

Sharks 40 Minute Timecoded Script as of 30th August 2024		
Timecode In	Timecode Out	Based on: Sharks_2D_IMX40_6k_P3D65G26_ENG_Screener_240827 Subtitle
01:01:36:07	01:01:38:23	From the depths of ancient seas, it came.
01:01:47:10	01:01:50:05	A fish unlike any other.
01:01:54:21	01:02:01:09	A survivor built to rule where others failed.
01:02:29:01	01:02:33:05	In time, it grew to thrive in every corner of the seven seas.
01:02:38:02	01:02:40:23	With muscles that can cross the vastest oceans.
01:02:47:10	01:02:50:18	And senses that follow the invisible cues of the earth....
01:02:52:10	01:02:55:08	plus, the delicate scent of prey.
01:03:36:10	01:03:39:11	To some, they were gods.
01:03:42:10	01:03:43:20	Guardians of the reefs and fish.
01:03:54:10	01:03:56:09	But dangerous waters lay ahead.
01:04:09:10	01:04:18:09	And the battle for the great shark's future would rest with its most unlikely ally.
01:04:59:06	01:05:07:18	Three hundred and twenty miles off eastern Australia, lines the ancient volcano of Lord Howe Island.
01:05:16:12	01:05:18:10	A world ruled by sea.
01:05:26:14	01:05:31:11	Fueled by ocean currents that create one of the most unique habitats on earth.
01:05:45:14	01:05:48:11	Sharks are attracted to the sound of crunching bones.
01:05:53:10	01:05:56:02	But don't try this at home.
01:06:00:06	01:06:04:02	Liv Rose teaches free diving here at Lord Howe Island.
01:06:06:20	01:06:13:12	Free diving is a special skill needed to enter the world of one of the island's most intriguing residents.
01:06:15:22	01:06:17:19	The Galapagos Whaler Shark.
01:06:30:21	01:06:36:19	In this day and age, we are so saturated through media and the photos that we see.
01:06:39:05	01:06:40:07	They don't touch us anymore.
01:06:44:19	01:06:53:11	My aim behind teaching free diving, I wanted to inspire people physically and connect them physically to the ocean.
01:07:06:04	01:07:09:01	It's an indescribable feeling when we're under the water.
01:07:12:12	01:07:14:04	Something that makes us feel like we belong.
01:07:15:09	01:07:16:19	It's like a feeling of going home.
01:07:31:07	01:07:39:13	These Galapagos Whaler Sharks are juveniles and stay in schools known as Shivers to avoid being eaten by larger adults.
01:07:41:23	01:07:45:18	Cannibalism is not uncommon in the shark world.
01:08:12:00	01:08:15:12	The sound of breaking waves helps them find the island.
01:08:19:01	01:08:26:07	And scientists believe these are a genetically distinct population found nowhere else on Earth.
01:08:29:08	01:08:32:09	Together, they feed on the island's rich bounty.
01:09:07:04	01:09:10:14	But in this paradise, there's a problem.
01:09:17:12	01:09:27:04	Just as the sound of waves attracts the sharks to the island, the sound of fishermen's engines attracts the sharks to their catch.
01:09:47:10	01:09:52:07	Over years of fishing, the sharks have become accustomed to the sound of motors.
01:09:55:11	01:09:58:23	Knowing a kingfish on a hook makes an easy meal.
01:10:03:10	01:10:10:21	Up to 1,300 whaler sharks are accidentally caught amongst the kingfish as bycatch each year.
01:10:16:10	01:10:22:03	But here on Lord Howe, an experiment is finding ways to help them.

