Billy Deans: Okay. I'm glad you told me that.

Karen DeMaria: What? Oh. [laughter]

BD: To read through those things. I used to take them in the bathroom when urinating with the sounds, and then call people up like, "Hey, man, listen to this."

KD: I had a friend that had an answering machine. He was like, "Hello, hold on for a second." All of a sudden, you hear a, "Katoon." Then there is a toilet flushing. He is like, "Sorry, I am not available for your phone call right now." I think like, "Oh, God." [laughter] Let us start off. This is April 1st at 9:15 a.m. How long have you lived here in Keys, Billy?

BD: Since 1968, December of [19]68, I've lived down here.

KD: Was that full-time?

BD: It's full time, correct.

KD: How old were you then?

BD: Ninth grade. Thirteen, fourteen. Say, thirteen or fourteen at that time.

KD: How much of that time do you think you spent on the water? Were you always a water rat?

BD: Yes. It's funny you mention that because the first thing I noticed when I came down here, we crossed over the Seven Mile Bridge, and the water was so clear you could see. I remember going, "This is my niche," or I said, "Oh, I'm going to like this." But that's the thing about it. What stood out most to my mind was the clarity of the water at the Seven Mile Bridge. That was it.

KD: Was the water blue, green?

BD: It was green, but it had that golf color to it, but it was clear. I mean, it didn't have that silvery turbidity look to it that you see quite a bit now. But on the bridge, you could look down and you could see all the grass. We dove the drive tour to this one. We were out there on Loggerhead Key and the water was so clear. It was just like that.

KD: Yes. We went up to the lighthouse and it was really cool. [laughter] While you were out diving, I got to go to the lighthouse.

BD: That's cool.

KD: Have you always lived on Sugarloaf area?

BD: No. I lived on Stock Island – the famous Stock Island – from [19]68 to actually 1980. Then I moved to Sugarloaf in 1980 to present.

KD: How long have you owned the dive shop?

BD: I've owned it for five years. I've worked it for – let's see, since [19]78, [19]88. Fifteen years. Fifteen years, yes. [19]88, [19]93. Yes.

KD: You went to college, right?

BD: Yes.

KD: University of Florida?

BD: Yes.

KD: Do you have a degree? A four-year degree?

BD: Yes.

KD: In what?

BD: Chemistry?

KD: Have you ever taken any advanced courses?

BD: No. No. It's...

KD: You think that is enough. [laughter]

BD: Oh. Well, the big choice was go to work for DuPont or come back to the Keys. Yes, I know. Then I've driven up through Maryland, that big DuPont [inaudible]. No. I don't care what kind of benefits you have. It's just...

KD: Did you have any written information regarding your observances in the past?

BD: I have a dive log. My first log, initially, it's just trash. But this one starts in 1977. There's certain specific dates in my memory that I remember when we were diving off the Keys.

KD: So, you have a continuous log from [19]77 to now?

BD: Correct.

KD: That is just in case I need to come back, or if a scientist wants information to follow up on them trying to identify the people that have actual written information. So, you graduated from college and worked at the dive shop. Is that pretty much...

BD: Yes.

KD: When was that when you graduated?

BD: [19]77. Yes.

KD: Where is most of your water experience?

BD: Well, there's two separate areas. Initially, my biggest exposure was between [Coleman?] and Tail End Buoy in that area from the early to late [19]70s, [19]77, [19]78. Oh, this is an awesome map. Jeez, where'd you get this?

KD: At the (Kevan?) Hardware store.

BD: On Margaret Street?

KD: Yes.

BD: Oh, this is a nice map.

KD: \$60.

BD: Goes all over.

KD: Yes. Now, where did you say from?

BD: We've got to go further down, further out west. Well, at the end of the bar down to the tail end...

KD: Where it says Satan Shoal?

BD: Yes. This area right here. Satan Shoal, on the reef line here. I knew that reef line like I knew the back of my hand.

KD: That is Tail End Buoy?

BD: Yes. Tail End.

KD: Okay. I'm learning this. [laughter] And all is pretty much oceanside, right?

BD: Correct. I have done some diving in the gulf. Then from that period, from [19]79, [19]80, we started diving more out front from Sand Key to Pelican Shoals. Then we started concentrating on diving those deep water wrecks.

KD: Where did you start the wreck diving?

BD: Actually, we started diving in Weeksboro in 1980, from that time period. I've seen some interesting changes in that wreck in my life.

KD: Yes, that would be interesting. Okay. So, Satan Shoal or that area by Tortugas was pre [19]79?

BD: Yes. That was from the early [19]70s to about [19]78, [19]79.

