

future of fish

Incentivizing conservation through the promise of economic sustainability

An interview with Dr. Mark Powell, Ocean Conservancy

How did you develop your philosophy around sustainability?

When we started in 1999, we had pretty good national law, but we had many fisheries managers who, from a conservation perspective, were dragging their feet. They were good at identifying the fisheries that were in trouble, but the solutions looked intractable.

What was the problem?

Fundamentally, the problem was that most fishing fleets were too big, and there was too much pressure on the stocks. But there was no single solution that didn't hurt someone, and managers have a hard time implementing regulation that puts someone out of business—especially when they have to choose who goes out of business.

So the managers didn't want to look like the bad guy?

Right. It was just easier for them to let attrition pick the losers, even though this wait-and-see tactic meant that everyone was ultimately harmed to some extent economically, and more and more damage was ultimately done to the marine environment—which, in turn, meant less stable and healthy fisheries.

What did you think the solution was?

I started with a protectionist attitude. I was a straightforward salmon conservation biologist. I believed we needed to tighten laws, strengthen policy implementation, and clamp down. And we started to do this by filing lawsuits. But in the process, I got to know the players and an agency scientist told me something I'll never forget. He said that if you try to implement specific prescriptive rules, you'll never make the rules fine enough in scale to really achieve what you want to achieve. In other words, fishermen have incentives to find marginally legal ways around the rules.

For them it's a matter of survival, right?

Exactly. It's better to design a way for them to get out of the industry (without going bankrupt) or design a solution into the system that allows people to continue to make a living while they improve the fishery.

What was your win-win strategy?

One example of what we did deal with the bottom-dwelling fish populations on the West Coast. Rockfish were in trouble, but the flatfish (flounder and sole,



DR. MARK POWELL

Dr. Mark Powell, originally from Oregon, earned his Ph.D. in biology from U.C. San Diego. After serving as an assistant professor of biology at the University of Connecticut Marine Laboratory, he moved full-time into conservation work. As both an independent consultant and throughout his 9 years with Ocean Conservancy, Dr. Powell's work has emphasized building productive solutions to vexing natural resource problems. He blogs at

<http://blogfishx.blogspot.com>

future of fish

which were less desirable) were healthy. We fought for limitations on rockfish catch, and the fishermen agreed. They said they'd just fish for flatfish instead. We said, "hey, not so fast." We were concerned that the rockfish would be caught as bycatch, since rockfish and flatfish live together. So we endorsed and incentivized innovations whereby if fishermen could prove that they weren't catching rockfish, they could catch even more flatfish than the allowance, since the flatfish quota was based on bycatch of rockfish. We built a way for them to make a better living, while actively participating in reducing bycatch.

So what's the take-home message for other conservationists?

The key is to find a way to tune regulations so that the smartest and best fishermen are innovating toward our conservation goals. When you look at us on a dichotomy, as those who are killing fish vs. those who are saving fish, it looks like we're at odds. But if we (as conservationists) just try to pay attention, listen to fishermen and what they have to say, we might find a point where we can get our goals close to alignment.

Do you have other examples of successful projects using this approach?

We had a more sophisticated strategy with red snapper in the Gulf of Mexico, but it was the same basic philosophy. With red snapper, it wasn't a bycatch problem, but rather an allocation problem. The way the catch was divvied up, it was a derby-race for fish. So we got a major wholesaler and distributor of red snapper to help us lobby the regulators to set new catch limits and establish an individual transferable quota (ITQ) system in order to reduce the number of people fishing. We used a market-based approach so that those who were allocated the ITQs had the option to catch their quota, sell their permit, or lease it to another fishermen. Once fishermen realized that their quota had value both today and in the future, they came to the fishery managers and asked for further reductions in the catch quota in order to rebuild the stock. They did this because they were looking into the future and saw that reducing the catch limits today meant for better economic times in years to come.

So this was a good lesson for us. If we had only argued for catch limits and no ITQs, the fishermen would have been generally against the idea. Instead, we established a system that gave fishermen control of their resource, which led them (acting in their own self-interest) to argue for conservation.

DR. MARK POWELL

"The key is to find a way to tune regulations so that the smartest and best fishermen are innovating toward our conservation goals."