01:10:38:21	01:10:49:12	Around the island, a network of devices called acoustic receiving stations are anchored to the ocean floor and record any tagged sharks and fish that swim by.
01:10:52:10	01:10:58:17	Painting a clearer picture of the favorite hunting grounds of sharks, fishermen, and the fish themselves.
01:11:04:22	01:11:10:20	The experiment has discovered four key hotspots where sharks and fishermen most often overlap.
01:11:17:00	01:11:24:21	Helping scientists make new maps that show the best places to catch fish without the risk of catching sharks as well.
01:11:27:10	01:11:30:14	So that the entire ecosystem will benefit.
01:11:53:15	01:11:57:22	Every species plays its role in keeping the delicate balance of nature.
01:12:07:21	01:12:11:11	Life on Lord Howe is special because of its isolation.
01:12:16:02	01:12:18:07	Showing how all life is interconnected.
01:12:21:17	01:12:24:10	Both here and across the seas.
01:13:16:15	01:13:18:19	Stewart Island, New Zealand.
01:13:21:21	01:13:25:12	On the doorstep of the vast southern ocean.
01:13:36:17	01:13:42:05	Feeding ground for one of the largest and most aggressive species of shark in the world.
01:13:44:10	01:13:46:23	The Great White.
01:14:00:17	01:14:04:09	To face a Great White is to face nature itself.
01:14:11:16	01:14:17:09	They grow up to twenty feet long and more than two thousand six hundred pounds.
01:14:27:00	01:14:35:11	While Great White attacks on humans are rare, they are not unnatural.
01:14:37:08	01:14:43:12	The use of a steel cage is the safest way to enter their world.
01:15:33:18	01:15:40:14	This is shark number 'two three four'
01:15:42:10	01:15:49:07	The tag next to his fin was attached fifteen hundred miles away in eastern Australia.
01:15:58:01	01:16:01:12	Scars across its body are signs of its journeys.
01:16:02:05	01:16:06:05	The mortal battles against prey and even other sharks.
01:16:12:02	01:16:16:14	White sharks spend most of their lives in the deepest and wildest oceans.
01:16:18:20	01:16:21:19	And we're only just beginning to understand why.
01:16:27:13	01:16:31:01	'Two three four' has tracked across the entire Tasman Sea.
01:16:36:21	01:16:43:18	Another white shark, 'P one two', swam from Africa to Australia over ninety-nine days.
01:16:45:10	01:16:51:09	Then tracked its way all the way back, swimming thirteen thousand miles.
01:16:56:19	01:17:05:00	Some reach depths of four thousand feet where temperatures near freezing and no light ever penetrates.
01:17:09:15	01:17:16:01	Each of these sharks are in search of the one thing that all of us need, food.
01:17:24:21	01:17:27:22	And the great white shark needs a lot.
01:17:37:10	01:17:40:00	One seal can feed a shark for up to two weeks.
01:17:50:18	01:18:04:04	Two-thirds of the White Shark brain is devoted to smell, enabling them to detect the scent and oils of their prey from hundreds of yards.
01:18:18:12	01:18:33:12	But as they near, sight, sound, and a sixth sense created by cells in their skin, called Ampullae of Lorenzini, allow them to follow the heartbeat and nervous systems of their prey.
01:19:39:11	01:19:44:01	Without predators like sharks, the balance of nature collapses.
01:19:45:10	01:19:54:12	The life and journeys of sharks are brutal, but they are vital to keeping the oceans healthy around them.
01:20:20:16	01:20:30:09	On the Pacific island of Morea, American scientist Jess Cramp is on a quest to understand where sharks travel in the open sea.
01:20:48:03	01:20:53:14	It's really hard for ocean people, I think, to describe how they become an ocean person if they're not born in it.
01:20:53:20	01:20:58:09	I was born in the mountains. I just always, always felt very drawn to the sea.
01:21:06:12	01:21:11:12	It scares me sometimes. It delights me.

