

Joshua Wrigley: I guess we will give it another go here. I think the machine is back on track, so?

Wayne Davis: Looking for swordfish from a boat as a kid, you're always looking for fin sticking above the water or what we call clipping. Now and then you'll just see a little touch of a fin come out of the water for a little bit of a second alongside the boat. That'll make a little bit of a wake on a calm day. Or a pair of fins protruding well above the water, which you don't get to see that often except on a gorgeous day when there are a lot of fish around. But early in my – it wasn't a career then because I wasn't working. I was just a kid in the summertime having fun being on a boat south of Block Island or south of Nomans in the Vineyard and Nantucket. There were finning fish out there, ones that would show their fins. But as the summer progressed, it seems like the fish turned into what we call underwater fish more and more. They'd be swimming just below the surface, and you wouldn't see them. You couldn't see them at a distance because of the glare and the refraction of the water, the farther away you got from the boat.

JW: Would that be because they are hunting?

WD: No. I don't know. Just maybe early in the season, they might fin a little bit better because people think that – or it's been theorized over the years by fishermen that swordfish come to the surface after eating to get up in the warm water to aid in their digestion. Because it's only a handful of times in my years in the air of actually seeing a swordfish actively feeding on the surface. So, they come to surface and just lollygag around and digest their food. As the season progressed, the water is more uniformly warm, so they don't have to come all the way to the surface. That's just a guess. So, there'll be underwater fish. So, if you're going to find fish from the boat, as you're out swordfishing and you're on the boat, you got to look underwater from the mast right alongside the boat and not too far out, not more than a couple of boat lengths. Because as you get out, get further away, the angle of looking into the water becomes flatter and there's more glare. So, it's pretty much like looking down under your feet when you're on the boat. But moving up into the air, 500 feet or more in an airplane, swordfishing, you're still pretty much looking down. You don't see them out too far, except on a really nice day. Once in a while, one will breach, jump out of water, and you can see them a mile away or so. You said you saw that picture of mine of that breaching.

JW: Yes, I saw that photo.

WD: Yes, that wasn't much of a picture because that was cropped out of a picture where you couldn't even see the fish in it. I had to really zoom in on that to crop it out. I probably took that from down near a mile away. I saw the fish jumping like a mile away. It's quite apparent.

JW: How many times did it breach?

WD: Repeatedly, probably half a dozen times. As soon as I saw it, I started flying towards it. I started taking pictures right away. Then by the time I got the picture that you saw, it had stopped breaching. But that's the farthest away you'll see a swordfish is when they're breaching. Otherwise, when you're swordfishing...

JW: You know why they breach?

WD: No, might be just for fun.

JW: Maybe it has something to do with...

WD: Yes, a lot of people say that. Occasionally, when you do catch a swordfish and bring it aboard, it's got some remoras in their gill plates. Of course, I haven't been on the boat to catch swordfish that many times, just a handful of times when I was a kid. They do have warm parasites in them, but remoras hanging out on them. Who knows if that's why they jump or just jumping?

JW: Do they go down beneath?

WD: No, most of the time when I've seen them breached from the airplane. If you see them breach half a mile away, get right over there with the airplane because you'll probably be just lying under the surface with no mako. I've never seen a mako chasing a swordfish. I've heard the guys on boats tell me about that. But no, almost like it's just breaching for the fun of it. Like I said, frequently, when you do see one breach, no matter how far away it is, I always fly right over there and get right to where that spot was and look around for that fish. Because pretty good chance you'll find him, he'll be on the surface and then he may breach again. Early in the season, they breached more when they first come out of the warm water off the edge of the continental shelf back up onto the bank. Then they'll do a lot of breaching.

JW: So, what is the distance in which you can actually spot something from the airplane?