KD: Well, do you want to start with the present or the past? [laughter]

BD: I don't know. We could start with the past because, like I said, there's certain points...

KD: Well, talk about...

BD: Well, the thing I've really noticed quite a bit is the consistency in the water clarity. I remember when we first came across that. The first thing that really stood out in my mind as a young man when I moved here as an outsider, was the clarity of the water. It was always really clear. I remember going out to the reef and just seeing the water. Not only being clear, but it had not a lot of particulate matter in the water.

KD: Crispness?

BD: Yes. Crispness and a little frog [inaudible] in the water. We call it (frog shit?).

KD: Was it there? Do you agree with the term gin clear?

BD: Yes, I do. Yes. It's clear. There was one time between [19]73 that I remember going out — we dove quite a bit in [19]73. That's when I met John, my dive partner. We would dive out front, meaning, the Stock Island channel out by the nine-foot stake on Western Sambos. The water was so clear, you could be in a hundred feet of water and look down and you see the bottom. Just see it, and it was on a consistent basis. Now, we don't see that now. We don't see that. We very rarely get that kind of visibility anymore now.

KD: When did you start noticing the change in quality?

BD: That's a good question. Out front? That's a tough one to say. I want to say [19]86, [19]87.

KD: Was it gradual, do you think, or it was...

BD: Yes. It was nothing. It was not hard and fast, but it was a gradual change in the visibility. I couldn't give you a specific date, but it's just it wasn't like it was in the...

KD: That is when it became really noticeable to you?

BD: Yes. On a consistent basis where we have thirty foot of visibility on the reef line.

KD: A lot of people think thirty-five or forty-five feet of clarity on the reef line is just perfect. It is wonderful.

BD: Well, if you're running a business, it is.

KD: Nowadays?

BD: Oh, yes.

KD: But were you saying before, it...

BD: It was always clear. I remember getting up early in the morning, going out there, and seeing a lot of big fish on the reef feeding, and then the water being real clear. This is early in the morning when the sun's not up. But it's not like that. It's not like that.

KD: It is almost like in the olden days, thirty-five feet was a bad day of visibility.

BD: We wouldn't go out.

KD: [laughter]

BD: Now, when you hear thirty-five, forty, people are happy.

KD: When you are saying now that it is dirty, how would you describe?

BD: Well, white turbidity, has lots of suspended particulate matter in the water. They're probably quarter to three-eighths of an inch-long pieces of white matter in the water, for lack of a better term. That's what I've seen. But I haven't seen any actual brown streaks in the water or anything like that. That's what I consider to be — what I've seen in the water. That's the thing that sticks out in my mind.

KD: The white matter?

BD: Yes, because I never used to see that.

KD: It is a span of one year, you are saying it is year round now or is it just seasonal?

BD: What's that?

KD: The real dirty water. Or is there difference in the seasons?

BD: Yes, I can see what you're saying. It's noticeable just about year round. The water gets clear when the stream comes in and you get those little wood – they call them wood chips. [laughter] I don't know what those are. When the blue water comes in, those come in. But when the water goes back out, that white stuff is always there. I don't know if it's a runoff, but it seems to be consistently there when we were diving.

KD: In the past?

BD: Yes. As I look back, when I go in the water, yes, it's consistently there.

KD: All year round since [19]86, [19]87?

BD: Yes. Yes. That date of [19]86 or [19]87 is not specific. But it just seems to be that's when the time period was when we were getting.

KD: Has it gotten noticeably worse or the same?

BD: Yes. What I've always been looking at is a trend in the visibility. The visibility has definitely worsened over a certain period of time in the past as opposed to previous years. You can tell. Like you say, thirty-five, forty feet was a bad day. Now, it's a good day.

KD: You said this is mainly in the front. This same type of thing, do you think, has happened out at the Satan Shoal area, Tail End Buoy? Do you notice anything about water clarity differences out there?

BD: Since I started running the shop, I don't make it out there much anymore, unfortunately, though it is so pretty out there. The times I've been out there, it's been clear out there. But the streams come in and it's like a big flushing action. So, I couldn't give you a specific answer to that.

KD: What about down the deep breath? Since you have been doing deep breath diving since 1980, have you noticed a change in the water clarity on the deep breaths in the last 13 years?

BD: It's hard to believe.

KD: [laughter]

BD: No. The visibility is usually still pretty good out there. The big thing I have noticed is a tremendous loss of shark life. We first started diving those wrecks out front. I mean, you could go in the water, and on any given day, you could see a dozen sharks. It was just a natural – it was a given.

KD: What kind?

