

When Swordfish Conservation Biologists Eat Swordfish

We are seeing species decline and disappear at ever-increasing rates. Environmental problems have become so widespread and emergencies so common that they are no longer perceived as drama. Few news items have the power to grasp our attention and elicit a sense of dismay. Gossip is presented alongside ecologic disaster and stock-market issues compete with nuclear threat and extermination of innocent people. When flipping through news after a long day of work, we may be attracted by the gossip and choose to ignore the disaster. After all, it is someone else's disaster. We have not caused the problem; we are innocent.

But are we? In our work as conservation biologists, we often pretend we are the good guys and problems are created by bad guys elsewhere. Is this a fair representation of reality? Does this take into account all the complexities? It would be fair to acknowledge that we, too, contribute to problems. For instance, the fancy laptop on my desk was made in China, perhaps at high environmental and human costs. Once trashed it may end up being burned by minors in Ghana to retrieve its valuable metal components.

We think of ourselves as professionals who are aware of environmental problems and work hard to solve them, but we pay little heed to what we do, buy, and consume. Some of my reputable colleagues drive SUVs to the office every day, possibly where they write about climate change. I know excellent biologists who spend much of their professional lives condemning unsustainable fisheries or reporting high levels of toxic contaminants in marine megafauna, yet when eating at a restaurant they order swordfish or tuna from overfished and declining stocks. At this point their study subjects cease being endangered wildlife and become food. Although most conservation biologists probably behave noticeably better than most uninformed citizens, it is disturbing to see the hypocrisy of avowed conservationists, as if monks advocating poverty were to wear jewelry and expensive silk robes.

Some of us have started to realize our current lifestyle is inconsistent with the message we voice. We wonder how we can ever stop contributing to global problems and eventually become part of the solution, at least in the areas we are most passionate and concerned about. Would

that imply giving up comfortable life standards? Does that mean never again savoring that melt-in-the-mouth delicious fillet of Mediterranean swordfish, "just because" (apart from being loaded with mercury and PCBs) members of this shrinking population are caught in pelagic driftnets that incidentally kill thousands of cetaceans, sea turtles, and other endangered wildlife?

Without question, we would prefer our governments to take care of environmental and ethical issues, rather than having to face difficult choices ourselves. If Mediterranean swordfish comes from unsustainable or illegal fisheries, why don't *they* stop those fisheries in the first place? As the eminent conservation biologist and fishery scientist Daniel Pauly put it, "I don't want to have to check in the morning if my orange juice was pressed by underpaid migrant workers - I just can't." In an ideal world, people should elect sensible representatives through the democratic process so that laws and regulations will allow us to make good choices. Being engaged as consumers and bearing the responsibility of making informed decisions is unpleasant and sometimes even impossible, as Pauly notes. Relying on government representatives to wisely choose for us would be optimal.

Although it remains to be seen if present-day democracies are the most appropriate framework to nurture sustainability and promote conservation, democratic laws can only be changed or formulated by elected representatives. To empower politicians who may be promoting new values and sustainable lifestyles, voters should first identify their own values and realize that alternative ways do exist (a difficult task, considering our exposure to media that are predominantly market-driven). In addition, politicians must rely on public consensus (or demand) to issue wiser laws. So the burden is back on the individuals who have at least a chance of influencing the decision-making process through their votes and the market through their wallets. The most informed members of our society may also get organized and place emphasis on changing laws and other collective instruments, which are then enforced top-down.

Although generally speaking people are unlikely to ever become virtuous unless they are forced to do so, there are growing sectors of modern societies that look for alternative models and seek inspiration from less

consumptive patterns of behavior. Most religions of the world advocate moderation and restraint, but few religious leaders seem to embody such moderation, and their calls may remain unheard in this increasingly materialistic world. Still, alternative values and habits can be learned and appreciated through the example of clever individuals. If my beloved science professor comes to campus riding a bike, I might admire his example and possibly even reconsider buying that sporty coupe. If some smart people around me stop trashing their old computers and come up with new ways to reuse and recycle their components, I may realize that trashing everything all the time is neither necessary nor appropriate. Personal examples matter, particularly by those closer to our heart. Calling for top-down enforcement will not bring us far without much bottom-up consensus, and this kind of awareness must be created step by step starting here and now.

