

Table of Contents

- 3. Sharkwater—The Story
- 4. Director's Statement
- 5. Production Notes
- 8. Shark Finning
- 10. Biographies

Sharkwater – The Story

For filmmaker Rob Stewart, exploring sharks began as an underwater adventure. What it turned into was a beautiful and dangerous journey into the balance of life on earth.

Driven by passion fed from a life-long fascination with sharks, Stewart debunks historical stereotypes and media depictions of sharks as bloodthirsty, man-eating monsters and reveals the reality of sharks as pillars in the evolution of the seas.

Filmed in visually-stunning high definition, *Sharkwater* takes you into the most shark-rich waters of the world, exposing the exploitation and corruption surrounding the world's shark populations and the marine reserves of Cocos Island, Costa Rica and the Galapagos Islands, Ecuador.

In an effort to protect sharks, Stewart teams up with renegade conservationist Paul Watson of the Sea Shepherd Conservation Society. Their unbelievable adventure together starts with a battle between the *Ocean Warrior* and shark poachers in Guatemala, resulting in pirate boat rammings, gunboat chases, mafia espionage, corrupt court systems and attempted murder charges, forcing them to flee for their lives.

Through it all, Stewart discovers these magnificent creatures have gone from predator to prey, and how despite surviving the earth's history of mass extinctions, they could easily be wiped out with a few years of human greed.

Stewart's remarkable journey of courage and determination changes from a mission to save the world's sharks, into a fight for his life, and that of humankind.

Director's Statement

Rob Stewart

When I set out to make *Sharkwater*, I wanted people to see what I saw, an incredible undersea world that is so foreign to most of the planet. I had no idea that it would become a human drama that would take over four years, span 15 countries and nearly end my life.

I started making the film because I've been fascinated with sharks since I was a child, and I realized there was a discrepancy between the way the world viewed sharks, and my experience of them.

I wanted to make a film that shows sharks the way they really are, as beautiful and magnificent creatures that don't want to hurt humans, and to show how our fear has blinded us to the fact that their populations have been reduced by 90 per cent over the last 50 years.

The fact is that sharks do not eat people. More people are killed by pop machines than sharks. They're actually afraid of us, and are incredibly difficult to film.

The few attacks that do occur are actually shark mistakes, which tend to be glorified by the media, increasing the public's fear of sharks, and pushing people further from the reality. Confronting that fear allows people to see sharks in a new light, and inevitably care for their survival.

While shooting this film, I encountered every obstacle imaginable, including a multi-billion dollar shark fishing industry that won't want this film released. There was so much stacked against this movie, that making it became a mission to expose this industry and to stay alive.

There is a lot we can learn from sharks. They are a beautiful example of a creature that's managed to live in balance on earth—and survive. I believe we need a new relationship with the natural world. For humans to survive on earth beyond the next hundred years, caring for the environment has to become cool.



Director Rob Stewart

Production Notes

Sharks have long stirred hostility and anxiety in humans. Countless books, films and sensationalized headlines have made the mere idea of “shark” synonymous with images of vicious attacks by indiscriminate killing machines. “The truth is that sharks have much more to fear from us,” says filmmaker Rob Stewart, who has spent years filming hundreds of hours of videotape trying to prove just that to a skeptical public.

Toronto-born Stewart, an expert diver and underwater photographer, joined members of the Los Angeles-based Sea Shepherd Conservation Society aboard the *Ocean Warrior* for a four-month expedition to deter shark poaching in Costa Rica and Ecuador—the perfect opportunity to start filming his documentary on the relationship between sharks and people. A series of life and death situations including pirate boat rammings, attempted murder charges, arrests, espionage, corruption and hospitalization were the last things he expected on his journey that has become the beautiful and revealing film, *Sharkwater*.

Stewart has had a life-long fascination with sharks. At the age of eight, while free diving in the Cayman Islands, his dream came true when around the corner of a reef he saw his first shark close-up. “I was amazed because it was so cool to see something so big and so powerful and so perfect,” said Stewart. During extensive study, he learned that sharks have shaped the evolution of ocean species, giving rise to schooling behavior, camouflage, speed, size and communications. Far from the public perception of sharks as indiscriminate predators with no purpose outside of attack, they have been an integral part of ocean life for 400 million years. Despite surviving for longer than any other large animal on earth, their populations are being wiped out. “No one wants to save sharks – they want to save pandas and elephants, and they’re afraid of sharks.” Stewart’s original vision was to make a beautiful underwater film about sharks, which quickly changed into a human drama.