BD: Grey reef sharks. I've seen some black tips out there, hammerheads. In the winter, we have seen a make out there swimming around. But predominantly, I've seen hammerheads, and I call them gray reef sharks. I couldn't give you specific species. But now, there are no sharks. I mean, zero. We're lucky to see one maybe a month. Before, it was just like, "Oh, well." They were just all over.

KD: When did you notice this difference?

BD: This has been relatively recent. I don't know, [19]88, [19]87. Yes. Right in that period because I remember diving in [19]86, [19]87, and saw them thinning out. Then in [19]88, there was...

KD: Anything else on the deep breaths that you have noticed changed?

BD: Yes, the group of population. I can tell you exactly where that's from. When we first started diving out right there – I mean, a lot of blacks. Just these big, black torpedo bodies swimming around. I don't see that now. I think the primary reason is that it's been spearfished.

KD: On Weeksboro?

BD: Yes. Because when you dive on a consistent basis, you see fish traps. I've only seen one fish trap there at the time, and it's still there. It's a ghost trap. We knock the door open. Well, you swim along, you see telltale signs. You see 357 shells laying here. I hear stories of guys – there's been jewfish on that wreck on a consistent basis. Before they even ended up being a restricted species...

KD: Protected.

BD: – protected species, those guys would go out and bang them. I've heard stories of people shooting them. Nothing to do about it. I mean, but...

KD: No. It is common knowledge of still people on Big Pine shooting jewfish.

BD: Oh, man, I hope – there's a big three-hundred pounder on the (Cayman Island?). It's huge. It follows the people around. It's awesome. That's terrible. I can't believe it.

KD: Since the moratorium on jewfish, have you noticed that they are coming back?

BD: They're like gators.

KD: [laughter]

BD: It's great. I think it's absolutely phenomenal. I think it is the best thing in the world.

KD: You have seen them while on the wrecks or on the reef?

BD: Actually, we've see them on the wrecks. That's a good point. When I first started diving out on Eastern Sambo, I remember seeing jewfish out there. The reef, like in twenty feet of water, these old timers will probably tell you they'd get right underneath the dock.

KD: You are talking about the big old, jewfish boils up in the northwest channel area. West of it.

BD: They're just thick as flies out there. Yes.

KD: They are back out of the water. [laughter]

BD: It's unbelievable.

KD: Can you imagine?

BD: Yes. Anyway, I've see them predominantly on the wrecks. I don't know why.

KD: Well, how deep is the Weeksboro?

BD: Two hundred and fifty feet.

KD: Where are the groupers? Or where did the groupers used to be?

BD: Right around the deck, about two hundred feet, 210.

KD: When did you notice that this population was all of a sudden gone?

BD: About [19]85, [19]86, started thinning out.

KD: What? The cat calling me. She has got a lizard.

BD: What about the geckos?

KD: [inaudible] It's there. They are in the house.

BD: Does the kitty cat bother them?

KD: No.

BD: She know better or she had a...

KD: Well, they are not in the house at night and the geckos come out. They are pretty much night creatures. I think Donna and I have killed more just by accidentally stepping on the little babies that are...

BD: Oh, the geckos?

KD: Yes. The babies are about this big. They make the stupid mistake of going across the floor in the middle of the night when you come in here for a snack or a glass of water.

BD: They get stepped on.

KD: Yes. You sort of learn to shuffle your feet a little bit more and watch where you are walking. [laughter] It is not too feeling. Anything else on the wrecks that you noticed when these wrecks changed?

BD: Actually, the one thing I have seen is I've seen a proliferation of corals, especially – there's a wreck called the Curb that's on the southeast of the Maine ship channel. I guess in that channel, the water flows in between, and I – actually, it's out in here. They've already got it marked. That's the (Cayman channel) there. Then the...

KD: (Fish Havens?)

BD: Yes. Right here. Then the Curb was right out here. There's about four wrecks out in this area here. But the Curb was where we dived most often. I guess the water flow in and out of here. I've seen there's a lot of – I've got a nice little area of black coral growing. There's Oculinas and I've seen a proliferation of that. But what I would like to see is what some of the bad guys look like. Because I do a lot of scootering. I'll go down at the – back down here.

KD: Look through there.

BD: They have the...

KD: That is a very good book. It has got all kinds of different species of the corals and stuff.

BD: They have the bad stuff?

KD: Well, they don't really say what's good or bad, but it shows you all the different ones. Then I can ask the scientists about the different ones. What do you mean by bad corals?

BD: Well, not bad corals, but like algae. There are a couple areas out in here. Because if I have a shitty day, I'll go out and ride my scooter, and I do a lot of it. The neat thing about this ledge area right here.

