

EDF PARTNER
CHRIS BROWN

OCCUPATION
FISHERMAN

LOCATION
POINT JUDITH, R.I.





OCEANS

A fisherman's story

Chris Brown was just eight years old when he first went to sea in the 1960s, fishing with his grandfather. He was allowed to pilot the vessel home while his grandfather made sketches of the Rhode Island shoreline. “It was a thrill to feel the power of the boat,” he says.

Now a commercial fisherman himself, Brown, 53, has witnessed the sharp decline in the New England fishery and the toll on coastal communities. “Thirty years ago, we thought the resource was inexhaustible,” Brown says. “We fished in ways I’m not proud of. I’d like to make it right for the next generation.”

Working with scientists and other fishermen, Brown has been a leading advocate for a new management system called catch shares, which taps the market to give fishermen control of their destiny.

“I’m a businessman,” he says. “I’m concerned about my inventory. To heal the ocean, we all need to pull together and start acting like a community again.” ■

WHY WE WORK ON OCEANS

“By offering fishermen a financial stake in the health of fisheries, we can revive coastal communities and bring the resilient oceans back to life.”



Amanda Leland
VP Oceans

OCEANS GOALS

- Protect ocean ecosystems by creating sustainable and healthy fisheries
- Make catch shares the standard management method in U.S. fisheries
- Promote catch shares internationally
- Safeguard and restore ocean habitats



Hope for America's most troubled fishery

Can markets help heal the oceans? With EDF's help, New England is one of several regions to implement a new management method: catch shares. The 400-year-old New England cod fishery is finally on the path to recovery.

On Georges Bank off the Massachusetts coast, cold, nutrient-rich currents from Labrador collide with the Gulf Stream to create one of the world's most productive fishing grounds. The waters here were once so thick with cod that fishermen bragged they could lower a basket and pull it up full of fish.

But generations of overfishing and faulty management proved devastating for fish and coastal communities. In New England, fishing revenues dropped 50% just in the past decade and many of the groundfish stocks, including cod, have declined to dangerously low levels.

Facing a crisis, regulators tried to control fishing by imposing trip limits and restricting days at sea, but this led to a dangerous race for fish.

Now, some trailblazing fishermen are working with EDF to embrace a market solution that we helped develop, called catch shares, which could revive the fishery. The program gave fishermen a choice: continue with the old system or join cooperative groups or sectors. Sectors work by allotting a percentage of the total allowed catch to groups based on catch history.

More than half of the commercial fishing permit holders—representing 98% of fish harvested—joined the program. Data for the first year show

that their boats made 70% more money per trip than previously, and bycatch, the accidental killing of fish, was four times below that of other boats.

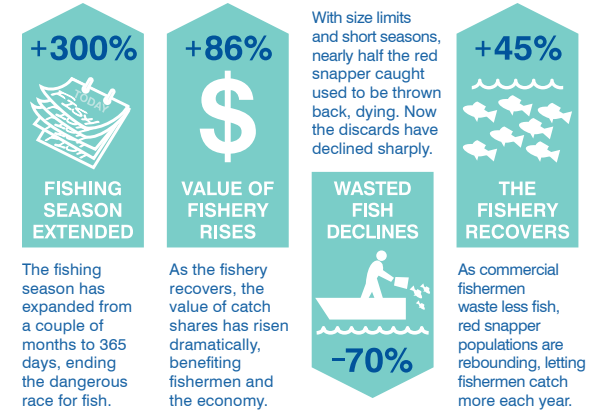
"It's safer, better for the fish, and I can make a business plan for the year," fisherman Greg Walinski told the *Cape Cod Times*.

Unlike other approaches, catch shares reward conservation. "As the fishery recovers, fishermen's total catch grows," explains EDF's Emilie Litsinger.

Fishermen also have the option to trade shares if the need arises. For example, if a fisherman catches more than his share, he can buy quota from another, still keeping the total catch within the limit. The result: less waste and more profit.

Over the last five years, catch shares have compiled a solid record of rebuilding fish populations around the nation, including programs EDF helped implement for red snapper in the Gulf of Mexico and groundfish in the Pacific. We also are leading the fight this year on Capitol Hill to defeat short-sighted legislation that would ban new catch share programs along the East and Gulf Coasts.

"Catch shares are proving that fishermen can be good managers if given the chance," says Captain Chris Brown, who operates a 45-foot trawler out of Point Judith, R.I. "We're becoming businessmen, finally, instead of just hunters and gatherers."