Frustrated by the widespread misconceptions and driven to change them, Stewart embarked on a journey that would prove exciting, invigorating, satisfying and dangerous—often at the same time. “I was working as a wildlife photographer and had published articles on what was happening to sharks around the world after I discovered illegal shark fishing in the Galapagos. We set up a fund where people reading the articles could donate money towards placing a patrol boat in the Galapagos islands. We received virtually no money, and I realized there’s got to be a better way to reach people. Print clearly wasn’t the most powerful medium I could be using, so I decided to make a film.”

In April of 2002, Stewart teamed up with world-renowned conservationist Paul Watson of the Sea Shepherd Conservation Society on an excursion aboard their ship, *Ocean Warrior*. Invited by the Costa Rican government to patrol the waters around the Island of Cocos, Stewart expected to film sharks underwater, not realizing that he would be thrown into a situation where everything that could go wrong, would go wrong.

In addition to the usual challenges a first-time filmmaker faces, Stewart endured situations that would exhaust even a seasoned documentarian. Stewart recalls, “on our way to Cocos Island we intercepted the *Varadero*, a fishing boat illegally long lining in Guatemalan waters. That incident set Stewart’s film into an entirely new direction. He explains, “I never got into the water for the first month there, so my underwater documentary dreams were crushed. I realized this was a really fascinating story, and decided to film everything that was going on.”

The focus had now changed and the stakes were considerably higher. Sharks are caught for their fins, and despite some countries having banned shark finning, shark poaching is rampant because of how profitable it is. One pound of dried shark fin can retail for \$300 dollars or more. Prized in Asia as a delicacy, shark fin soup has generated a worldwide, multi-billion dollar industry, where more than 100 million sharks are killed each year. The process of “finning” involves cutting off the shark’s fins, after which the rest of the body is thrown overboard, wasting over 95 per cent of the animal.

“When we arrived in Costa Rica, the *Ocean Warrior* was charged with seven counts of attempted murder for the altercation with the *Varadero*, despite the fact that the president of the country invited us there,” notes Stewart. “Everyone else involved was wondering why the whole judicial system was attacking us, and ignoring the illegal fishing boat. While on shore, we had a chance to find out more about the shark finning operations.”

Stewart learned that although shark finning is illegal in Costa Rica, Costa Rican fins were showing up all over Asia. Extensive research uncovered a connection between the Taiwanese mafia and the shark fin supply. With the help of an insider, Stewart went undercover to investigate the shark fishing industry in Costa Rica, finding out that illegal shark finning was rampant along Costa Rican coasts. “There were millions of dollars in fins in dozens of illegal shark finning operations that the authorities were ignoring,” explains Stewart. “After being chased and threatened by operators with guns, our guide admitted that the ‘shark-fin mafia’ was on the lookout and it would not be a good idea to be seen in town.”

After spending weeks fighting attempted murder charges in Costa Rica, Stewart and the crew of the *Ocean Warrior* fled Costa Rica to avoid arrest. In an epic chase, they wrapped barbed wire around their boat so the coast guard couldn’t jump onboard, and fled to international waters. Narrowly escaping arrest, they headed to the Galapagos Islands, where they were invited by the National Park to protect the marine reserve from illegal fishing.

Guns and shark fin traffickers proved to be only a few of many dangers Stewart was to face. Although not sure how he contracted it, his lymphatic system had become infected with what is known as “flesh eating disease” and he was in danger of losing his leg and possibly his life. At this point he was unsure whether the film would ever be completed. “This was the ultimate low. Everything had gone wrong. We’d been kicked out of virtually all the countries we had been to. I would have been arrested if I went back to Costa Rica, and at the end of all this, I had not shot anything underwater. I had come to shoot an underwater documentary and instead shot this human drama. And now I was going to lose my leg, maybe my life. The situation was so bad, and I couldn’t tell everybody at home what exactly was happening.

