

Saving the Ocean
TRINIDAD'S TURTLE GIANTS

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TEASE

Carl Safina

On this edition of SAVING THE OCEAN we're with giant sea turtles in the Caribbean.

Carl Safina (narration)

Leatherback turtles have cruised the oceans since the age of the dinosaurs.

Carl Safina

There's a leatherback turtle in the net right here. What a mess. Look how tangled up it is.

Carl Safina (narration)

But today these ancient mariners are in real hot water.

Carl Safina

I hate seeing that.

Carl Safina (narration)

We'll head to Trinidad where leatherbacks are making a strong comeback...

Carl Safina

Wow, how extraordinary.

Carl Safina (narration)

And meet the islanders who have turned turtle tragedy into treasure.

Carl Safina

What does it feel like to you?

Jasmine

It's like very, very soft.

Carl Safina (to-camera)

I'm Carl Safina. Join me now for SAVING THE OCEAN.

FUNDER CREDITS

Announcer

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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, over fishing, 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 in these journeys. It's all about Saving the Ocean.

TRINIDAD'S TURTLE GIANTS

Carl Safina (narration)

We're in the Caribbean just off the coast of South America, on the tropical island of Trinidad.

Carl Safina

It looks like we're in the jungle. Is this the prettiest place in Trinidad?

Anderson Inniss

Yes it is.

Carl Safina (narration)

I'm driving to the rugged northeastern corner of the island.

Thousands of other long-distance travelers like me are headed to the same place.

Music Up

Only they're all arriving by sea.

It's June, height of the migration and nesting season of one of the largest and most ancient reptiles on earth – the leatherback sea turtle.

Like many sea turtle species, leatherbacks are in trouble around the world. But in Trinidad, this mysterious creature is staging a surprising comeback.

I've come here to find out how they've managed against heavy odds to do it. First, I want to try to get a close-up look at a leatherback in its natural element –swimming at sea.

They're incredibly elusive animals, so I've enlisted some experts to help find them.

Biologist Scott Eckert is with the Wider Caribbean Sea Turtle Conservation Network, WIDECAST for short. The boat crew is with the Grand Riviere Nature Tour Guides Association, a local conservation group.

Carl Safina

How are you?

Dog

I'm okay, man.

Carl Safina

Good, I'm Carl.

Scott Eckert

Hey Dog, this is Carl Safina. Len Peters. These two guys run the sea turtle program and this nice fishing boat.

Carl Safina (narration)

Fisherman Len Peters has worked with Scott for years on leatherback research. If anyone can find a turtle at sea, it's these two.

Scott Eckert

We're going to go offshore a ways. The turtles tend to group up around the besting beaches and they'll be just maybe two to three kilometers off shore.

Carl Safina (narration)

The seas are rough.

STORM SFX

Carl Safina (narration)

And just as we get underway a heavy squall moves in.

STORM SFX

Carl Safina (narration)

That'll make it even harder to spot anything.

Carl Safina

We've come to Trinidad in what's obviously the rainy season to find some of these giant leatherback turtles that come to the Tropics to nest from as far away as Canada. They're supposed to be here by the thousands and they're big but the ocean is bigger. So we'll see what we can see.

Carl Safina (narration)

Leatherbacks stay underwater for about ten minutes at a time before coming up for a breath of air. We scan the ocean surface, watching for a head to pop up.

Scott Eckert

Right here, right here, right here, right here. She's going away, she saw the boat.

Carl Safina (narration)

Turns out, *spotting* a leatherback is the easy part.

Scott Eckert

There, right side.

Carl Safina (narration)

Getting close enough for a good look is much more difficult.

Scott Eckert

She's staying, she's staying. Ah crap, there she goes.

Carl Safina (narration)

Leatherbacks are champion divers. They can descend to depths of four thousand feet – that's three-quarters of a mile - one of the deepest of any creature.

Scott Eckert

There she is, right there.

Scott Eckert

She's diving, she saw the boat. There, got it, right there. Oh it's a big one. Come behind her.

Carl Safina

I don't see it anymore.

