

**SAVING THE OCEAN
SWORDFISH! PART 1 TRANSCRIPT**

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TEASE

Carl Safina (narration)

On this edition of Saving the Ocean, we're going out with some of the last swordfish harpooners.

Derek "Hoss" Atwood

Swordfish!

Carl Safina (narration)

We'll experience the thrill of the hunt...

Derek "Hoss" Atwood

There you go!

Carl Safina (narration)

and the satisfaction of landing the prize.

We'll also see why this is the most sustainable fishery around...

Fish grader

A plus. Going in the big vat.

Carl Safina (narration)

and how swordfish are the world's best large fish comeback story.

Carl Safina

I'm Carl Safina. Join me now for Swordfish!

FUNDER CREDITS

Announcer

Major funding for Saving the Ocean is provided by:

The Kendeda Fund -- furthering the values that contribute to a healthy planet.

And by Okeanos -- foundation for the sea.

INTRO

Carl Safina

Hi, I'm Carl Safina. No matter where I travel I always return here, to walk, feel the seasons change... I've been coming here since I was a kid.

Now I'm a marine biologist and I write books about the ocean -- that magic, majestic, two thirds of the planet that starts right there in the surf.

In my travels I see pollution, overfishing, coral reefs in trouble. But I also meet inspiring people, working to solve problems.

In this series, we visit people with solutions, and places getting better. So I hope you'll join me on these journeys. It's all about Saving the Ocean.

SWORDFISH! Part 1

Carl Safina

Beautiful boat, beautiful boat.

Carl Safina (narration)

We're leaving one of southern Nova Scotia's tiny harbors.

The plan is to be out swordfishing for a week -- a routine trip. Not that offshore fishing is ever routine, nor are the goodbyes.

Larry the skipper picks his way along the channels he's known since boyhood.

Carl Safina

Hey Larry, how many hours do we have to steam now and how far from shore are we headed?

Larry Sears

We're approximately 10 hours and that's around 80 to 90 miles off shore.

Carl Safina

And the first stop is a part called the Gully? Is that right?

Larry Sears

Yeah, Romey's Peak or west of Romey's Peak, yeah.

Carl Safina

So all the little bits of the edge of the Georges Bank, they all have different names, they're like different neighborhoods.

Larry Sears

Different names on the edge of the Bank, yeah.

Carl Safina (narration)

We're heading for the canyons along the edge of Georges Bank -- a relatively shallow 8000 square mile area that, in spite of some over-fishing, is one of the world's richest fishing grounds.

Ocean currents sweep deep, cold nutrient-rich water up onto the warm Bank, and that leads to an explosion of sea life.

Animals travel thousands of miles to feed here in summer -- whales, tuna, sharks, and swordfish.

Carl Safina

We're going out with these guys who will be swordfishing. We will be killing some swordfish, that's what they do, but the story is about how swordfish are more abundant now than they were ten years ago. There've been a lot of problems in the Northeast part of the US and Atlantic Canada, a lot of overfishing, the collapse of cod that we've all heard about. But we can get the fish back, there are people doing it right and that's what we're going to see.

This looks like a really well-stocked galley. What do you have here?

Derek "Hoss" Atwood

We got ...

Carl Safina (narration)

Hoss runs the ship's galley, and we won't be going hungry.

Derek "Hoss" Atwood

... we got the chips and stuff that's behind ya. The bars is behind ya.

Carl Safina

Cakes and chips. Bars okay.

Derek "Hoss" Atwood

And in here is like Ritz crackers and whatever. I'll show you what's in the fridge.

Carl Safina

Alright

Derek "Hoss" Atwood

There's your eggs.

Carl Safina

Well, there's not much room left in this fridge.

Derek "Hoss" Atwood

....in the fridge.

Up in here you got your fries and your hot dogs and your baloney.

Down the bottom is pork steak and pork chops.

Fish.

Carl Safina

Ah! Frozen haddock on Georges Bank.

Derek “Hoss” Atwood

This one here has got all your chocolate milk and your milk shakes and stuff in...

Carl Safina

Wow! It's not a weight-watching cruise is it? No. Not really.

Derek “Hoss” Atwood

It's not. As you can tell we don't lose weight.

Carl Safina (narration)

Ten hours to go. We'll be on Georges by morning.

Carl Safina

And here we are. This is the swordfish grounds. We have around us maybe about a dozen other boats and it's really quite something because there's nothing but water as far as you can see for all of these miles. We're about 120 miles off shore now and as soon as we got to this spot we had a lot of company.