I also hadn’t made the movie I’d wanted to make yet, or spent any time underwater with sharks. So much was left to be done. It would have been crazy to give up at that point.

So I stayed in hospital for a week and eventually the infection cleared up and off I went again," notes Stewart. "I was very lucky."

Having come so far, stopping at this point was not an option for Stewart, "I needed to get back into Costa Rica and find a way to stop the finning." Knowing he would be arrested immediately, Stewart had to sneak back into the country by bus. What he returned to was far from expected. Costa Ricans had begun to rally for sharks and fight against illegal shark fishing.

Stewart returned home to Canada to start editing his movie. Before much of the work could be done, however, Stewart had to get well from the many illnesses acquired while shooting—diagnosed with Dengue Fever, West Nile virus and TB at the same time, there was not much energy available to focus on *Sharkwater*. "I fought that off for a year while doing little trips and hibernating trying to get better. The internal time actually led to the development of the shark concepts and the theories that make up the body of *Sharkwater*."

Stewart spent the next four years on *Sharkwater*, shooting over 400 hours of footage, in 15 different countries, and editing and crafting the story along the way. "I had to learn virtually everything about filmmaking as I went, so my learning curve was incredibly steep."

Despite the numerous challenges, Stewart has combined his extraordinary underwater imagery with a compelling original soundtrack composed by Jeff Rona (featuring music from Moby, Nina Simone, Portishead, Aphex Twin and more) and interviews with renowned experts to create his first feature film, *Sharkwater*.

Shark Finning**What is Shark Finning?**

- Shark finning refers to the removal and retention of shark fins and the discard at sea of the carcass. The shark is most often still alive when it is tossed back into the water. Unable to swim, and bleeding to death, the shark suffers a slow death where 95% of the animal is wasted.
- Shark finning takes place at sea so the fishers have only the fins to transport, and have no need for refrigeration. Shark meat is considered low value and therefore not worth the cost of transporting the bulky shark bodies to market.
- Any shark is taken—regardless of age, size, or species.
- Long lines are the most widespread method of fishing for sharks.
- Shark finning is widespread, and largely unmanaged and unmonitored.
- Shark finning has increased over the past decade due to the increasing demand for shark fins (for shark fin soup and traditional cures), improved fishing technology, and improved market economics.
- Shark specialists estimate that more than 100 million sharks are killed for their fins annually.
- One pound of dried shark fin can retail for \$300 or more. It's a multi-billion dollar industry.

Impacts of Shark Finning

- Loss and devastation of shark populations around the world. Experts estimate that within a decade, numerous species of sharks will be lost because of long lining.
- Unsustainable fishery. The massive quantity of sharks harvested and lack of selection deplete shark populations faster than their reproductive abilities sustain.
- Threatens the stability of marine ecosystems.
- Loss of sharks as a food staple for many developing countries.
- Large industrial, foreign fishing vessels that threaten traditional sustainable fisheries invade local waters.
- Obstructs the collection of species-specific data that are essential for monitoring catches and implementing sustainable fisheries management.

Are there laws against shark finning?

- Each country with a coastline is responsible for laws and regulations pertaining to fishing in their waters.
- A number of countries have shark-finning legislation. Many stipulate that fins must arrive in a 5 per cent weight ratio of the shark carcasses onboard. Only a few countries demand that sharks arrive in port with fins attached.
- According to the IUCN Shark Specialist group, the easiest way to implement a ban is to require that shark carcasses be landed with fins attached. The possession of fins alone on vessels would thus be illegal.
- Shark finning violates the United Nations Food and Agriculture Organization's Code of Conduct for Responsible Fisheries.
- Shark finning is contrary to the United Nations Food and Agriculture Organization's International Plan for the Conservation and Management of Sharks.
- The United Nations Convention on the Trade of Endangered Species of Flora and Fauna (CITES) lists the whale shark, basking shark, and great white shark as species that could become threatened if trade is not controlled. To date, 169 countries have agreed to be legally bound by CITES.

