

Interviewer: So, it is where you can catch?

Brad Gorst: That's where there's a handful of pockets of red grouper right now.

Interviewer: Okay.

Brad Gorst: You know.

Interviewer: So have you kind of stopped fishing for grouper up here or?

Brad Gorst: Aye, yes. Because we haven't had some fathoms.

Interviewer: Yes. *[indiscernible]* [00:20:04]

Brad Gorst: Yes. So, I'd say 100 foot. It's right at 100 foot, that's 10, that's right from the 15 fathom.

Interviewer: Okay.

Brad Gorst: Started to 15 fathom line.

Interviewer: Okay.

Brad Gorst: Yes. That's about right.

Interviewer: Yes.

Brad Gorst: And the south of the Ship Channel

Interviewer: Okay.

Brad Gorst: And you know right in there it is a pocket but you see kind of this area didn't get whacked by the red tide, didn't get back by the red tide and it doesn't get whacked by the red tide. Now I don't know if it's helping this, there's a say that the red tide doesn't grow on fresh water. And all the fresh water coming from Tampa Bay is slowing it down or not, I don't know. But Hayward Matthew says, he seems to think that it's that galeated iron.

Interviewer: Okay.

Brad Gorst: Because when you get to the Sahara Desert, that's what he said that their information was telling but now they have galeated iron. They have big bones.

Interviewer: Okay. And that actually that took it as that can -- that froze from the iron too.

Brad Gorst: Really? Okay.

Interviewer: Yes, yes. So, yes. Some researchers show that you see a lot of that after that.

Brad Gorst: Now you know I don't know if that makes any sense because you see you get the [indiscernible] [2133] on the holes and it seems like it's worse sometimes than others. I mean, that's iron. When you put [indiscernible] [00:21:42] and it cleans the holes on it. So it seems like some years it's worse than others.

Interviewer: Yes. Let's go back to this 2013 event. How did this impact your businesses or business [00:22:00] and do you ever stop fishing? So you kind of stop targeting red grouper?

Brad Gorst: No. We just went elsewhere.

Interviewer: Okay.

Brad Gorst: We fished offshore down south. We started going elsewhere, just it's like any fishermen, we get an effort shift.

Interviewer: Yes, okay.

Brad Gorst: But if there's nothing here we're going to go somewhere else.

Interviewer: Okay. So you are able to fish the red and so the practices, that weren't affected?

Brad Gorst: Yes.

Interviewer: Okay.

Brad Gorst: But the problem is up in like off the tarpon up in here before that red tide, official lot up in this area [indiscernible] [00:22:39] each year it just gotten better and better and better and as that went through [indiscernible] [00:22:49].

Interviewer: Yes. Okay. So, this area right here is kind of your hot like?

Brad Gorst: Anywhere, anywhere 30 mile radius of Clearwater, is my eight hour territory.

Interviewer: Okay.

Brad Gorst: This is a 30 miles radius.

Interviewer: Okay.

Brad Gorst: No, that's not quite because Bayport is 50 miles. So you mean this radius right here.

Interviewer: Okay. So you lost this plenty of time Hill state?

Brad Gorst: Yes.

Interviewer: So did you -- did you customer satisfaction problems or did it affect your...

Brad Gorst: I mean, I told people up front, I mean we had red tide so we're having to, it's hit and miss.

Interviewer: Yes.

Brad Gorst: So you know a lot of times we would fish this what we thought was the line we couldn't catch a thing, we go back down south we catch some, next day, we might

fish up here a little bit. So, each day you went, you start here and end up here or started here and then up here.

Interviewer: Okay.

Brad Gorst: We're testing that edge [00:24:00].

Interviewer: Yes. So you have to just kind of test it like trial and error?

Brad Gorst: Yes, exactly.

Interviewer: Okay. So is there any sort of information then that could have helped you become -- respond better to red tide? Are there any information that would've been useful to you to help your operations or...

Brad Gorst: I guess being out there every day we had, you know, we saw it and that's how we kind of know the edges of it. And, you know, there's a lot of communications.