Carl Safina (narration)

Larry walks out onto what they call the “stand” to set up the fishing gear.

These guys are the last of a breed. They stalk the swordfish, and then harpoon them by hand.

Only about a 100 boats still do this regularly, all from southern Nova Scotia. Everyone else catches swordfish using 25-mile longlines with a thousand baited hooks. The harpooners catch fish one at a time -- if they're lucky.

There's a line that runs from the harpoon head back here to a string of weights and floats. It's always set up in the same precise way.

Shawn's responsible for getting everything on the aft deck ready.

Larry has let us attach our small HarpoonCam to his harpoon. It's a risk for him of course, because small changes can easily throw things off.

It's everybody's job to look for swordfish. Shawn and Hoss are going to spend most of the day up in the mast, and they're prepared.

Carl Safina

So what do you have in your pockets?

Derek "Hoss" Atwood

The chips...

Carl Safina

Uhuh.

Derek "Hoss" Atwood

that I'll take up. There's my pop and my cakes in my pocket so we don't have to come down all the time to eat. That's all.

Carl Safina

So it's a big ocean.

Derek "Hoss" Atwood

Ya.

Carl Safina

How do you find a swordfish? What're you looking for?

Derek "Hoss" Atwood

Just keep looking. Just look for two fins.

Carl Safina

You're looking for fins?

Derek "Hoss" Atwood

Two fins

Carl Safina

What about, do you ever see them underwater when they're not showing?

Derek “Hoss” Atwood

Yea, sometimes. Sometimes, you’ll look down in you’ll see ‘em. Some show a light purple, some show a blue.

Carl Safina (narration)

On Georges Bank for a couple of months in summer, swordfish like to spend time hanging out on the surface. They’re probably warming up after hunting in the cool depths, and that’s when the harpoon boats get their chance.

Now it’s time to stay focused, and concentrate.

Georges Bank is filled with life, and the spotters get to know what to ignore, like a couple of pilot whales.

We’re looking for small, dark fins just breaking the surface.

Derek “Hoss” Atwood

11 o’clock, about 200 yards. It’s just there and then it goes. So we’ll keep watching. Just see, just see what it is.

What is that, Shawn? Sunfish, init? Right over here bout 50 yards, Shawn. Bout..yeah, sunfish.

Carl Safina (narration)

A big, two hundred-pound sunfish just ambling along.

Derek “Hoss” Atwood

Swordfish!

Here it is right here, look Larry, here he is right there—bout 50, 100 yards

Larry Sears

Yeah, right there, yeah.

Take your time. Take your time, Hoss. Bring down, go down, yeah. Take your time, this big chop it’s gonna be hard.

Carl Safina (narration)

Hoss has to steer the boat to place Larry right on top of the fish.

Derek “Hoss” Atwood

There you go.

Larry Sears

Yea. Yea got him.

Carl Safina

We’ve only been at this about ten minutes. Swordfish on the surface. They made a perfect approach. They obviously know what they’re doing. And they struck it.

Derek “Hoss” Atwood

There he is right here, look Larry. 50,100 yards.

Larry Sears

Bring down, go down, yeah.

Derek “Hoss” Atwood

There you go!

Larry Sears

Yeah got him.

Carl Safina(narration)

Now Larry and Shawn have to hurry back to the aft deck.

The fish is on the line, but with its long sword it’s too dangerous to haul in. Anyway before the fish tires out it would probably just pull the small harpoon head free.

Instead they’re going to let the fish pull the string of floats and the high flyer until it’s exhausted. It’s not fun for the fish, but then no fishing is.

We’ll pull the fish in later.

Larry Sears

Right there, I see it.

Derek “Hoss” Atwood

How do you want me go on him?

Larry Sears

Start swinging around.

Carl Safina (narration)

The good thing about harpoon swordfishing is that you kill just swordfish -- no sharks, no turtles, no seabirds, no immature fish.

Derek "Hoss" Atwood

There you go!

Larry Sears

Hit it... he's hit in the backbone.

Derek "Hoss" Atwood

In the backbone?

Carl Safina (narration)

Larry's backbone shot may not be deep enough for the harpoon head to stay in. We'll see later.

By mid-afternoon we've come up on only our third fish. This is definitely not an easy way to make a living.

Larry Sears

Yeah, get around him.

