



Convergence: The Undersea World of Fabien Cousteau

Partnering with students and others, explorer Jacques-Yves Cousteau's grandson restocks oceans through his new nonprofit, Plant A Fish

*In a world where the environmental crowd seems to be interminably either hugging—or planting—trees, Fabien Cousteau (of the seagoing Cousteaus), focusing on saltier portions of the planet, decided to give fish a chance. Launching his nonprofit Plant A Fish in New York City earlier this year, Cousteau's group has already planted oysters in the New York Harbor with public school students from Brooklyn's Urban Assembly New York Harbor School. Next, he plans to rehabilitate sea turtles in El Salvador, grow mangroves in South Florida, and encourage coral growth in the Maldives. Cousteau talked to **Sustainability: The Journal of Record** editor Lori Tripoli about his inspiration, the red tape he had to negotiate to implement his dream, how universities and corporations can become involved, how everyone should eat seafood responsibly, whether the Gulf of Mexico can possibly be saved, and why the oyster is important in his world. Excerpts from the discussion follow.*

Lori Tripoli: You launched the nonprofit Plant A Fish in June, just a little more than a month after the BP rig exploded in the Gulf of Mexico. Had you planned this nonprofit for a while, or did you decide to start it after you saw what was happening in the Gulf?

Fabien Cousteau: I wish I could claim that it was because of the Gulf, but quite honestly, I have had this idea since I was a kid. I have been diving since my fourth birthday, for obvious reasons. My eyes were opened to the underwater world for several decades—I will not tell you exactly how many decades, but a few—the beauty of it, of course, its fragility and the influence our actions have over it in our daily lives.

For a little over 30 years now, there has been a very successful tree-planting program in just about every neighborhood. It is a wonderful thing, but almost two

years ago, I was up at three in the morning reading an article about yet another tree-planting program that was getting initiated with millions of dollars being thrown at it, and thinking, of course, it is very important and essential for the land and well-being of our planet. However, people aren't focused on taking care of our oceans in this manner yet—and I am sure you are familiar with these figures already—almost 60 percent of our world's total fish stocks have been depleted since the '50s, and over 90 percent of our pelagic fish—sharks, tuna, billfish, and other traveling fish—have been wiped out.

To me, given the experiences that I grew up with, and the passion they've instilled in me, it is very frustrating to see that we have neglected almost three-quarters of our planet for such a long period of time. So that is how the idea came to me. I was thinking, "Plant a tree, plant a tree. Why can we not plant a fish?"

That is a good idea.

And it was about that simple. Fruition, of course, is much more complex. But that is how it came about. It had nothing to do with the oil spill in the sense that the launch was already planned for June 7th, which was the day before World Ocean Day. It was also planned for the week that marked my grandfather's 100th birthday commemoration, which was June 11th. That is why we came up with the date of June 7th. I wanted to commemorate my grandfather. I also wanted it to be a celebration of our oceans, and I did not want to impede on those very special dates that week.

If we are going to see a little bit of light at the end of this very dark and gruesome tunnel that is the oil disaster, we must drive everyone's attention toward the oceans and reveal how we fundamentally affect it. I think that we need to hold on to that momentum and really try and turn this into positive action toward restoring the health of our planet.

Why start with oysters? They're not very photogenic.

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Fabien Cousteau



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You know, you ask that, but I laugh every time, because it is a very poignant species. At the same time, it is hard to try and get people to imagine oysters beyond their plate. Oysters are a key species out in the ocean world. They are a reef builder. As you know, reefs can be described as the rain forests of our waterways, the home to many, many species—over 200 here in the Hudson River, in the Northeast of the United States.

The oyster itself, especially the northeastern Atlantic oyster, is capable of filtering up to 50 gallons per oyster per day, which is a wonderful thing. There used to be over 350 square miles of oyster reefs here in the Hudson River area with over 9 billion oysters, effectively making it the largest oyster rookery in the world. The oyster trade in the 16-, 17-, and into the 1800s was largely responsible for the financial foundation that built New York City, amongst other things. I mean, I do not want to take the starlight away from Albany, because it also helped build Albany, as well. But it really has been an absolutely paramount species, not only for the ocean world, but for human beings. We now find ourselves, in 2010, with basically no oysters left in the Hudson River.