Interviewer: Okay. Just kind of mentally kept track of where it was and sort of this awareness?

Brad Gorst: Yes. You know, when you talk to this guy, you talk that fisherman, that fisherman, we talk to everybody.

Interviewer: Yes, you share knowledge.

Brad Gorst: And now you know, everybody's out on and you know all the players are on the boat.

Interviewer: Yes.

Brad Gorst: And then you go up and you see what everybody caught. That's how you know what fish. Fisherman watch other fishermen.

Interviewer: Yes, yes. So you just kind of manage...

Brad Gorst: We figure it out if I see you going out and I went that way, you caught a bunch at the end of the day, I'm like, hey Joe, did you see Philip over here? Yes, he went out of here, he had been all days, so okay, so, I know the speed of his boat.

Interviewer: Yes, yes.

Brad Gorst: I know he had an eight-hour trip. So he probably went x amount of distances and x amount of course.

Interviewer: Okay.

Brad Gorst: So I have an idea and I know the bottom.

Interviewer: So, you have a mental map of wherever they land, where they were catching, okay.

Brad Gorst: So, I know where good idea where the bottom is, so.

Interviewer: Okay. All right.

Brad Gorst: I mean good satellite imagery would be kind of cool.

Interviewer: Yes. Okay. So in terms of understanding where the red tide is and things yes. So the satellite imagery, I mean, nobody uses that to track, kind of where the things are and they send out into those three-day forecast. But in some of the cases, like last year, you know, to tackle that big subsurface globe that wouldn't necessarily...

Brad Gorst: Where did you see that one?

Interviewer: That was down off [00:26:00] of saw huge subsurface bloom right around here.

Brad Gorst: Now this is before or after...

Interviewer: This was in October 2018. We're out there. I can show you, I have a figure of it, I can show it too.

Brad Gorst: And it showed up via satellite?

Interviewer: No, it wouldn't have. No because it was subsurface really deep, so we wouldn't have seen it.

Brad Gorst: So from what I understand, the organism comes from out in the deep water out there. That's what I've always been told and then when we get them hard West winds -- this year, we had a lot of West Wind, but then there was also that year that, the year the hurricane that the mosaic had a breach of one of their retention ponds with phosphate.

Interviewer: Okay.

Brad Gorst: And they were told to pump it out and they were going to take it out and barges and runs offshore and dump it. Well, a lot of offshores, you know, fishermen are skeptical anyhow. So we're thinking, okay, who was their documenting the fact that they actually went out to 100 fathoms and dump it? And just didn't go outside of the land and start pumping? So, did that do anything?

Interviewer: Did you guys see any -- I mean, did you see red tide related to that that dumping or...

Brad Gorst: It was a coincidence, so we have red tide just after that.

Interviewer: Yes, okay. And what year was that?

Brad Gorst: Hey Wayne, do you remember what year was that we had the hurricane or which one that supposedly had all the lead. He got those barges to get that chemical, the phosphate out of the mosaic and they take it offshore and dump it [00:28:00]? Was that the...

Male Speaker 2: I remember some about that year.

Brad Gorst: That was Charlie or something 2005 or 2006?

Male Speaker 2: Charlie was 2005.

Brad Gorst: It was just after Charlie I think.

Interviewer: Okay.

Male Speaker 2: Charlie was coming as we ran down there.

Brad Gorst: Yes and then that's when it flooded -- they had a bridge at one of the larry's over at mosaic and they had to pump all that. They didn't want to get any aquifers, so they put it on barges and took it out and supposedly took it off shore and dumped it and that was just after that we had that red tide.

Male Speaker 2: Probably Charlie, I was working, I saw big man boat, we never seen a hurricane and it died down to where it was see the damage, after that, it's still like a [indiscernible] [00:28:46] and nothing burn.

Brad Gorst: Yes.

Male Speaker 2: And it comes back and you are right, you said nothing is like [indiscernible] [00:28:58]

Brad Gorst: Yes, yes, so.

Male Speaker 2: That will be like 2004, 2005, yes.