Scott Eckert

Got her right here. Wait, wait, wait. Oh she's going, she's going.

Carl Safina (narration)

After hours of near misses, we're ready to call it a day. But then...

Scott Eckert

One o'clock. Oh this is perfect, she's sleeping. She's sleeping. Look at that, isn't that awesome?

Carl Safina

How cool is that?

Scott Eckert

This is absolutely perfect. You can't do better than this.

Carl Safina

Oh my god.

Carl Safina (narration)

Here's my chance. A close encounter like this one is becoming increasingly rare. Leatherback populations around the world have plunged in recent decades and the species is now listed as Critically Endangered. Which makes this female's mission to make it ashore and lay her eggs all the more crucial.

Carl Safina

As soon as she saw me she decided to just angle down, she just tilted down and went away. But I got a nice look at the whole length and the whole bulk of her. Very, very impressive animal.

Carl Safina (narration)

Even more impressive is the epic journey she made to get here.

In the Atlantic, leatherbacks forage for jellyfish in cold northern waters. Come winter, they swim thousands of miles south to breed and lay their eggs in the tropics. The long migration is fraught with hazards like sharks and fishing nets. But the danger is greatest at their destination – nesting grounds... like Trinidad's Matura Beach.

Five miles long, it's one the largest leatherback nesting sites in the world.

Carl Safina *(to camera)*

There's not much happening right now. It's a little bit before sunset. But after dark this beach is literally going to be crawling with thousand pound turtles.

Music Up

Carl Safina (narration)

Each night from March through August, female leatherbacks hit the beach like an amphibious assault force.

On land the massive creatures are slow and defenseless.

They struggle up the beach to reach dry sand... where they painstakingly dig a deep egg chamber.

Once underway, the female enters a kind of trance so our presence won't disturb her, as long as we keep our lights low.

Carl Safina

What would a turtle like this weigh?

Scott Eckert

Oh, our average size out here is about eight hundred fifty pounds.

Carl Safina

Holy moly.

Scott Eckert

She's pretty good sized, that turtle is pushing a thousand pounds.

Carl Safina

She's still digging the egg chamber?

Carl Safina

That was her answer.

Scott Eckert

I know. (laughs)

Carl Safina

Flipping a bunch of sand.

Scott Eckert

Throwing a bit of sand at you.

Carl Safina (narration)

Her rear flippers do the shoveling... and they're badly scarred from some close calls.

Scott Eckert

This other flipper is if you look half cut off.

Carl Safina

No kidding.

Scott Eckert

Yeah, only has half a right flipper.

Carl Safina

What would take off half a flipper off of a giant turtle like this?

Scott Eckert

Probably most of the time it's bites from sharks. In fact, if you look here you can see that's a bite, that's probably a bite. They're just round, shark-mouth type bites.

Carl Safina

That's incredible. Wow, she's starting to lay eggs.

Scott Eckert

Yes she is, very good. This was a tough nest to build, she had a lot of roots to dig through but that looks really good.

Carl Safina (narration)

Each clutch contains about ninety eggs.

Carl Safina

They're amazing.

Scott Eckert

Would you like to hold one?

Carl Safina

Yeah, of course. Whoa. They feels papery not rubbery.

Carl Safina (narration)

Each female lays about six nests a season – over five hundred eggs in total.

When she's done, the female packs the hole with sand...

And sweeps the area to disguise the nest.

She's about to come out of her trance, so we douse the lights and switch to a Nightvision lens.

By the time her youngsters hatch out two months from now, she's likely to be a thousand miles north and far out to sea.

Carl Safina (narration)

As the night unfolds, it becomes clear to me just how important this five mile long ribbon of sand is. All around, new life is in the process of being launched into the world.

Carl Safina

It's a very active night, there are turtles all over the beach. Some are coming, some are going, some are digging, some are laying. Its just fantastic, all the activity that there is here. It's a turtle factory is what it is.

Carl Safina (narration)

On such a magical evening, it's difficult to imagine that just twenty years ago, the leatherbacks of Matura Beach were well on their way to being wiped out.