Carl Safina (narration)

This shot will take all Larry's skill -- the fish is several feet under water.

Derek "Hoss" Atwood

There you go!

Larry Sears

I'm coming. Bigger fish. That was a bigger fish yeah.

Carl Safina

That fish was under water. Did not have his fins out. I didn't even see it until we were almost over it and the stand was almost past it. He got a straight shot at it. It was quite a sizeable fish.

Carl Safina (narration)

Late afternoon, and it's time to see what we got. First up, the fish Larry thought he'd hit in the backbone.

Derek "Hoss" Atwood

This is the backbone one, I think.

Larry Sears

I don't think it's on there.

Carl Safina (narration)

The guys might be faced with losing a third of their day's catch.

Larry Sears

Some strain on it. It may come out if the dart didn't get in deep enough.

Want to try this? I don't feel much. I don't feel much on it.

Carl Safina (narration)

There's 600 feet of line to gently pull in.

Shawn Smith

It feels light. It feels like there's no fish on it. I shouldn't be hauling it this easy.

Larry Sears

Nothing on it. Fish is gone.

The end of the dart couldn't have gone in the fish far enough so that when it pulled back, that it catches on the ears of that to turn it, so that it lays like that, the hook in the meat. That way it can't pull out, but if it only goes down part way-- something like that -- so it can work, then it'll keep working it's way back, pull straight out, out of the fish.

Carl Safina (narration)

Now the fish we found first thing this morning.

Shawn Smith

Bigger fish than what I thought it was.

Larry Sears

Yeah, I didn't think it was very big.

Carl Safina (narration)

They're pleasantly surprised at the size. It's a bit under 200 pounds. And there's another surprise.

Larry Sears

His sword broke off, didn't it?

Derek "Hoss" Atwood

Yeah, his sword's chewed off.

Carl Safina (narration)

The fish's 3 foot-long sword is missing. Some fishermen believe that mako sharks bite off swords, but I don't think a shark would risk going for the sharp end of the fish.

Carl Safina

Swordfish ram things. They ram sea turtles, they ram pieces of wood, they ram boats. Makos do attack swordfish but I doubt that they would attack the bill. They do bite their tails off.

Carl Safina (narration)

Hoss agrees with me about that.

Derek "Hoss" Atwood

They come up from behind 'em. Take the tail right off of them.

Carl Safina (narration)

Now the third fish we found today.

Derek "Hoss" Atwood

This is a lot bigger fish. Oh yeah lot bigger. He'll make two of that one.

Larry Sears

I'd say it's well over 200 pound. There he is coming there now.

Carl Safina (narration)

Larry's terrific underwater shot got a great 300-pound fish. The largest ever caught was over a thousand pounds, but two to three hundred is average.

Swordfish are doing well -- we'll talk about why later. Year to year fishermen are seeing bigger fish – always a sign that there's not too much fishing pressure.

The harpoon boats aim to bring in top-quality fish...

Shawn Smith
How'm I doing?

Carl Safina (narration)

...so they ice the catch quickly, and they stay out just a few days.

Derek "Hoss" Atwood
Coming down.

Shawn Smith
OK Hoss.

Carl Safina (narration)

While Hoss and Shawn store the fish, I check out the parts we're not taking home.

Carl Safina
This fish has been eating plenty of squid, and silver hake, and then these other longer fish. It's a little hard to see what these were exactly. So that's what they eat before we eat them.

Derek "Hoss" Atwood
You ready for him, Shawn?

Shawn Smith
Yeah.

Carl Safina (narration)

To my mind swordfish harpooning is the perfect fishery. Nothing else is killed, the fish are plentiful, and the boats take great care to get the catch home in good shape. This could be sustained forever, so long as we take the broad view.

Carl Safina
One thing this shows is if we want to have swordfish we have to have something for them to eat. So while people also eat squid, and people also

eat silver hake, actually which is sold as whiting, if we take all of them there's nothing for the bigger fish. So you know when we think about our fisheries, we think about what can we catch, how much of it can we catch – it shouldn't be based on just how many squid can we possibly take out of the ocean for there to be just a few squid left to breed more squid. We have to have enough squid to feed the swordfish, if we also want there to be swordfish.

Carl Safina (narration)

As our second day dawns, we have an important visitor. It's Dale Richardson, president of the Nova Scotia Swordfish Harpoon Association.

Carl Safina
Morning.

Dale Richardson
Morning.

Carl Safina (narration)

Dale's a harpooner himself.