Websites about sharks and shark finning

Sea Shepherd Conservation Society
www.seashepherd.org

WildAid
www.wildaid.org

Shark Trust
www.sharktrust.org

Shark Project
www.sharkproject.org

The Florida Museum of Natural History/American Elasmobranch Society/International Shark Attack File
www.flmnh.ufl.edu/fish/

ReefQuest Centre for Shark Research
<http://elasma-research.org/>

Sources:

IUCN Shark Specialist Group. "IUCN Information Paper. Shark Finning." 2003.
IUCN Shark Specialist Group. "Shark Specialist Group Finning Statement."
Sea Shepherd Conservation Society. www.seashepherd.org. "Long line Fishing."
WildAid & Co-Habitat. "Shark Finning." September 2003.

Director Rob Stewart

Rob Stewart, born in Toronto, Canada, is an award-winning wildlife photographer and the director of *Sharkwater*.

Stewart began photographing underwater when he was 13. He became a certified scuba instructor trainer at age 18, and holds a Bachelor of Science degree in Biology from the University of Western Ontario, and has studied Marine Biology and Zoology at universities in Kenya and Jamaica.

Stewart spent four years traveling the world as the chief photographer for the Canadian Wildlife Federation magazines, and has logged thousands of hours underwater, using the latest in rebreather and camera technologies.

His work underwater and on land has appeared in nearly every media form worldwide, from BBC Wildlife, Asian Diver, Outpost and GEO magazines to the Discovery Channels, ABC, BBC, night clubs and feature films.

Captain Paul Watson

Paul Watson is the founder of the Sea Shepherd Conservation Society—an organization dedicated to research, investigation and enforcement of laws, treaties, resolutions and regulations established to protect marine wildlife worldwide.

Over the years, Paul Watson has exhibited a remarkable diversity in his activism including:

- Co-founder of Greenpeace in 1972 and Greenpeace International, 1979
- Founder of Sea Shepherd Conservation Society, 1977
- Field Correspondent for Defenders of Wildlife, 1976 to 1980
- Field representative for the Fund for Animals between 1978 to 1981
- Representative for the Royal Society for the Protection of Animals, 1979
- Co-founder of Friends of the Wolf, 1984
- Co-founder Earthforce Environmental Society, 1977.
- Director, National Board of the Sierra Club USA, 2003 to present

Watson majored in communications and linguistics at Simon Fraser University in British Columbia. He has lectured extensively at universities around the world, and was a professor of Ecology at Pasadena College of Design from 1990 to 1994. He was also an instructor in UCLA's Honors Program in 1998 and 1999. Currently, Watson is a registered speaker with the Jodi Solomon Speakers Bureau of Boston, and regularly gives presentations at colleges and universities in the United States and at special events throughout world.

In 2000, Watson was chosen by *Time Magazine* as one of the environmental heroes of the 20th Century.

Dr. Erich K. Ritter

Erich Ritter has a Ph.D. from Zurich University in "Behavioral Ecology" and is the only professional applied shark-human interaction specialist. Ritter's main expertise is the body language of sharks, with a major interest in shark attacks and their causes. Many of the old theories of why sharks attack have been erased through his experiments, and new ideas proposed. He is the only shark attack expert to recreate many of the typical attack scenarios with the respective species. His understanding of potential reasons for shark attacks opened new doors in this field of research.

Ritter is the senior scientist of Green Marine. His research group focuses on conditioning, agonistic display and subordinate hierarchies. Most of these projects are conducted by master and doctoral students from different universities. He is also an Adjunct Assistant Professor at Hofstra University.

Ritter is co-editor of SHARK INFO, a shark information service located in Switzerland, serving more than 500 news stations in German-speaking Europe. Many of his mainstream articles on shark behavior have been translated in English. Ritter is co-founder of the "Hai-Stiftung" in Switzerland, and "Shark Foundation" in the USA whose main focus is the protection of sharks through better understanding. The foundation is currently sponsoring several projects.

Ritter developed the first interaction system for swimmers, divers and snorkelers (ADORE-SANE) that allows safe swimming and interaction with any potentially dangerous sharks under different conditions. He has spent the last eight years collecting data from around the world. Besides some reef species, his primary focus is on bull sharks, lemon sharks and great whites. Ritter has been extensively interviewed in magazines and on TV shows promoting and explaining his ways of shark-human interaction, and explanations of shark attacks. Ritter holds workshops in the Bahamas, South Africa and the Maldives on a regular basis.