WD: Swordfish, they're pretty much underneath. Imagine yourself sitting on an airplane and looking out underneath the wing, you don't want to look out too much beyond forty-five degrees out. Because out there, it's just going to be glare. Unless it's an absolutely perfect day and no way you're going to see a finning fish a distance away. I mean, I've heard stories and a matter of fact that somebody even quoted me once of saying, "I saw a finning fish a mile away," which is total baloney. [laughter] Now, you can see him breach that far away. But no, you're pretty much flying around when you're sword fishing. If you get to your boat and you find a fish right away to start the day, that's usually where you'll end up. You'll course around that area all day long. On a good day, when you get six fish or more, it might take all day long to find six fish. I've had days when, for instance, we caught five fish and you had one every two hours you'd find. Sometimes on days like that, the only thing you'd see all day long is a swordfish, really weird. Then there are other times, when you'll be in a swordfish ground, where there are a couple of swordfish around and all kinds of bait around, you'd think you'd see more, but you never do. They're really funny fish. Only a handful of times have I seen two together. I mean, quite a few times I've seen two together.

JW: Yes, I was going to ask before if they ever school?

WD: Never. They'll come in bunches. I've had good years swordfishing when I never saw two

at once. A few years back, one day I was fishing for Rodman, I did see three at once. Two of them were swimming along side by side. I had robin coming along to try to get these fish. They were perfectly side by side, and I was in full photo mode too. I was just so mesmerized by these two fish swimming along. They were tied together with a rod, probably fifty feet apart, nose-to-nose, going along side by side. Not nose-to-nose, they were side by side, but their noses were even. I watched them for about five minutes before I thought to get my camera out. By that time, they had come apart. I do have a picture I'd like to show you with the two swordfish in it.

JW: That was for Rodman Sykes on Virginia Marise?

WD: Yes, that's right. Yes, that's right, on the Virginia Marise, those two fish were going along together. I made a big wide swing around and tried to get a better angle of taking a picture of them, and I found another fish. And so, I had three fish that day together and we got none of them. [laughter] So, at swordfishing, you just pretty much coursed around, stand within a mile or so with the boat, looking for another swordfish to pop up. The best place to find a swordfish is right next to where you just got one. Maybe not right away, but they do especially out on a place like which is now in Canadian waters on the northeast peak of Georges. After that, I've seen good days out there when you get a dozen or more fish. I mean, you don't get too far away from the fish you just got because there's going to be another one pop right up there all day long. I've seen two or three weeks in a row out there when day after day after day, it's almost like that. That part of the bank is growing swordfish. They just keep popping up, great place.

JW: You said before that on the northern edge there, where you are finding a lot of tuna now, that those tuna are intermingled with swordfish?

WD: I assume they are. The times that I've been out there since 2006 or 2007, I never did mention this facet. I was flying for a seiner out in New Bedford. When flying for tuna fish, especially on a good day, you got to know, you're looking for a school of fish and not a single skinny little fish like a swordfish. The tuna fish out there were like 500 pounders. So, you can imagine a school of two to 300 tuna fish at 500 pounds each are pretty easy to see. So, it makes sense to get up high to see out as far as you can and see as much as you can.

JW: Are you looking for their wakes?

WD: You're looking for the body of fish, you're looking for a little ruffle on the water, or a lot of birds, whales. If say, for instance, I was out there flying around where I knew there had been fish, and it was a perfect day, I'd get up somewhere over 1000 feet up to 1500 feet or so and fly around and just cover ground and look for those little things that might give you an idea that there's something there. I can remember the first day that I found a body of fish offshore. I think it was 2006 or 2007. It was out on the northern edge. It had been out where I did a little cruising around the day before with my friend, Mark Avila, and we'd seen a couple of big fish.

JW: Big tuna?

WD: Big tuna, yes. It was early August and we coursed around this one area. If you can find a couple of tuna fish during tuna fish season in areas where tuna fish hang out, you should hang

out there until you find the bunch, but we didn't that day. But I came back the next day and looked a little bit harder and a little bit harder, covered a little more ground. I went a little further east this day. I went all the way out to the edge of the line on the northern edge, the Canadian line, the Hague Line. There was a set of pairing trawlers working out there. So, I went out and flew around them. They just hauled back and they had a big net full of fish. So, I knew they were herring around for feed. Look around and around, I couldn't find anything. I couldn't find anything. I went one more time back out to the line. I would just start, and I said, "Oh, I'm going to give up here. I started turning for home and I kind of just looked behind me out, toward the deep water to the north of there, and I saw a little ruffle on the water. The tail looks kind of strange. Well, I flew over there, and this is a real body of fish. There was well over 1000 huge giants in several big bunches, strung out all over the place. I almost didn't see them as we just so close to not seeing them. Anyway, we got the boat out there the next day and had a good day sailing. The point about swordfish and tuna being in the same area, when I've been out there in recent years, I've been tuna fishing, flying for tuna fishermen. So, I'm not down low where I would see a swordfish unless it was very apparent. So, being up at a higher altitude, looking for tuna fish, unless you had an absolutely gorgeous day, I could see myself flying right over the swordfish. They wouldn't be thick there. But there could be two or three in the course of the day. You wouldn't see them because I was flying too high and concentrating on tuna more or less. So, I don't know if that makes any sense to you.