Why oysters, other than that? Because I wanted to start by giving back in my own backyard and envisioned Plant A Fish to be a grassroots movement that empowers local communities. The idea is to have the different programs spread throughout the world, where appropriate, and of course, incorporate new programs as time goes on and funding becomes available for new key species.

As a secondary kickoff, we have turtles. The eastern Pacific hawksbill turtle, up until just a few years ago, was written off as basically extinct. Scientists found as recently as a year and a half ago a small but viable population that was still nesting in the mangroves and the beaches of El Salvador. The turtles are much more sexy looking on camera, and maybe pull at the heartstrings of folks a little bit more than oysters. We can save them and restore them both.

Oysters are the catalytic converters of the ocean. Turtles are more like sea gardeners. They are also an iconic species in the sense that they are the flag bearers of the health of the oceans. *Tortugueros*, which are the turtle egg collectors, can switch from consuming the eggs to restoring the population of sea turtles. In turn, ecotourism will be generated, and the *tortugueros* will make a better living.

Why are turtles endangered? Is the problem that people are in their habitats—beaches—or that the turtles are being hunted?

For the last several hundred years, turtles were hunted not only for consumption, for meat, but their

eggs were collected for consumption as well. The demise of the hawksbill turtle has also been largely due to the beauty of its shell. They are a type of turtle that bounces back much more slowly than some of the others. That is why they are having such a hard struggle. The west coast of Central America, which was a hotbed of the east Pacific hawksbill, was also the hotbed for collecting them.

Where did you get the oysters?

The oysters are native to the area, are collected as spat, which are tiny baby oysters that basically look like a bunch of grains. You can put a whole bunch of them in your hand. They look like sand. The spat in this case has been donated by oyster farms out on eastern Long Island. Then they are transported to the Hudson Bay area with the help of the Urban Assembly New York Harbor School. The school is raising some of them in an aquaculture center. Once the oysters have grown to a certain size, they are ready to be reintroduced into their native habitat in the greater Hudson Bay area.

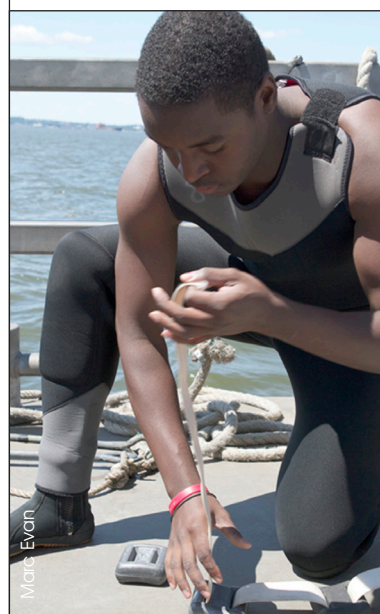
What were you hoping that the Urban Assembly New York Harbor School students learned from planting the oysters?

The New York Harbor School is a public high school that, beyond the rigors of public high school curriculum, focuses on marine policy, marine technology, and marine science. Many of those elements go into restoring, amongst other things, oysters. The oyster program is an integral part of the school education curriculum. There is a select group of students called the Harbor core students who take care of the oysters. Students who are scuba certified and ready can be part of the actual restoration process underwater. Other students are an integral part of all the work done on land.

Did you have to get a lot of government approvals to plant these oysters?

Oh, yes. The longest part of the process is getting approval from the New York Department of Environmental Conservation and from the U.S. Environmental Protection Agency, the government agencies that oversee the bodies of water in and around the program areas. We are in the process of finalizing some of those through NY/NJ Baykeeper. Environmental entrepreneur Bart Chezar (based in Brooklyn) has also been instrumental in conducting small-scale restoration surveys in the Hudson River. This is a very involved restoration initiative by many people and organizations, including NGOs and government agencies and such. It requires many players because it is a huge undertaking. I mean we are talking about a very large body of water, and we are talking about potentially a very large amount of effort to restore a semblance of the oyster population that used to

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be here. We all need to make sure that it is done correctly.