Carl Safina
OK. You're our first catch of the morning.

I remember when swordfish were really depleted and I've talked to a lot of old guys who say that there used to be a lot of swordfish. Then it seemed like it went through a period of real scarcity. What's happening now?

Dale Richardson
Well, science and everything else is telling us today that our swordfish stocks are back in a healthy state and are sustainable to the future.

Carl Safina
Why do you think they have recovered since almost all the other fish that we hear about are still way down?

Dale Richardson
I guess it's testament to their resilience as a stock. We've also learned to manage them better, I guess.

Movietone

Cruising in waters where the big fellows abound, to the deep sea fishermen it's a playground, off the coast of Nova Scotia.

Carl Safina (narration)

At one time all swordfish caught off the US and Canadian east coast were harpooned.

Movietone

In the hands of a sharp shooter, the harpoon is deadly. To penetrate the tough, scaly hide of this streamlined monster is one trick...

Carl Safina (narration)

Swordfish were harpooned from the boat, then picked up in the dory.

Movietone

..and when old salty takes up the trail, his doom is sealed.

Carl Safina (narration)

But now 90% of the swordfish catch is with nets or longlines.

US harpooning is almost gone, and in Canada it's only Dale's Association left.

Movietone

A savage monster of the deep is tamed, and when you've tamed him, you've been fishing.

Dale Richardson

There's no more primitive way to harvest a fish than one man on the end of a stand with a harpoon in hand. We have to see the fish, we interact very little with other species, we have no bycatch because you have to see what you're throwing the harpoon at.

Carl Safina

Yes so you don't kill anything else, you could have sharks in the area, dolphins in the area, sunfish in the area. Nets or longlines can catch those things and can catch sea turtles too. So that's a big difference.

Dale Richardson

They always have their bycatch issues. The more aggressive type of fishery you have, the more bycatch issues you have.

Carl Safina (narration)

Swordfish are long-distance travelers. We know this because Larry our skipper used his harpooning skills to stick satellite-tracking tags in fish, for Canadian scientists.

Fish spawn down south in winter, then feed up north in summer. They were in trouble in the 1980s, but then three things happened:

Conservationists persuaded the US government to ban fishing for juvenile fish off Florida.

Consumer groups organized a boycott that reduced demand.

And international catch quotas were successfully enforced.

Swordfish grow fast, so Dale and his group are still fishing.

Carl Safina

Do you go swordfishing because you can make money swordfishing compared to lobstering, or do you go swordfishing because you really love swordfishing?

Dale Richardson

I guess when I started it, the thought was we were gonna make lots of money but it's developed into a love thing, I think. We try and make as much out of it as possible - it only makes sense if you're going to catch a product to use it to the fullest - but in reality we don't make a whole lot of money. Some years we make some, some years we don't.

Carl Safina

So what do you love about it? You come out, here you drive around all day, you have to really keep your attention up for 12 hours. Some people might think that that's not their definition of an easy day's work or a good time. What do you love about it?

Dale Richardson

You know, it's exciting just to see them and then, of course, the hunt is on to try and outsmart the fish, or the weather conditions, and... I presume it's the hunting instinct.

Carl Safina

Uhuh. Well, I'm a fisherman and a wildlife lover and a conservationist and I have to say that the part of me that is a fisherman shares the thrill that you feel about seeing these fish, and the part of me that's a conservationist also thinks that it's a good fishery because it's clean and it is sustainable and it is coming back.

Carl Safina (narration)

We're back to our routine.

It's hard to do, but you have to stay completely alert.

It's two hours before Hoss thinks he sees something.

Derek "Hoss" Atwood

Larry, just... Larry, just go up this way, up this way. Whatever it is, it looks good, it's staying right up on top of the water the whole time.

Okay up there about, it just is gone, just cut under there. Here it goes there now.

Carl Safina (narration)

It's incredibly hard to pick out nine inches of dark fin in the haze and choppy surface.

Derek "Hoss" Atwood

Here he is. He's out here.

Larry Sears

Go ahead.

Derek "Hoss" Atwood

You see him?

Larry Sears

Stay outside.

Derek "Hoss" Atwood

I know, I gotta get up here, Larry. Look right up here one o'clock, about 50 yards

Larry Sears

Yeah I see him, gotta stay outside of him.

Derek “Hoss” Atwood

Go right on him?

Larry Sears

No. Go out here.