JW: So, have other parts of Georges Bank also received these new fish migrations as well? Because I know you have been talking about the Northern Edge here as being a new place that is got a lot of fish in it, is it one of several or is it just the Northern Edge?

WD: Who knows? The Northern Edge because that's where we found them. They hang out on the Northern Edge, my theory, is because it's right next to the bank. It's anywhere from forty fathom north out into the deep water and no doubt on that edge there. There's plenty of feeds. So, they're probably feeding there at night. Typically, you'll find them out in the deep water a hundred fathoms or more in the daytime and sometimes quite away north of the Northern Edge too. The only other place there is on Georges is back west of there where I'm talking about out of the line, which is toward the Cultivator Shoal, which is a part of the Northern Edge of Georges, but it's a shoal on the west end of the Northern Edge. From there, down towards the Great South Channel, with another fifty miles to the southwest, that's all-good tuna country. You can find them there one day. You couldn't find one within a hundred miles there the next day. So, it's just very variable. To get back to a little bit of swordfish history, at times, on a tuna spot, we'll see a swordfish here and there. It has happened a lot more in recent years, like two or three years ago, all way up in the Gulf of Maine. Last summer in the Gulf of Maine, there was several swordfish seen even in June, just southeast of Portland, which is very rare. There were a lot of fish around. Some guys got a couple of fish there in one day. These are tuna harpooners catching a swordfish. Those swordfish had to be fairly thick up there. When they're looking for tuna fish from a tuna boat, the highest they have is like a twenty or a thirty-foot mast. I don't even think anybody's got a thirty-foot mast. They are looking for tuna in their own way. They're looking not out to the horizon. But they're looking at ways away from the boat, looking for ruffles on the water and birds and stuff like that. I can't say this that I know, but it seems to me that they never really look alongside of the boat as you do when you're swordfishing, looking for a swordfish.

JW: How close are we talking about?

WD: I'm talking about within two boat lengths of a small boat. It seems like the only time that a tuna fisherman finds a swordfish is when they almost run over them. When I hear that, like it was last summer and the summer before, I think it that'd be 2013 and 2014, it says to me, especially when they started seeing them in June up at a little high spot called [unintelligible]. What's the name of the other fishing ground up there? The Kettles, the Outer Kettle and the Inner Kettle. When they see them up there in June, and these are tuna fish guys finding them, there's got to be a few swordfish there, let me tell you. Because the only ones they're finding is the ones they're bumping into. So, there's got to be a few there, It is very interesting. So, back to finding swordfish, finding tuna fish, it takes a lot of covering ground. It's something I never did mention about finding swordfish, you got to jump back again. A lot of times when you do swordfishing, you go out. First thing you do is find your boat and your course. Spend your time around the boat looking for a swordfish around the boat, hoping that he has gone to where he knows somebody caught them the day before or something like that. If you don't find any around the boat, then you'll tack out a little bit further. And so, swordfishing, you never really do cover much ground. Then once you do find a spot where there is a swordfish, say it's the middle of the day, you'll probably never go more than two miles from that spot again. But tuna fish have like a daily migration pattern, which might be ten or fifteen miles. They have their place where they feed overnight or towards dawn, usually on the inshore shoulder portions on the banks and stuff like that, up in the Gulf of Maine. Then as the day progresses, they typically move offshore to the east. If this is over in MassBay and out around the southern end of Jeffreys Ledge in southern Maine, off the eastern coast of New Hampshire, they'll move offshore into the deep water. Up in the Gulf of Maine, way up in there, they'll feed early and on the Gulf of Maine, the shoreline up there runs almost east and west. So, when they feed in the shoal water up there, and then they go offshore, it seems like they almost always go southwest. If you see some, say early in the morning on Jeffreys Bank, which is southeast of Rockland, see them there early in the morning, you want to go southwest to there and head out halfway between there and – what's the name of that? Out towards Cashes, because those fish will move out to the south and southwest out to the deep water there. So, they've got a huge daily migration pattern. My friend, Dave Thompson, he used to fly for the White Dove out of Cape May, New Jersey. He's told me about many days and when he would find a body of tuna fish or even one school of tuna fish up on the north end of Stellwagen Bank. They try to catch them with a seine. To line up a school of tuna fish with a seine boat, a big slow seine boat, is rather difficult at times. They are very difficult or impossible sometimes. He's chased one bunch of fish from the north end of Stellwagen Bank, all the way down, and almost down to Plymouth Harbor. Same bunch of fish over the course of several hours. It doesn't stay in migration down and toward the bay.