Do you have a team of lawyers working for you to cut through all the red tape?

I hate lawyers. I am sorry for all the lawyers reading this. They make things more complicated than need be. I rely on the work of the people at the Harbor School and Baykeeper and, of course, Bart, to get all these things done. This is a passion initiative for me. It certainly is not a day job.

What is your day job?

My day job is being an ocean explorer and filmmaker, amongst other things.

So you do not want your nonprofit work to be an unpleasant undertaking.

I want it to be by the people, for the people. This is not about Fabien Cousteau. This is about the people, the communities and, of course, the ocean world.

Is any follow-up or monitoring of the oysters being conducted?

Yes. We involve the students and the naturalists who are supervising the students, so they can monitor and survey the restoration effort and witness its success (or not). People can get a feeling of payback for their efforts and see that they are doing some good to the ocean. We're hopeful that once we start restoring the oysters, we will begin to see a lot of the native species come back to the Hudson and surrounding areas.

Do you plan to work mostly with high school students, or are you also looking for younger kids or university students?

I want to raise an army of youth to be able to accomplish these tasks that have been laid before us because of the neglect of previous generations. They are by far our best hope. They do not have boundaries. They do not know what impossible means. On top of this, they have boundless energy and incredible imagination. You know, their parents listen to them. Their grandparents listen to them, and they know a lot more about the plight of our planet than we did at their age. So they are definitely a focus. I'm also reaching out to local communities because I want not only the young but also the not-so-young to appreciate the importance and be part of these restoration efforts.

Does your group have a need for volunteers? If so, how can they become involved?

It has been all volunteers helping out, not only behind the scenes with fundraising efforts, with the outreach, but also on the ground with the actual restoration programs that have either been run through schools or local people who have volunteered as managers of these programs. We are just now getting started, but basically the outpouring of support as far as volunteers are concerned has been overwhelming and has been a wonderful, wonderful thing. It just shows that this idea is not as crazy as I thought it was at three in the morning.

Well, the plant-a-tree thing really took off. Do you hope to partner with corporations or universities in any way?

Absolutely. I want to invite people and organizations of all sorts to become friends of Plant A Fish. That may mean not just schools, but other NGOs and, of course, corporations that feel Plant A Fish would align well with their corporate social responsibility message, whether they want it to be specific to their employees and adopt, say, a beach to "replant" its sea turtle population, or to the greater community and launch a partnership to restore a coral reef system. I certainly invite those folks to come and join us.

With the turtles, do you have to do work beforehand to make sure that whatever the turtles eat will also be available in the location that you are planting them?

That is a very good question, and actually, I am sorry to say that you are probably one of the only people that has asked that. Depending on the species, the health of their surroundings is more or less important. Oysters are a little bit more tolerant of dirty water. With turtles, their water should absolutely be



as healthy as possible. With regards specifically to El Salvador, those waters are still fairly healthy. I will not say that they are 100 percent, but they are healthy enough to support the project.

The idea of the education and empowerment behind the restoration is teaching people about the importance of that water body being healthy, and what that means to us as a species: how we influence the oceans, and how in turn, whether the oceans are healthy or not, how that influences us. That is part of the process. It is certainly not just throwing a bunch of fish back in the ocean and calling it a day. This is about really changing people's perspectives and minds or, I should say, starting with changing people's perspectives and having them really connect in a personal way with their ocean world.

Do you ever worry that you are interfering with Darwin's notion of survival of the fittest?

I certainly do not think that Darwin had calculated the magnitude by which we are now influencing our planet. If we were to follow just our intellect, we would be lost, but we can follow our hearts. We can certainly strike a balance with our planet so that not only can it be healthy, but we can, as well.

Are you working in the Gulf of Mexico, or do you have any plans to?

The work is never done. There is always a fire or catastrophe somewhere. I would like to pride myself on thinking that we also show the beauty of the oceans. With regards to the Gulf, my family, basically my father and sister and me, as well as the Ocean Futures Society team, has been in the Gulf since April filming what have been the effects of the Gulf oil spill both above and below water. Below water is the most important part, because most people do not get a chance to see that. We continue to do so not only to create a larger documentary, but also to compel individuals and agencies to become more actively involved with the response efforts to current events.