Derek “Hoss” Atwood

OK. He’s settling.

Larry Sears

Take your time.

Derek “Hoss” Atwood

Yeah I know but he’s settling, Larry. I can hardly see him now.

Larry Sears

Go in, go in.

Derek “Hoss” Atwood

Get ready.

Larry Sears

Just take your time.

Derek “Hoss” Atwood

Yeah.

Carl Safina (narration)

Success is all about coordination. Larry, Hoss and Shawn have been harpooning together for 20 years.

Larry Sears

He’s swimming hard.

Carl Safina (narration)

Even though they know each other’s moves by heart, they still talk anyway.

Derek “Hoss” Atwood

There you go. There.

Larry Sears

That did him good.

Carl Safina (narration)

A perfect hit.

And then the day got better when we were joined by a herd of frolicking dolphins. They're on the rich Georges Bank for the same reason we are -- to catch fish.

They're better at fishing than us, so they can afford to take time off to enjoy themselves.

Derek "Hoss" Atwood

Swordfish! There he is right there.

Larry Sears

Okay, go after him then. Where is he?

Derek "Hoss" Atwood

Right over here, look, I can go right down on him if you want me too.

Larry Sears

No, go outside.

Derek "Hoss" Atwood

Stay outside and go in on him?

Larry Sears

Yeah.

Derek "Hoss" Atwood

You sing out when you want me to come around on him.

Larry Sears

Gotta go way up here. Gotta go up ahead.

Derek "Hoss" Atwood

Go up ahead of him and then come down on him?

Larry Sears

Yeah you gotta stay out here. Okay start swinging her in.

Derek "Hoss" Atwood

OK. Be ready.

Larry Sears

OK. Take your time.

Derek “Hoss” Atwood

I am. You get ready. I’ll put you where the fish is.

Larry Sears

Speed her up.

Carl Safina (narration)

It's strange that the fish are never bothered by our looming and noisy presence.

And then...

Larry Sears

Oh! Argh!

Carl Safina (narration)

Larry misses his shot.

Derek “Hoss” Atwood

Keep watch see if he goes down deep or not.

Carl Safina

We came up on that fish and it was a clean miss. Larry just didn’t get the dart in the fish.

Larry Sears

I think in the last second I changed my mind of where I was going to hit the fish and moved the pole. And if you do that, most of the time you’ll be off. If you pick a certain spot on a fish when you’re coming at it and then change your mind you want to hit somewhere else, then you’ll probably miss the fish. And I think that’s what I did.

Oh! Argh!

We’ll know the next time, I’ll try not to change my mind.

Carl Safina (narration)

Then an amazing thing happened.

Derek "Hoss" Atwood

Where at? 9 o'clock?

Carl Safina (narration)

The same fish came back up.

Larry Sears

Okay right here, Hoss. He's up good okay. Take your time. Gotta go way around him now. Take your time you've got to wait, you've got to wait.

Derek "Hoss" Atwood

I am. There he is over here.

Go right on him now?

Larry Sears

Swing her in slow. Take her in slow

Derek "Hoss" Atwood

Okay. There you go!

Larry Sears

In his friggin' backbone.

Derek "Hoss" Atwood

You hit him in the backbone?

Larry Sears

Think so. Yeah

Carl Safina (narration)

It's another backbone hit, so they may lose it.

Carl Safina

The fish didn't spook and disappear.

Larry Sears

Didn't spook, no.

Carl Safina

It just went off a little ways and came back up again. Gave you a second shot at it.

Larry Sears

I've seen them do that before. Sometime three or four times they'll come back up.

Carl Safina

Did you get a shot that you were satisfied with or not so good?

Larry Sears

That doesn't look like it's really in him very good. I think it's the same with yesterday's fish, it was stuck close to the backbone and it didn't go very deep. So sometimes, after an hour, it'll work the dart out. But it doesn't hurt the fish, they'll heal up quick and be on their way again.

Carl Safina (narration)

In our next episode we conclude the story of Larry and his crew.

I'll try my hand at delicately hauling in that fish that came around a second time, and we all get fooled by a classic harpoon-fleet joke -- a wooden fish.

When the weather turns bad Larry misses his shots, and lines keep getting caught on our HarpoonCam.

But we still get fish, and we head back to port with a catch that the fish-buyers are eager to take.

I'm Carl Safina. Please join me next time on Saving the Ocean, for the conclusion of Swordfish!

FUNDER CREDITS

Announcer

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