Interviewer: Okay.

Brad Gorst: So you know, there was another one of them. This was the one up here in 2013, that was that year we had that real bad West Wind all summer. It was just West

Wind every day. And after hearing, you know, that's what made me to suspect because I heard that the red tide is always present out in deep water.

Male Speaker 2: You know, they always say it's around, yes.

Brad Gorst: So, and I just figured, okay, well then that's what push this up in there maybe, you know, at what point where the currents moving and this one came in the fall. But this is that 2013, it killed all this bottom, this is all good bottom and this is -- there are more bottom here from Tampa North [00:30:00] there's more bottom than there's all rest down there -- than you get down here.

Interviewer: Okay.

Brad Gorst: There's a little bit -- I guess there's a stripped down here in that 20 fathoms line, there's a lot of bottom and you got to jog it out to like 30 fathoms. Then you got some more bottom then you jog out to here, down the 40 breaks.

Interviewer: Okay. And so had you seen red tide in this area before or was it the first time?

Brad Gorst: That's the first one I've ever seen up in there.

Interviewer: So it just kind of enormous to have in this area?

Brad Gorst: Yes. It just, you know and I'm convinced that that's why these fish traveling north and south following these, whatever cracks crevices they follow.

Interviewer: Yes.

Brad Gorst: Since we didn't -- the red tide -- the fishermen quit going here. Like I said before we go to place to where we only think there's fish. So with less bottom, we continue to fish these, what smaller amount of bottom there was, and there was no fish to replenish to come back in here to fill this estuary back up.

Interviewer: Okay.

Brad Gorst: So we knocked out, we knocked out 60% to 70% of the population and we took out the other 20% to 30% down here. So, now instead of taking five years to come back, it's going to take 10 to 12. That's my opinion, because the currents and then you know, I remember, it kind of all came together when you guys had showed them satellite imageries and you know, you're talking about the water, where the tide moved east one to your -- you said one year it did go as far east.

Interviewer: Yes.

Brad Gorst: It stayed offshore. That was a bad red grouping year for the reds out there.

Interviewer: Yes, oh yes. For that 2015 the loop current was really hard. Yes, I've showed that my presentation last year. So yes, that kind of lines up with what you saw.

Brad Gorst: And all those tides [00:32:00], if you go back and if you can do a timeline on those where the tides and the currents were and anomalies, you'll probably start seeing, you'll start seeing maybe at its reoccurrence coinciding with these.

Interviewer: With that red tide event, you mean, yes.

Brad Gorst: I think that you tidal events and your current are big factor.

Interviewer: Or the winds like you said, it was up the surface that might be more of a wind thing than a current thing. But yes, so you said you had time anomalous West Wind in here too?

Brad Gorst: Yes all summer, it was 13.

Interviewer: Okay.

Brad Gorst: Because we took Charlie Christ up in there in a boat ride with Mike Colby, Colby might remember.

Interviewer: Okay.

Brad Gorst: He's the one that set it up.

Interviewer: Okay.

Brad Gorst: But we take him up there and look for the red tides. They know this.

Interviewer: Okay. Yes, yes. He is convinced.

Brad Gorst: Okay. So, we're going to go get some more fun in the study it.

Interviewer: Okay.

Brad Gorst: Which was cool, you know, so...

Interviewer: All right. So, the then between 2013 and this past year, are there any other events?

Brad Gorst: I don't remember any.

Interviewer: Okay. And actually, sorry let's go back before you go to this last year. So, between this 90s event up till 2014, are they are there any other big events?



Brad Gorst: There was one in like late of 2005, that would have been Charlie.

Interviewer: Yes, okay. So let's talk about that one before we go to the most present. Do you remember where that guy was or...

Brad Gorst: I'm trying to think. I know it was right out front.

Interviewer: Okay. If you want to try.

Brad Gorst: But it is more similar to what the 2018 was in here.

Interviewer: Okay.

Brad Gorst: There is more coastal.

Interviewer: You want to try and draw it out?