01:21:17:01	01:21:25:09	Diving in a bait ball or being dragged offshore from a sea mount and not knowing if I'm going to be able to kick my way back through the current.
01:21:26:10	01:21:36:14	It teaches me. It inspires me. It's hard to describe, but there's just something about the sea that makes me feel alive.
01:21:48:10	01:21:52:09	In order to protect sharks, we actually have to understand something about their lives.
01:21:53:10	01:21:57:16	We have to know how long it takes them to reach sexual maturity before they can make babies.
01:21:58:04	01:22:03:14	We need to know what they eat, where they go, who do they mate with, when do they mate, is it seasonal?
01:22:16:15	01:22:22:11	Shark numbers have drastically declined in the last fifty years as a result of fishing pressure.
01:22:23:19	01:22:26:03	And we're only getting better and better at catching fish.
01:22:28:17	01:22:42:09	So it's incredibly important that we spend the time and resources now on understanding where sharks are, where they're going, and why they're thriving in some places and not others, so that we can better design policies to protect them.
01:22:57:10	01:23:01:22	What's really interesting, I think a lot of people don't know, is that there are over 1,200 different species of sharks.
01:23:02:12	01:23:05:11	And they live in all sorts of ecosystems.
01:23:11:17	01:23:15:02	They'll live in little crevasses in the reef, and they'll live in the deep ocean.
01:23:19:05	01:23:27:13	Because sharks live in such inaccessible places, researchers have to find ways to follow them into their world.
01:23:36:18	01:23:53:07	For this, they use a variety of tags which attach to the sharks, either by clamp to the dorsal fin, like on this whale shark, or surgically implanted beneath the skin.
01:23:56:21	01:24:03:21	Recording depth, speed, temperature, and location.
01:24:05:02	01:24:12:09	Giving scientists a secret window into where sharks go, when and why.
01:24:29:10	01:24:32:14	Lots of sharks in the ecosystem, it actually means the ecosystem is really healthy.
01:24:33:00	01:24:38:09	There are generally lots of food fish around, the reef is usually thriving, and that's what we want in a healthy ocean.
01:24:41:14	01:24:49:02	More than 30% of all sharks on the planet are actually threatened with extinction.
01:24:52:04	01:25:03:10	We need to try to plan for that, to try to help them survive in an ocean where we are hitting them with climate change, and with fishing, and with habitat destruction, and other factors.
01:25:36:04	01:25:41:07	People get really excited about sharks, either they hate them or they love them.
01:25:45:10	01:25:51:13	A lot of people are afraid of sharks, and they see sharks in a bad light, which makes it a little harder to advocate for their protection.
01:25:58:10	01:26:04:10	The Cook Islands are what we call a large ocean state, which means there's very little land, but there's a whole lot of sea that make up the country.
01:26:07:20	01:26:12:05	It's sparsely populated, but we have this vast ocean in the middle of the South Pacific.
01:26:23:11	01:26:28:00	Why it's important for my work is because there are still a number of oceanic white tips there.
01:26:38:23	01:26:51:12	The oceanic white tip is known as the shipwreck shark, and has a reputation for eating marooned sailors throughout history.
01:26:59:12	01:27:03:14	But these tales are often the product of exaggerated myths and ignorance.
01:27:09:07	01:27:19:10	The work we're doing, people think it's very glamorous, wonderful work, and I can assure you that spending weeks at sea trying to find a single shark can be completely demoralizing.
01:27:23:04	01:27:29:16	And that's because my group, we're choosing to work on animals that are critically endangered, which means they are just one step away from extinction.
01:27:30:08	01:27:33:22	But because they're one step away from extinction, it means there just aren't a lot of them in the ocean.
01:27:37:21	01:27:42:01	So we'll spend a long time, sometimes weeks, before we see a single oceanic white tip shark.
01:27:47:19	01:27:51:22	They don't always succeed in finding or tagging sharks.
01:27:54:04	01:27:59:20	But when they do, the window to their incredible world begins to open.
01:28:04:06	01:28:12:09	Tags record the sharks' movements for up to a year before transmitting their data, allowing researchers to find out exactly where they've been.
	01:28:18:07	When you get an email that says your tag has popped off, it's a little bit exhilarating.
01:28:18:16	01:28:24:04	No matter where you are, you're going to log into the system, and you want to download your data and find out where your animal has gone.
01:28:25:10	01:28:28:20	It sounds probably very nerdy, but it is really exciting.
01:28:29:02	01:28:35:13	And in fact, the fishers that I work with often tag the animals, and they'll ask me, "Where has my shark gone? Has the tag popped off yet?"
01:28:35:13	01:28:47:15	And it's pretty fun to see them just as excited as we are, because this is an animal that is swimming thousands of miles and diving to like fifteen hundred, two thousand meters in the sea.

01:28:48:03 01:28:49:23 We get to look at all of that with the data.

01:28:49:23 01:28:51:06 We can look at their diving profile.