A word of warning – some graphic images follow that may be disturbing to viewers.

Music Sting

The fact that *any* turtles remain here is thanks to the efforts of an extraordinary woman, Suzan Lakhan Baptiste. She grew up here when it was open season on leatherbacks.

Suzan Lakhan-Baptiste

In the 1970s and '80s, turtles were being killed in large numbers. A lot of people from outside the community started to come in and kill the turtles very senselessly. And they would smoke the meat and cook out and this became very popular. Here was like a huge graveyard, you know, that's how I could of described it.

Carl Safina (narration)

Poachers held free reign, butchering the females and selling the meat on the black market. Nests were ransacked for eggs. Turtle parts were even used as shark bait.

Suzan Lakhan-Baptiste

About thirty percent of the females that came to lay their eggs were killed. Annually.

Carl Safina

That would have been thousands..

Suzan Lakhan-Baptiste

Thousand of turtles.

Carl Safina (narration)

Horrified, Suzan started speaking out against the slaughter. Not a popular move in a place where people depended on money earned from turtle hunting.

Suzan Lakhan-Baptiste

A lot of people used to call me “Crazy Woman, Mother of Turtles,” they used to jeer and laugh at me.

Carl Safina

You must be very stubborn.

Suzan Lakhan-Baptiste

Yes, I was. I don't know why, maybe I was destined to do something like that.

Carl Safina (narration)

Suzan and a few brave family members began spending nights out on the beach, guarding turtles and confronting poachers.

Suzan Lakhan-Baptiste

To protect these turtles, we had to be here every night. Our presence here was very vital to sending a clear message that the beach is now prohibited and protected.

Carl Safina

I imagine that if you go out and there are people with machetes killing turtles, and you say, 'don't do that', they're not gonna say, okay.'

Suzan Lakhan-Baptiste

Very much so. Actually, when we started, that was a big paradigm shift. Free for all before and now people being curtailed and you're telling people that they cannot enter and you cannot do this anymore, we got into physical fights, even I did.

Carl Safina

Wow.

Carl Safina (narration)

The tense standoff with poachers continued, night after night, for years. Growing publicity about the slaughter finally convinced the government to step in.

Hunting was outlawed and Suzan's band of "Nature Seekers," as they named themselves, was authorized to police the nesting beach.

Twenty years on, the nightly patrols continue. After decades of killing, Matura Beach is finally safe.

Ronald

She seems to be clean of injuries, except just a little v-notch that is missing here at the front of the flipper.

Carl Safina (narration)

As word spread about the "Crazy Turtle Lady's" courageous fight, the Nature Seekers began taking a few curious visitors out to see what all the fuss was about.

From that modest start, the leatherbacks have become one of Trinidad's biggest tourist attractions.

Carl Safina (narration)

It's Friday night at the Nature Seekers headquarters. And the staff is loading up for a busy night of turtle-watching tours. Suzan's brother Francis, one of the first to join her cause years ago, heads up the tour guides.

Francis Superville

We are expecting about three, four hundred tourists.

Carl Safina

What, three or four hundred? No way.

Francis Superville

Some nights we have over five hundred on the beach.

Carl Safina

That's incredible. Wow. And who are they?

Francis Superville

Locals, foreigners, people with families, friends, dates, everybody.

Carl Safina

Oh, people come on dates to see the sea turtles?

Francis Superville

Yeah. Every night, Friday night, on the beach is party night with turtles, man.

Carl Safina

All right.

Carl Safina (narration)

Each year, fifteen thousand visitors flock to Matura in hopes of glimpsing a nesting leatherback.

The Nature Seekers are ready for them with educational materials and guided tours.

Francis Superville

Leatherbacks are solitary animals. I don't know if the females give out hormones and the males then say, "OK good things are going to happen down in the Tropics." So everybody heads down.

Carl Safina

Francis has a turtle up the beach. One of the patrol people found it so we're following him to it.

Carl Safina (narration)

Groups are allowed out on the beach only after a turtle has entered her egg-laying trance, so the activity won't scare her off.