Brad Gorst: As far as from what I remember, [00:34:00] I mean it's spotty at best down here. But I know it was right in like in here. I can't remember up in this spotty. I don't remember. It's like this line right here it'd be. Again, I don't know what it is, but it seems like. But I know it was really bad right. I mean, the worst part was right in here that I can recall.

Interviewer: Okay. I'm just going to use dots a little bigger certainly. Did you try this?

Brad Gorst: Spotty recollections.

Interviewer: Yes, no, it's okay. I mean, remember, we're going to do you know, 100 of these and all of the overlaid, so we'll see patterns. You know have to right on. So this is 2005 and then, do you remember, you know what that killed off that year, what kind of species you saw getting killed off?

Brad Gorst: I've seen basic thing that grants and grants corgis.

Interviewer: Okay.

Brad Gorst: A few regular groups and few gags, not a ton, you know not the whole fish obviously.

Interviewer: Okay. And you mentioned, I mean, you mentioned the dumping but are there any other sort of triggers you saw like wind or anything else that...

Brad Gorst: You start getting the tide -- you get a tide rip. These tide rips out like off the beach here.

Interviewer: Okay.

Brad Gorst: And a lot of times there was a southeast wind flow, they usually start in like in this running southeast northwest.

Interviewer: Like the wind coming up this way?

Brad Gorst: Yes. Because it's summer time, it is predominately southeast wind flow.

Interviewer: Okay, yes [00:36:00].

Brad Gorst: And then you get the sea breeze in the afternoon pushing back with the thunder bumpers. So I mean, I don't know, there again, you know, you get all the thunderstorms rolling up in here. You got Tampa and all that concrete. I've watched storms generate across here and it's amazing the bay affects them. Storms will start overland and over here but they won't be over the water. It's neat to watch them because you see them start popping up...

Interviewer: Yes, I know.

Brad Gorst: And you can tell when it's going to happen because it's blowing hardness in the mornings here in southeast and then get calm. And all of a sudden you get this cool breeze coming from this. I feel so much better. Then you start seeing the clouds pop up. There's another but that's all upper level stuff here but sometimes you'll start seeing -- you see lower level clouds along the coast not on the sky out there.

Interviewer: Okay.

Brad Gorst: So the land has really affected.

Interviewer: Yes. We saw in Miami too, like sometimes it's raining on mainland and then on our little island, it's like sun is out. It's amazing how that pressure systems drive that. Anyways, all right. So this one kind of come from the south and you think the wind push this up here or...

Brad Gorst: Yes. Well, you know as the currents are coming but you'll get little lines of those that algae on the surface. The macro seem to like it, they could get underneath of it. I don't know what it is, but they like it and then you'll get some the tides that go up this way too. It comes this way, it's like there's a converging zone right in there something, for the tides in the currents.

Interviewer: Right in here?

Brad Gorst: Starting from tarpon and the springs a lot of times, we'll see a tide line it will come this way and then it will kind of come down and then sometimes it come this way. Just to you turn it here. [00:38:00]

Interviewer: And does that kind of soft the red tide or is that you see it like cutting off in that area or...

Brad Gorst: I don't know. I don't know if it's a driver or what.

Interviewer: Okay. And then, you know, business-wise again on this 2005 event, did you have -- did you have to stop fishing, just kind of work around it?

Brad Gorst: Work around it. You know, the worst part is the press, it's the news media.

Interviewer: Yes.

Brad Gorst: You know, there's people. It's like, when it was bad down there, people came here.

Interviewer: Yes.

Brad Gorst: So we, you know, it's kind of a catch 22 the oil spill. We have people that actually came here because they were smart enough to do their homework that realize we didn't have oil here. But then we had people that cancel their trips say, oh. So we're kind of in this limbo. But the news media is what crushed us really. We are not coming because of the red tide, we don't have red tide there, you know.

Interviewer: Okay. Yes, I've heard a lot about that really.

Brad Gorst: The media?

Interviewer: Yes, the impacts a lot worse than they needed to be.