01:28:51:15 01:28:55:20 We can see if they've swam to the Tonga Trench, if they've taken dives, like multiple dives.

01:28:56:03 01:28:58:05 We can look at the time of day that they're traveling.

01:28:58:05 01:29:01:21 It is so cool. It's like unlocking this incredible puzzle.

01:29:11:20 01:29:14:05 We've had some really interesting data, and it's not always good.

01:29:14:11 01:29:21:08 So we have had some animals that we know have been killed by local fishers, and some animals that we know have been picked up by longliners.

01:29:28:13 01:29:36:23 And you can tell that because the tag will sit at the surface on a boat and travel at zero meters, as opposed to under the water, as if a shark would be swimming.

01:29:47:10 01:29:52:21 But also fishers generally fish down the largest predators first, so sharks would be some of the first to go.

01:30:05:03 01:30:17:19 Jess's research is working, and helped create the Cook Islands Shark Sanctuary, a protected zone of more than seven hundred and fifty thousand square miles, three times the size of Texas.

01:30:19:09 01:30:21:16 But there's still lots to do.

01:30:23:12 01:30:26:09 We're part of this. We're part of the ecosystem. We're part of nature.

01:30:27:10 01:30:33:07 It's been giving and giving and giving to us for decades and millennia, and it's time for us just to give back.

01:30:35:04 01:30:43:11 You can look at the plight of sharks and actually learn a lot about the sea, and look at their movement patterns and learn about climate change.

01:30:44:00 01:30:51:09 And you can look at the interaction of sharks and fishers and start to gain an understanding of what it means to live and die by the sea.

01:31:03:15 01:31:07:19 It's changed not only how I view them, but also how I view myself in a part of the ecosystem.

01:31:17:01 01:31:24:08 But also they're a species that are often misunderstood, and they just need a lot of help.

01:31:57:15 01:32:03:14 My name is Cristina Zanato, and I'm a shark behaviorist and scuba diving professional.

01:32:05:00 01:32:10:05 I'm originally from Italy, and I came to the Bahamas on vacation to learn how to scuba dive.

01:32:14:10 01:32:22:10 I thought I'll dive for a year and then go back home and get a real job, and that was twenty eight and a half years ago.

01:32:27:10 01:32:33:20 I've loved sharks since I can remember, and so I realized that the rest of the world didn't.

01:32:37:15 01:32:43:00 There was a call from the outside to come in and harvest the sharks of the Bahamas.

01:32:51:06 01:33:03:17 And so that's when I realized how dangerous it was for our animals, but also how complacent we'd been into thinking that we had this little sheltered corner of the world.

01:33:05:19 01:33:22:07 And so I started off with a petition back in 2009, asking the Bahamian government to consider the creation of a marine protected area, a shark sanctuary for all sharks all over the territory of the Bahamas.

01:33:29:01 01:33:45:10 The petition gained twenty five thousand signatures, which resulted in 2011 on the full protection of sharks.

01:33:45:10 01:33:51:18 I think one of the most comprehensive legislations has ever created for shark conservation.

01:33:53:13 01:33:54:08 That's when it started.

01:34:47:22 01:34:51:05 When the sharks show up with hooks, they obviously are in pain.

01:34:53:05 01:34:56:17 Some of these hooks created large infections on the side, on the skin.

01:34:59:05 01:35:05:18 And as I became more confident working with the animal, I decided that I would try to remove these hooks from these sharks.

01:35:07:10 01:35:09:23 It was the same way I would remove a thorn out of my dog's paw.

01:35:22:11 01:35:26:12 Some hooks come very easy. Some hooks take quite a lot of work.

01:35:37:22 01:35:42:20 But they know I'm doing something good for them.

01:36:17:10 01:36:19:18 Sharks are vulnerable by the human presence.

01:36:21:17 01:36:24:09 They have survived five mass extinctions.

01:36:26:16 01:36:33:20 And we have brought them about three hundred species of them on the brink of extinctions in less than a hundred years.

01:36:42:06 01:36:50:02 Sharks are the guardians of the ocean, and the maintained health and balance of the entire ecosystems.

01:36:51:15 01:36:58:03 And I think that is pretty amazing to witness.