We are also being asked to be advisors in several states that are affected by the oil spill. I have been down to Florida to speak with different heads of different organizations, both governmental and non-governmental, about what can be done, what are the solutions that are least negatively impactful on the environment and most positively impactful to the cleanup of this oil spill.

At the same time, we are trying to mop up as fast as possible to keep up with the oil spill, which is kind of a backwards way of doing things, but we do not have a choice. Until we can cork the hole, we are not going to be making any headway, but at least we can try and limit the damages as much as possible in



the meantime. We are going to be dealing with the repercussions of this oil spill for decades to come. It is a long-term battle.

Is the mainstream media doing a good enough job in reporting the impact of this spill? Oil-covered turtles do make a good visual, but we are not necessarily seeing the dead oysters, or whatever is under water. Do you think that the media is doing a sufficient job in making people aware of the level of catastrophe involved here?

I hate to generalize, because some media outlets are doing a better job than others. I think there is still a large margin of improvement that can be had, and most importantly, what I fear is that the media will get tired of talking about the oil spill way before the

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problem subsides. That is the most dangerous part of the game, to forget or to ignore something that will likely be slated as one of the greatest monumental disasters of our century. Yes, of course, dead turtles make for very visually impactful news, but dead coral is at least as important, if not more so, and we also need to talk about it.

The difficult part—and I sympathize with the media there—is that you are dealing with a very competitive world in terms of trying to get people's attention, and we live in a very ADD-sound-bite type of world, and this sort of thing, trying to describe an undersea world that we do not know very well, that we have only explored 5 percent of, and the extent to which our actions are negatively impacting this undersea world—all of this is hard to fit in 30 seconds or less.

True enough.

That is why print is extraordinarily important, because you can probably tell a story in much more depth than you otherwise can via a television sound bite.

Do you eat seafood?

I like calling it sea life rather than seafood, and this is something I learned from oceanographer Dr. Sylvia Earle—if we think of seafood more as sea life, we might think and value it more and begin to curb our overconsumption. That said, to answer your question, my list of sea life, seafood, is becoming very limited, unfortunately. I am certainly trying to walk the walk and talk the talk as much as possible, and I use, amongst other things, seafood watch cards, such as the Monterey Bay Seafood Watch card (a guide to choosing appropriate seafood). There are others out there that are equally as good. If we all start doing little things like that, taking those cards with us, whether virtually on our iPhones or

physically in our hands, and making those choices in supermarkets and in restaurants, we can make a huge difference. It really is about curtailing our consumption, and certainly curtailing our use of the oceans as an infinite resource and garbage can.

Is there anything else you want to point out?

One of the things we cannot forget is that, in the darkest of moments, human beings are capable of creating miracles when pressed to do so. There are a lot of examples out there of that. I think that we cannot lose hope—we can change the course of our actions, we can change the course that we have set up for ourselves. But in order to do so, we have all got to pitch in. We all need to pull in the same direction. It is not so much a matter of sacrificing everything and becoming hermits. It is a matter of curtailing our everyday bad habits that we do not even know we have. We are just becoming conscious of those things.

If we start doing little things in our lives, cumulatively it makes a big difference. I know it is not as visually or mentally easy to wrap our heads around that if we stop using single-use plastics or start making the right choices at supermarkets, that it makes a big difference, but it really does. I mean when you are talking about hundreds of millions, if not billions, of people around the world making those choices, all of a sudden we can begin to strike that much-needed, critical balance with nature.

We have to start using our world and our oceans as a bank account. We have to stop eating away at our capital and start living off the interest. Plant A Fish is one way to start getting us mentally trained to do that and start paying back that capital that we have squandered.

If You Want To Learn More

Plant a Fish
www.plantafish.org

NY/NJ Baykeeper
www.nynjbaykeeper.org

Ocean Futures Society
www.oceanfutures.org

The Urban Assembly New York Harbor School
www.newyorkharborschool.org

Monterey Bay Seafood Watch
www.montereybayaquarium.org