Carl Safina

Wow, look at her. She is enormous.

Carl Safina (narration)

Most of these eco-tourists actually live around here and they're thrilled to see what's in their own backyard.

Francis Superville

Those of you who want to take photos, come to the back. In the next few minutes you can come to the back so you can see how she's started excavating the nest. She is concentrating on only depositing the eggs. That's the time to touch. At that stage she would not abandon and go back out. You can feel the shell, the shell is like rubber.

Carl Safina (narration)

So many Trinidadians have made this pilgrimage that the leatherbacks have become national celebrities.

Carl Safina

And the shell is so smooth. What does it feel like to you?

Jasmine

It's like very, very soft.

Carl Safina

Yeah.

Carl Safina (to camera)

This is quite a scene. And it's really fantastic to see the enthusiasm. These kids are loving this experience. It's a miracle; it's so mysterious and really incredible.

Francis Superville

You can feel the shell, feel the muscle, feel her blubber.

Carl Safina (narration)

Turtle tourism has lifted the local economy, infusing it with much-needed cash and jobs.

Suzan Lakhan-Baptiste

When the season starts we at Nature Seekers are zealous, walking up and down. Oh let's see the first turtle. What will be the first day they come in? Because once those turtles are coming, it means sustainability for the community. Without the turtles, there's no money. We have learned to show the wider world the economic benefit of the turtles being alive rather than dead. The community now are stewards of this resource, they are now protecting this because this is what is putting bread and butter on their table.

Carl Safina (narration)

Suzan's model has taken off. Sixteen other communities in Trinidad have started their own sea turtle protection programs, inspired by the dramatic rebirth at Matura Beach.

Suzan Lakhan-Baptiste

When I first started, we had about ten maybe twelve turtles for the night. Now we have over two hundred turtles in our peak time on a nightly basis.

Carl Safina (narration)

Thanks to dedicated activists like Suzan, Trinidad's nesting beaches are thriving and the number of returning females is on the rise.

But the leatherbacks aren't home free. Another big threat looms just off the beach: fishing nets.

Fishermen here use nylon gillnets that they leave out overnight.

Measuring up to a mile long and a hundred feet deep, a gillnet is death for most everything that hits it.

The fishermen are only after a few commercially valuable species of fish. But the nets also snag leatherbacks. Lots of them.

It's dawn on Trinidad's north coast and some leatherbacks have been spotted in a net just off shore.

A rescue party is quickly organized.

Carl Safina

We're going out right now to try to prevent five from drowning because they're tangled up in a net. But it's very rough, we're not sure we can do it.

Carl Safina (narration)

Time is of the essence. Leatherbacks can remain underwater for close to an hour. But if they can't reach the surface to breathe, they'll drown.

Carl Safina

There's a leatherback turtle in the net right here. What a mess, look how tangled up it is. At least it's alive.

Carl Safina (narration)

The men race to free the struggling turtle.

She's so wrapped up they have to cut the net away.

Finally, she's free. Two others also get freed.

But by the time we reach the last two turtles, it's too late. They've drowned.

Carl Safina

I hate to see that.

More than three thousand leatherbacks are caught in nets each year off Trinidad. About thirty percent of them -- a thousand animals -- die.

The fishermen are also hurting. Turtles wreck the expensive nets, which go for about two thousand dollars each. Repairs and downtime take a big bite out of the fishermen's meager income.

Scott Eckert and WIDECAST are working on ways to reduce turtle deaths and save the fishermen money.

Scott Eckert

Instead of saying, you can't fish that way anymore, even though that's how you've always fished, we are finding ways to modify the equipment they're using to make it turtle-safe.

Carl Safina (narration)

Scott is having them test out a modified gillnet that's called a *short net*. It only goes fifteen feet down in the water, rather than the usual fifty to one hundred feet.

A typical gillnet is like a long curtain, with lots of fabric that waves around in the current. When a turtle strikes, the loose netting wraps around the animal.

But the short net is less exposed to the current, so it hangs down like a stiff curtain. When a turtle hits it, the animal doesn't get tangled. That's great for turtles, but what about catching fish?