JW: Does he have to lead them? Get ahead of them?

WD: Get alongside of them to let the net go. It depends how fast the fish are moving, how far ahead of them he had to let the net go. It's not a great amount. It's not a science, but it's an art to know where to let that net go for a school of moving tuna fish. Because I've seen them do all kinds of things, doing about face and curb often, you never get them. It's fun but difficult.

JW: So, did the tuna usually travel pretty high in the water column then?

WD: Well, if they're not up there, we don't see them obviously. That's what we depend on for them to be on or close to the surface, whether or not they're making an actual wake or not. If they're making a wake, they're much easier to see at a distance. I think probably the furthest away I've ever seen a bunch of tuna fish is like seven or eight miles, I guess, on a real calm day. Then when you see them at that distance, you don't say, "Oh, there's a school of tuna fish," you think, "Well, what's that up there." Then you got to go fly to it to confirm that it is something that you're looking for. There are times when you'll see something like that and think it might be a school of tuna fish, but you get up there and it's just a bunch of porpoises thrashing around or something similar, porpoises or whales or birds working with a bunch of bluefish or something. Even big schools of blue fish on a beautiful day can make a little rough surface on the water that you can see for a long way away. It might be tuna fish, but you never know until you get there.

JW: How often do you see those schools of blues?

WD: In recent years, not a lot. This seems like they've thinned out in recent years after having been super thick for thirty years or so. But last summer, let me think why, I was chasing white sharks last summer so didn't get out into bluefish country that often. But no, come to think of it now, there's a lot of bluefish and stripers just east of Nauset, New Orleans there in August. But nothing I can tell you precise about. Talking about differences that I've noticed since covering the Gulf of Maine and Georges Bank and the Northwest Atlantic since 1973, other than the mention of the apparent migration of the body of swordfish and giant bluefins away from the New England shoreline from Cape Cod, up into the Gulf of Maine, toward the east out on the Georges to the northern edge of Georges Bank and the deep water there, to include the offshore waters of south of Mount Desert Rock, that and the reduced numbers of blue sharks offshore everywhere in New England. Those are the only three things that really come to mind as far as changes in populations of fish. Although as I flown further offshore in recent years to go out and see for photographic purposes, trying to find sperm whales and blue whales and stuff like that, it does seem like either there are more sperm whales around now or I've just been seeing more because I'm going further offshore.

JW: You mentioned there are four that you see?

WD: Yes. Down at Oceanographer Canyon, we have got them well documented. What else were after the changes? I had something on my mind here, "What the heck was it?"

JW: Well, we can always come back. I was just thinking if you wanted to say something about working with the Atlantic White Shark Conservancy and seal populations on Monomoy Island white sharks?

WD: Yes. Well, that's a recent thing, the Atlantic White Shark Conservancy has been around since 2013, I guess. Now, it's started by Cynthia and Ben Wigren. They started right out doing funding for white shark research with Dr. Greg Skomal, as he worked with Billy and Nick Chaprales and their fish spotter, George Breen. Since we found the first one along the Cape Shore of Orleans back in 2007, as I recall, and they started tagging and recording them.

JW: White sharks, that is?