NET GAIN FOR FISH AND FISHERMEN

The catch share program for Gulf of Mexico red snapper that EDF helped create in 2007 has proved to be a spectacular success.

"For the first time, fishermen are working together for a common goal. Catch shares are the reason. I feel I have a stake in the resource."

Bubba Cochran
Galveston, Texas, fisherman



A healthy shark population is indicative of an ecosystem in balance. Once common throughout the Gulf region, Caribbean reef sharks are now increasingly threatened and are being caught faster than they can reproduce.

Ensuring a future for sharks

EDF spearheads a unique partnership between the United States, Mexico and Cuba to save the Gulf of Mexico's magnificent deep-sea predators.

Sharks have roamed the oceans for more than 400 million years, since even before there were dinosaurs. But that ancient lineage does not guarantee a future. Today, tens of millions of sharks are killed each year.

"The Gulf of Mexico has nearly 100 shark species, but populations of some large sharks, including tigers and hammerheads, have fallen by as much as 90%," says Dr. Douglas Rader, EDF's chief oceans scientist.

There is no easy answer to the shark crisis, in part because many sharks are highly migratory and have few young. They're also a source of food and livelihoods in many nations.

In response, EDF has begun working with the Mote Marine Laboratory of Sarasota, Fla., to link the United States, Mexico and Cuba in a program to rebuild shark populations in the Gulf of Mexico.

Sharks play a key role in marine ecosystems. For example, as their populations have fallen on the U.S. Atlantic coast, the rays they prey on have proliferated. The rays feed on bay scallops and have ravaged scallop beds, devastating the fishery.

The EDF shark initiative builds on a decade of work with area governments, researchers and fishermen. "Our goal is to expand scientific exchanges and broker cooperation to protect our shared resources," says Dan Whittle, director of our Cuba program.

Last year, EDF co-convened the first meeting of a tri-national shark team to begin laying the foundation for effective conservation. We're working with researchers from the University of Havana and Mexican partners to identify shark nursery areas and determine shark migration patterns. We're also helping managers explore policy options, including catch shares.

The results of our collaboration will form the basis for more effective management and for setting sustainable catch limits—the first steps toward ensuring a future for sharks in the Gulf.

"If successful, the tri-national program for sharks can be a powerful model for management of sharks globally and other migratory species like tuna and swordfish," says Pam Baker, EDF's director of conservation initiatives for the Gulf.

"Cuba, Mexico and the United States are ecologically connected. Cooperation benefits us all."

Billy Causey

Southeast Regional Director, NOAA National Marine Sanctuary Program



Ocean diplomacy: Taking catch shares international

Fish know no national boundaries, so international engagement is essential. In 2011, EDF expanded its fisheries work in North America and beyond.

We helped convince Belize's cabinet to authorize catch shares coupled with marine protected areas for spiny lobster. This will reduce fishing pressure along the 600-mile-long Mesoamerican reef, the largest barrier reef in the hemisphere.

We also teamed up with Mexican officials, fishermen and nonprofit groups to expand our pilot catch share program for finfish, shrimp and clams in the Gulf of California. The Gulf supplies more than half of Mexico's seafood, but is overexploited and threatened by destructive fishing practices.

Across the Atlantic, where 75% of Europe's fish stocks are overfished, we are consulting with EU governments as they rewrite Europe's fisheries law.

Protecting imperiled coral reefs, the foundation of marine life

Coral reefs contain one-quarter of all fish species, but they're imperiled by a variety of human-caused threats. Up to 35% of the world's reefs may be lost within the next two decades. Compounding the threats of overfishing and climate change is the growing demand for coral reef wildlife for home decor, jewelry and aquariums. Between 1988 and 2007, the global trade for coral exploded nearly fifteenfold.

Beautiful sea creatures such as iridescent cardinalfish are pulled from coral reefs as part of a largely unregulated international trade that is devastating many fish and coral populations. Every year up to 30 million fish and 1.5 million live corals are harvested, with the majority of them destined for the United States.

In response, EDF and its partners launched a campaign to leverage U.S. market power through the creation of stronger federal rules. Current U.S. laws lack standards for sustainable coral collection and shipping, while international laws are weak and poorly enforced. For example, in Southeast



Asia, despite laws prohibiting the practice, collectors often squirt cyanide poison in the water to stun fish, many of which die in transport.

EDF's coral coalition is working with scientists, industry leaders and policy makers to stimulate lasting change. Our goal is to end destructive collection and help ensure the survival of Earth's most fragile marine ecosystems.

70% of fisheries worldwide have crashed or are overexploited