KD: It's about [inaudible]?

BD: Yes. The reef line drops off about eighty feet and it comes back up. If I scooter along out in here, I can get some deep water. But there are certain areas that you go along and you see this brown shit. I mean, it's obviously some type. It's not part of the scheme of things.

KD: Could it be [inaudible]?

BD: Oh no, this is some kind of growth.

KD: Could be like something sponge or a film?

BD: No. It's a film. Yes. It's definitely a bad sign. It's like...

KD: Yes. But it is usually the algaes. Dictyota sign on the reefs. We have been finding that it is like the Codium algae problem off of Palm Beach. It is the same type of thing. Dictyota is the signal of high nutrient. But it is...

BD: This is interesting. I've never seen anything that looks like that. Of course, it could be a different form. I've never seen...

KD: Yes. These are all real closeups too. But you are seeing what – describe what you are seeing.

BD: It's like a film – brownish film that covers an area. It definitely is not supposed to be there. It's not part of the scheme of things. It's...

KD: Is it like a bubble film sort of encasing the coral?

BD: Yes. It reminds me of snot, is what it reminds me of. It's a brown area, and it's infected. There's some areas it has infected.

KD: You do not think it is black-band disease?

BD: No. No, I don't think so because black-band affects just a specific head, right?

KD: Right. It goes up in a line in that book. Yes, the book shows you pictures of it. That is interesting. How deep in the water is that?

BD: Thirty, forty feet.

KD: It is a brown bubble filled?

BD: Yes.

KD: Brown snot film? [laughter] When did you notice that? Or is that just something you just saw out there now recently and know that it is not supposed to be there?

BD: I've noticed it in the last couple years. What I ought to do is take pictures of this. Shit, that's what I'll do. I'll take my camera out.

KD: You should, yes, or video tape it.

BD: Video tape.

KD: Either, or, you have had your camera mounted on your studio.

BD: Yes. It should do that.

KD: But, yes, stuff like that is important because there are a lot of scientists around who could really use that kind of photos and stuff like it. Yes. If you are already out there doing it, or out there, if you have the photo and stuff, it really helps.

BD: I need to practice, I think. This shit here – excuse me. This stuff here, what is that?

KD: Yes. You see that quite often?

BD: Yes. I see quite a bit of that. What would be nice is if you could come out sometime and go ride the scooters and...

KD: Never been on a scooter.

BD: Oh, it's great. You'd cover a lot of ground, Karen. You can see a lot.

KD: [inaudible] is not. It is not too true...

BD: Well, I know, but you can cover – a guy swimming, a diver in the water, thirty feet, you've got about maybe three hundred yards. But on a scooter, you have over five thousand yards. If you dive in and reach there, you don't have any compression obligation. So, we could cover a mile square radius if you want to do that sometime.

KD: That would be fun, really? How did you get to the Curb and where is it?

BD: It's 185 feet.

KD: Where did you see the Oculina and the black coral colony?

BD: Actually, there's a tremendous black coral. There's three areas I've seen black coral. On the Curb, on the bow section. It's not a big community, but it's growing. There's about four (nisol?) stands. That's at about 155. There's an area just south of this, the bar out here where I scooter, that there's four big stands, big, big stands. I'm going to go back and cut them up now.

KD: No.

BD: That's a joke.

KD: [laughter] South of Middle Sambo?

BD: Actually, South of Western Sambos, there's four big branches out there.

KD: Any other coral species that you...

BD: That stand out?

KD: Yes. Interesting stands like pillar coral or black corals or...

BD: Then there's some black coral on the reef there now I've seen it. It's funny. I check them all the time just to make sure there's [inaudible] them. Here he comes. "Hi, Gloria. I'm book." Hey, Don, how you doing?" [laughter] What's up? She getting on my secret spots.

KD: I am not.

BD: No, I have secret spots. I mean...

KD: Is there anything else interesting about the deep breath diving that you want to let me know before we go on and talk about the reef? Any changes?

BD: No, just the marine life and those two species of fish I haven't seen. That's...

KD: What about tropicals out there? Have you noticed a difference in the movement of tropicals?

BD: On the deep water reefs?

KD: Yes.

BD: No. I'm not in tune to that, but I see a lot of tropical fish.

KD: But you have not noticed?

BD: No. I haven't seen any dramatic decrease.

KD: What about thermoclines?

BD: Yes. Well, we do get those probably about three times – three, four times a year. Cold water. I mean, we're talking mid-fifties – mid to low fifties

KD: On the bottom?

BD: Oh, yes. Then the visibility is over two hundred feet.