The fishermen assume that deeper nets will increase the catch size. But Scott has done research that shows that using a short net won't reduce their income.

Scott Eckert

The fish they want to catch, the ones that have the most value to the fisherman only live in that upper fifteen feet of water. And so by placing our nets more efficiently in a place where most of the fish are, shortening that net so it isn't quite so billowy, it doesn't entangle the turtles, and the turtles tend to bounce out. And they catch the same amount of fish.

Carl Safina (narration)

Right now, the short net is in trial use by only a few fishermen, but the results are promising.

Of course, the ideal solution would be to stop using nets altogether during nesting season.

To see if that's possible, Len Peters with the Grand Riviere Nature Tour Guides Association, is working with WIDECAST to develop net-free fishing methods.

Len showed me one that he is testing out called "targeted trolling."

Each boat is given a relatively inexpensive sonar unit to locate the area and depth where fish are feeding.

Len Peters

So we have fish here, between fifty and sixty feet.

Carl Safina (narration)

Then they run out hook and line gear to the correct depth and begin trolling – running back and forth over the target area.

Trolling catches *zero* turtles. Plus the equipment costs much less than a gillnet, which Len hopes will motivate the cash-strapped fishermen to change their traditional ways.

Len Peters

What we are telling the fishermen is, you guys can fish during the turtle season, catch fish, generate revenues to sustain your families and not touch turtles. It's less costly, it's more efficient and at the end of the day it's going to catch more fish. I think that's what its all about, catching fish.

Carl Safina (narration)

Trolling gear is not yet in wide use, but the trials have shown that it's just as good as gillnets as far as the fishermen are concerned. Changing fishing methods is going to take time, but Len is hopeful that things will improve for the turtles *and* the community, as it did at Matura Beach.

Len Peters

I live here. The fishermen are my friends. Their children and my children go to school together. So it's not a scenario where we want to protect turtles at the detriment of our fellow citizens. We need to work together. We need to continue to protect the turtles and they need to continue to sustain and support their families.

Carl Safina

You all have the same stake, really.

Len Peters

Exactly.

Carl Safina (narration)

Getting more turtles to the beach isn't just about helping fishermen or boosting tourism here. It's about the survival of the species.

Today, there are only three big leatherback nesting areas left in the Atlantic Ocean... and Trinidad is one of them. For the species to stand a chance, they need to produce as many of these little guys as possible.

After six to eight weeks under the warm sand, hatchlings burst out of the nest. With luck, thirty or so years from now, they will return to this beach as adults to lay their own eggs.

But they face long odds.

Scott Eckert

It is a mean world when you're bite size for everything in the ocean, like these little turtles. They swim fast, they swim hard. But only about one in a thousand is going to actually survive to adulthood.

Carl Safina

One in a thousand? Wow. I hope you didn't hear that. Just do your best, okay?

Carl Safina (narration)

Given such slim odds, these babies will need every bit of help they can get along the way.

So it's heartening to see how committed Trinidadians are to safeguarding their beaches and waters for the turtles.

Thanks to folks like Suzan and Len, there's been good progress at the local level, where it really counts.

Mighty leatherbacks have been swimming the seas for more than one hundred million years. With lots of helping hands in key places like Trinidad, there's still hope they'll be around for a few million more.

For Saving the Ocean, I'm Carl Safina.

TRINIDAD'S TURTLE GIANTS
PROMO :30

Carl Safina

On the next edition of SAVING THE OCEAN we're with giant sea turtles in the Caribbean.

Carl Safina (narration)

Tangled in nets and hunted by poachers, leatherback sea turtles are in trouble.

Carl Safina

I hate to see that

Carl Safina (narration)

But on this tropical beach, leatherbacks are coming back strong...

Carl Safina

Wow, how extraordinary.

Carl Safina (narration)

Thanks to lots of helping hands.

Jasmine

It's like very, very soft.

Carl Safina (narration)

I'm Carl Safina, join me next time for Trinidad's Turtle Giants.

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