Brad Gorst: Yes. Now little gags, they do really well right now, little gags up in this area.

Interviewer: Okay.

Brad Gorst: You know and now they're doing real well up there.

Interviewer: Okay. And then all right, so...

Brad Gorst: Because we don't have any gags here anymore in this area. I don't know why. We used to go out here and catch 20, 30, 40 of them at a pot and now you can't catch one.

Interviewer: Okay.

Brad Gorst: There's a few gags out -- there's a few gags showing up and I've heard out here [00:40:00]. We caught a handful in the grounds.

Interviewer: Okay.

Brad Gorst: Handful of jacks and a little bit of red grouper is out right in here.

Interviewer: Okay. And you think that's just because the red tide that they're out of these areas or start to come back or...

Brad Gorst: Yes. There again, if it's, you know if it moved the fish out, if it did displacement, it kind of follows along that line where we would have left a few or the red tide didn't get to that point and kill them and they might be filtering a little bit back in, so you have a line of buffer, so.

Interviewer: Yes. Okay. And then moving on to this last event last year, how it was this more severe than the previous years? Less severe?

Brad Gorst: For our area?

Interviewer: Yes.

Brad Gorst: Minimal.

Interviewer: Minimally severed. Okay.

Brad Gorst: It might have killed some of the bottom like that off of, you know, here within the first 10 miles of here, it killed the bottom. You get up to 11 miles you can start catching gags again.

Interviewer: Okay.

Brad Gorst: It didn't kill all the bottom. Some of them killed. I think that it depends on how long it's there and how severity as far as -- he was up here a long time. You know, it was pretty severe. So, it killed the muscles, the little worms that are up in the sand that come up in the dolphins pick them off and big fish and whatnot. It could have something to do while they're having problems with Kobe is up here.

Interviewer: Okay.

Brad Gorst: You don't know.

Interviewer: Yes.

Brad Gorst: But the tagging will help.

Interviewer: Yes. And was this sort of a surface event then or do you have any?

Brad Gorst: Pretty much, if we wouldn't have the hurricane pushing all this up there [00:42:00], once the hurricane was went by, it was minimally and it's like they retreat down.

Interviewer: Okay. So how long did it actually last in 2018?

Brad Gorst: Straight off in here?

Interviewer: Yes. On your area?

Brad Gorst: Three weeks maybe.

Interviewer: Okay. And so, I need to ask you about the 2005 event, do you remember how long that lasted roughly? Weeks, month?

Brad Gorst: I can't remember. To be honest with you, I can't remember.

Interviewer: Okay. It's all right. That's no worries. All right and so then, this last year the impacts, business impacts, was that a big deal or...

Brad Gorst: Then, since we are on the edge of it, minimally. I mean, it was like I said, more perception than anything. So what it is, you don't know what this is your loss if they didn't call you to begin with.

Interviewer: Yes, okay. So the media, yes, potential media impacts.

Brad Gorst: So, if people had actually call and ask and said you know, are you having red tide issue, but and there again, that's when we get to talk to the people who would tell us their bookings were like, did they get a lot of calls?

Interviewer: Yes.

Brad Gorst: You know.

Interviewer: Cancelling and things like that.

Brad Gorst: How many cancellations do they get.

Interviewer: Yes. Well, yes, I mean, we have the data. We're compiling all this data. So, we're looking at as well on the impact as a whole, but it's good to talk to you guys to understand your business. So, do you have to decrease in business last year overall or...

Brad Gorst: Actually, no. It was actually a little bit -- I had to pay more taxes, let's put it that way.

Interviewer: Okay. Yes, because you have those people to coming up, who have been [indiscernible] [00:43:49] saying.

Brad Gorst: Yes. We had a good year last year, we do. Business was good. This Marina doesn't -- we do well, you know, because of tourism we have. Our local businesses [00:44:00] is not as good as it used to be. But the tourism is, because with all these hotels now and we could stay and families come in, come to visit and they are going to come anyhow. Because they want to visit somebody that lived here and you know, brother and sister, their kids come down, so they'll get eight or 10 and 12, 15 people on both three different families. And that's what I that's what I see a lot of because I carry them in groups, more like six pack boats that will carry smaller, single family groups.