KD: But even with that thermocline, you've got a really good water visibility.

BD: Oh, yes. Yes. I'm sure that cold waters from out in the world beyond the outside drop off.

KD: Are you still getting that now? Have you noticed a change in that average?

BD: We used to get them quite a bit more in the mid-[19]80s, but we don't see it that much anymore. The reason I say that is we've been diving these wrecks more on a consistent basis too.

KD: Have you noticed a change in that or is it just still clear? I know you said – or as you are getting that cold water, that is dirty?

BD: No. Every time that cold water comes in, it's just absolutely crackling clear.

KD: What about the in reef? What have you noticed? Or have you noticed anything different about the reef corals, fish?

BD: Like I said, the lack of the bigger fish. Because I remember when we first started diving, there was always a tremendous amount of group work because that's what we were primarily targeting. If I had to say, I was probably part of the problem.

KD: So, it was spear fishing?

BD: Yes. I think one of the biggest problems was the [inaudible]. Because before, you could go out and you'd find an area...

KD: When did the maran become popular here?

BD: I would say [19]77, [19]78. I remember that's when the units were starting to become a little bit more financially affordable. Yes.

KD: Anything else from a reef – have you noticed areas of the reef that you used to go to that are not as healthy now?

BD: Yes. There's areas like the Western Sambo, this area that we've used to dive. This here on the east section over here, there's a channel that runs through there. We used to dive quite a bit on the west section of that eastern tip. It's not as vibrant as it used to be. I see a lot of coral damage. People out there standing on it. But it looks to me it's more than a natural wave action or scrubbing action. I haven't seen that damage from that freighter yet. I haven't seen it.

KD: No. I do not go out that way. I think the only time I have been to Sambos was on your boat probably. The only time I have ever been to Sambos. One time I got certified. More coral damage. You think like boat damage or just people standing?

BD: To me, it looks like it's people standing on the reef. I think it's four feet high. It's right up on the water. It's mostly...

KD: Is this something you have noticed in the last few years or has there always been some?

BD: I notice it more now, especially – well, see, that's interesting. Now that we're more in tune to what's going on a little bit more.

KD: Well, that is the problem because it might have been there, but before, it were not as noticeable because it was not critical. But now, there is just so much cascading things going on that people are actually more aware of every little detail.

BD: Yes.

KD: Besides the big fish, you ever notice a difference in the tropical fish community?

BD: No. That, I couldn't really give you a specific answer. I just know that there's a lot less.

KD: What about sponges? Algae?

BD: No, I can't give you specifics.

KD: When was the last time you were on the reef?

BD: About two and a half months ago. Actually, in the water. When I'm out on the boat, it's one thing. But actually, getting in the water and swimming around

KD: How often do you go there? I know you do a lot...

BD: I do a lot of diving out on the bar out here because it's still pretty nice out there. The big thing I have seen is an increase in the boat traffic. No doubt in my mind. We used to go out in the Western Sambos area and be the only boat out there. This is human progression. Now, you go out there and there's three catamarans, six sailboats, and two dive boats.

KD: They have maran buoys out there?

BD: Yes, they do.

KD: Do you think that has helped make that spot more popular because there is a buoy there? Or is it just because there's a lot more people in general and it's all over the reef?

BD: I think it's just because the distance between here and here, same as over the Sand Key and the visibility. I don't think it's specifically because of the maran buoys.

KD: Where do most dive places in Key West go to? Just in that range of just...

BD: Yes. I would say between Western Sambos down to Western Dry Rocks. That's the biggest area that's dove. Very little of middle and eastern. Very few people go to Pelican Shoal. We don't ride up there. It's just a pretty far distance for Big Pine to come down here. I don't know where [inaudible], buy this guy's probably dive [inaudible].

KD: Pelican, I guess, is probably just more of a local area then?

BD: Yes.

KD: Probably I guess campgrounds over there.

BD: Cudjoe Gardens Marina.

KD: Yes. Okay. You looked at that book. You want to go ahead and go through that coral reef book and see if there are any comments that you would like to make. Maybe a picture might spark a memory. I got these other lists here. You can look down and see just if there is anything that you noticed that might spark a memory.

BD: Just look at the list. Spiny lobster.

KD: You ever notice anything with spiny lobsters?

BD: Well, it's interesting because what we do is we don't have trips that specifically – we don't take anything on a boat. So, spearfishing or lobstering, none of that stuff because it's not so much actual crawfish. It's the damage that the reef incurs because of that. People are ripping coral rocks apart.

KD: Do you do it on your own?

BD: No.

KD: I know that some of the other guys, they do a lot of gathering of fish...

[end of transcript]