Boris Worm

Boris Worm is a marine biologist and an Assistant Professor in Marine Conservation Biology at Dalhousie University in Halifax. His research focuses on the causes and consequences of changes in marine life, and its conservation on a global scale.

The open ocean is by far the largest place on Earth, covering more than 70 per cent of the planet by area and an even larger percentage by volume. Humans now dominate many aspects of ocean life through the combined effects of overfishing, habitat destruction, pollution and climate change. Many species, particularly large predators such as some tuna and billfishes, sharks and turtles are being driven to dangerously low levels.

Apart from looming species extinction, there are some wider ecosystem concerns. Large predators can play an important role in maintaining aquatic diversity and ecosystem health, and the elimination of some large predators and herbivores from inshore areas has triggered cascading ecosystem effects. These ecological chain reactions contributed the collapse of some coastal ecosystems. If similar changes occur in the open ocean they are bound to be massive in scale, and probably difficult to reverse.

This is why Boris Worm tries to assess changes in marine biodiversity, to understand the consequences of these changes and how to halt or reverse deleterious trends.

Carlos Pérez Cembrero

Carlos Cembrero was born in Madrid, Spain. His family was very concerned about their kids growing up in a big city with no contact with nature and wildlife. He spent his teenage years studying in the country near the beautiful Alberche River surrounded by trees and hills. There, he learned the value of the animals, plants and friendship.

Cembrero then enrolled in Biology Sciences at the Complutense University of Madrid. He reached a professional profile as a Zoologist, sailing instructor and crew officer in the Spanish Coast Guard patrol boats.

During this period Cembrero joined the environmental fight building maritime educational programs and developing the First Actions Team for Greenpeace Spain. Cembrero left the organization in 2001, along with 10 colleagues, to protest the direction of Greenpeace Spain.

Trying to recapture the feeling of the true environmental activist, Cembrero joined the Sea Shepherd Conservation Society, volunteering on the *Farley Mowat* during a six-month campaign, highlighted by environmental front-line activism.

After the *Farley Mowat* campaign in 2002, he joined a project in Costa Rica named MarViva—a fleet that patrols and surveys the maritime protected areas in cooperation with the government authorities in Central America.

Currently, Cembrero is the Director of Operations for Oceana in Europe. Oceana is a foundation focused in the research, protection and documentation of marine habitats in the world's ocean.

Patrick Moore, Ph.D.

Dr. Patrick Moore has been a leader in the international environmental field for over 30 years. He is a co-founder of Greenpeace and served for nine years as President of Greenpeace Canada and seven years as a Director of Greenpeace International. As the leader of many campaigns, Dr. Moore was a driving force shaping policy and direction while Greenpeace became the world's largest environmental activist organization.

In recent years, Dr. Moore has been focused on the promotion of sustainability and consensus building among competing concerns. He was a member of the British Columbia government-appointed Round Table on the Environment and Economy from 1990 - 1994. In 1990, Dr. Moore founded and chaired the BC Carbon Project, a group that worked to develop a common understanding of climate change.

Dr. Moore served for four years as Vice President, Environment for Waterfurnace International, a manufacturer of geothermal heat pumps for residential heating and cooling with renewable earth energy. He is now a Director of NextEnergy Solutions, the largest distributor of geothermal systems in Canada.

As Chair of the Sustainable Forestry Committee of the Forest Alliance of BC from 1991 - 2002, he led the process of developing the "Principles of Sustainable Forestry" which were adopted by a majority of the industry.

In 2000, Dr. Moore published *Green Spirit—Trees are the Answer*, a photo-book that provides a new insight into how forests work and how they can play a powerful role in solving many of our current environmental problems.

Dr. Moore currently serves as Chair and Chief Scientist of Greenspirit Strategies, a consultancy focusing on environmental policy and communications in forestry, agriculture, fisheries and aquaculture, mining, biodiversity, energy and climate change.

- **Honorary Doctorate of Science**, North Carolina State University, 2005
- **Ph.D. in Ecology**, Institute of Resource Ecology, University of British Columbia, 1974
- **Ford Foundation Fellowship**, 1969-1972
- **Honours B.Sc. in Forest Biology**, University of British Columbia