Only 2 km away from one of my field sites in Greece there is an open-air dump. It is often in flames and sometimes I can distinctively smell its smoke, which I know includes dioxin, an extremely toxic chemical. Although it is terrible that in a country like Greece tons of garbage are still routinely dumped close to houses and schools, I know my garbage is there too. The plastic bag I trashed yesterday is burning today in that dump just around the corner. In addition to blaming others for dumping and burning and doing my best to document and stop this practice, shouldn't I also try to reduce my input of rubbish? That is where I get stuck because when I wake up in the morning it is nice to drink my tetra-packed grapefruit juice and have my plastic-cased yogurt for breakfast. Even if I am informed about the hazards posed by garbage incineration, I find it hard to give up my little comforts.

As conservation biologists, we often expect others to modify their behaviors or quit a job based on evidence that it has negative impacts on the environment. Nevertheless, we are rarely willing to change our own habits, even when we are fully aware of the detrimental effects of our actions. A plush life is pleasant, and we see it as our right, yet we demand others to become virtuous for the sake of conservation. We blame others, but find it hard to realize what is wrong with our own behavior and to change it. I suspect that an important part of the challenge is to be a good example in the first place, no matter what others do. It is striking to see how many people committed to conservation have not abandoned a single consumptive pattern, despite the eco-drama before our eyes.

For instance, fisheries scientists advocate for stricter quotas, which would therefore limit consumption, yet they themselves may practice little restraint in their personal consumption of seafood. If we take the premise that the individual does not matter, this is not an intellectual contradiction. We may also argue that if we do not eat swordfish, someone else will. Jennifer Jacquet, a talented PhD candidate at the University of British Columbia Fisheries Centre, makes a provocative analogy: "Is this not

like an early abolitionist owning a slave?" Jacquet, whose published work offers a brilliant analysis of the marine fisheries crisis, contends there is little accountability in conservation science for practicing what one preaches, and she thinks this may be linked to an overall hesitation to criticize consumption of any sort in the Western world.

Credible criticism of this kind would imply endorsement of counter-current choices and detaching from some of our dearest consumptive habits. This is something few of us are ready to do, but possibly something that some of us should consider doing at least to the extent possible, while carefully avoiding extremism and polarization. Being consistent with our ecological theories in daily life does not need to entail moral or religious harshness. It may be seen simply as an application of judgment and free will or a way of acting as responsible citizens of this planet.

As articulated in joint work by Jacquet and Pauly, a system of management or conservation based exclusively on purchasing power will not adequately address the problems facing the world's fisheries (or any other global problem) because of corporate skillfulness in dodging consumer choices. There are no simple solutions to the global crisis and even doing the right thing in daily life requires much pondering and learning. Irremediable as they may seem, problems may only be solved when individuals start addressing them. As highly educated conservation biologists who are aware and supposedly clever, aren't we good candidates to kick-start the process? Aren't we some of the best candidates to provide imaginative and appropriately informed examples of sustainable (and still enjoyable) living?

Mahatma Gandhi once said, "You must be the change you wish to see in the world." If we cannot manage to embody our teachings at least in part, it may be unrealistic to expect that others will change anything in their life, whether it is to stop eating whale meat or to refrain from hunting endangered wildlife for sport. This is not meant to be a recipe to save the planet. When conservation biologists stop ordering swordfish and opt for organic chicken or vegetables, the world will not be substantially different. The immense, complex, and global problems of our times will not disappear by the time all the members of our conservation elite have abandoned their unsustainable habits. Yet, only then will there be convincing evidence that responsible individual behavior can spring from science-based understanding of cause-effect relationships and only then will there be any hope that, beyond theory and preaching, the inspired and knowledgeable choices of a few visionaries may affect a larger community in a growing spiral of understanding.

Giovanni Bearzi

Tethys Research Institute, Viale G.B. Gadio 2, 20121 Milano, Italy,
email giovanni.bearzi@gmail.com