WD: White sharks, yes. It's become apparent that there are quite a few white sharks around here. Then last year, the summer of 2014, Greg Skomal began a population study working with and then funded by the White Shark Conservancy, excuse me. The White Shark Conservancy and Greg Skomal began a population study in the summer 2014. Great timing for me, I guess they needed a fish spotter, and I was available. It's been a great project working down around the Chatham area. This has all been brought about by the huge population of seals down there, that's grown in the last twenty years. In the previous segment where I was talking about the populations of swordfish and bluefins and a few other things like bluefish and stuff, but I thoroughly failed to mention the fact that in the last twenty years, seals have become thickened fleas down on the Cape there, especially Monomoy and the Chatham area and even up in the Truro. At times, I guess there's as many as 20,000 along that eastern shore there. I know I've got pictures of herds of them in the many thousands. All during the years, when we were flying over that area, from 1973 until about eighty-five, I flew out of Oak Bluffs airport on Martha's Vineyard and going out to Georges Bank. Day-after-day, many days in the summer, flying right over Monomoy, for a lot of years, we never saw any seals. Then about in the early [19]80s, I mean, I'm sure the guys from Chatham could probably tell you that there were seals around at that time. But they became apparent to us, fish spotters, who weren't looking for them, that from the early [19]80s on, they really started to burgeon. Up until now, there's many thousands of seals down there. We all, myself and my fish spotting buddies, my tuna spotting buddies, all through the [19]90s, always wondering when the heck are we going to see some white sharks? There's got to be some white sharks around here. We started looking for them and found them and Dr. Skomal got the idea to do a population study. So, we did last summer.

JW: So, the first sighting you said was in 2007?

WD: That's the first one I saw from an airplane. I think there was one in 2006 that one was trapped in a pond down in Elizabeth Islands there, some place. But that's really the first evidence we had of them other than an occasionally maimed or maimed dead seal on the beach. But anyway, we started the population study in the middle of June last year, I guess. We never said at the beginning of season, how many are we going to see or anything like that. But had someone asked me what I thought we might see for the population for a summer in that 120-mile stretch of beach, basically, we'd work from the south end of Monomoy up to Nauset Inlet, and that was enough. There was plenty of work to do there, plenty of looking. In the previous two or three years I'd flown for Skomal and Chaprales, occasionally, when their regular spotter, George Breen, was doing something else, I think one day, I saw seven sharks at once down off the middle of Monomoy. So, if I had to guess beginning last summer how many sharks would there be, I would say, "Oh, I don't know. We might count up a couple of dozen in the course of the summer." But anyway, I was amazed to find out at the end of the summer, after they put all the figures together and John Chisholm went through all the GoPro footage – are you familiar with how they run a GoPro camera? They swiped a GoPro camera down the length of a great white shark, when we find one, to get a video footage of its – I don't know if you call this lateral line on a white shark or not. But the demarcation line between the dark top and the white bottom, where that demarcation goes over the gills, it creates a pattern of swirls and spots. Just like a

fingerprint, it puts a positive ID on each shark. It wasn't always easy to get that GoPro swipe with the GoPro camera every time. So, quite a few sharks we got good swipes to make positive IDs, and a lot of times, we didn't. Some of them we couldn't even get close to. But at the end of the year, the total was sixty-eight. I don't know if you knew that or not.

JW: I think you had mentioned it.

WD: Sixty-eight. Yes. It's pretty impressive. Believe it or not, I never measured the distance between the south end of Monomoy and Nauset Inlet. If it's twenty miles, it's not much more. If it is twenty miles, right in that one section of beach that kept us busy the whole summer. Pretty amazing. As the second year of the population study gets underway this year, it will be very interesting, right off the bat, to see how many repeats we get, or stated another way, how many new fish we get? If it keeps continuing like some new and some old, this population study could really tell something. I suppose that the conclusion would be when, say, five years from now, when every fish we found, we'd already seen. Will that happen? Who knows?

JW: Well, maybe we can do another oral history in five years, and we can see how things went. Fingers crossed.

WD: [laughter] Yes, keep our fingers crossed. Yes, that sounds like a great plan. Maybe between now and then, we can elaborate a little more.

JW: I know you have to get going here. So, I guess we will wrap things up and close this interview. It has been very good talking with you, Wayne. Thank you very much for your time and for your memories here.

WD: Yes. Great, Josh. Good having you aboard and we'll talk again.

[end of transcript]