Interviewer: Okay. All right.

Brad Gorst: And then there again, being a little more an inspected boat, carry more than six people or we're not so subject to downturns like a lot of the guys because we're the only one in the town.

Interviewer: Okay.

Brad Gorst: Nobody else wants to jump in all the groups. Deal with all the regulations and stuff. So, they don't want to do this.

Interviewer: Yes, yes. They don't to drive [indiscernible] [00:45:07]

Brad Gorst: Right. They don't want to deal because...

Interviewer: Yes. Okay.

Brad Gorst: They don't want to come, so that guy is not, that guy is not here, two of the boats they are not here, this guy is here, that guy is not, you know.

Interviewer: Got you. All right.

Brad Gorst: So, I don't know, I know Max, he said he was fishing on the tier in the 70, so it was real bad down in here. I don't know exactly where back in the 70, we were fishing out of Sarasota. He said he was going to the southwest.

Interviewer: Okay. Southwest to Sarasota. I'll have to see, -- do you think he can talk to us? Do you think he'd do the interview with us?

Brad Gorst: Max?

Interviewer: Yes.

Brad Gorst: Yes. I am sure of it.

Interviewer: Okay. All right. Yes, I can send another team up here. I mean, not today but...

Brad Gorst: Just go south, I'll just drive you up to [indiscernible] [00:46:00] if you want.

Interviewer: Yes. I have to probably I have to get back this afternoon. Yes. But like I said, we're working with a group from Sara who's trying to do this process soon. So, they can easily -- it's only half an hour away for them so they can come up. I'll get his number from here if you want it.

Brad Gorst: It's all right. I hope that Wayne could be more information but, you know.

Interviewer: No, no. It's okay. No, that was really helpful. It's, you know, like I said, we want to make sure we're documenting all this in a format that we can actually use as a dataset. So it's really important to get it on the charts and things. We'll digitize it. If you can imagine like 100 of these interviews overlaid over each other, it's going to be a really rich dataset, the space and time about all these different events and going to fill in a lot of the gaps in the monitoring that you know. Satellite that aren't telling us the full story, the monitoring offshore it's really not hurting, very frequently.

Brad Gorst: I thought that if you can -- if I was be doing this, I will be looking that -- you can pick up chlorophyll, right?

Interviewer: Yes.

Brad Gorst: And what other things can you pick up?

Interviewer: I mean, satellites and we have -- we can do a lot of stuff. They can even get like, size spectrum of the zooplankton community. I mean.

Brad Gorst: How far back does that data go?

Interviewer: Only 20 years. That's the problem. A lot of the satellites came online in the 80s and 90s. So, we're really limited in time.

Brad Gorst: So if you can take back all that data or it's shift through that and see what currents and what you can find on the planktons and stuff like that that coincided with these years.

Interviewer: Yes.

Brad Gorst: Add that in a layer somehow.

Interviewer: Yes. So we do have the red tide index. You know, you're familiar with reason the stock assessment. I presented that last year. So that's a satellite drive index of severity. But that we're realizing doesn't tell the whole story. It's like I said, when you hear about surface blooms or deep blooms and it seems like the deep ones that are out of the eye of the satellite are a lot more impactful because they [00:48:00], I mean the satellite did it for 2014, like 2013 don't even show a lot of activity.

Brad Gorst: Really.

Interviewer: Yes, I mean there's some blooms but it's not like massive like the you know, so you don't see a lot of this in the surface this year.

Brad Gorst: Yes.

Interviewer: So, there is, you know, it tells you part of the story but not the whole story. So that's why your input is really...

Brad Gorst: I know Gary Folden, he's another guy that's been around here a long time. He'd be more than willing to tell you about it.

Interviewer: Okay.

Brad Gorst: He is the strike zone over there.

Interviewer: Okay. I'll get, let me while we can turn this off.

Brad Gorst: 485-854-44...