

Thanks, Chris, well said! It has often been said that we can't manage reefs, only people. The problems on reefs now are the problems caused by people. I don't worry about hurricanes or tsunamis damaging reefs, reefs have been recovering from them for thousands or millions of years. (mind you, if humans have degraded a reef, now it may not recover from such natural disturbances) We rarely if ever get to directly affect the reef, instead we must change how people are damaging reefs, if we want to save them. To do that, we must understand why they do it, and how to get them to change. That's not molecular biology, genetics, or ecology of the reefs, that's human behavior, social science. I agree not only is everything government does designed to affect human behaviors, but also the entire commercial world- advertising to get people to buy their goods, paying people to do work, you name it. And there is no alternative, having no government means anarchy and that means people with guns will modify other people's behavior (and survival). People influence each other's behavior, that's what humans do, and it will continue no matter what we do. We can use that to help the reef, or not, our choice. (note that if mosquito spray damages reefs, we would have to get the people who decide to do the spraying to change that, if we want the spray to stop damaging reefs. We'd have to change what someone does.)

Here's one example of the need to understand people's motives, and understand how incentives work, and thus why people do what they do. Some people say making reefs valuable will make people value reefs. I say sometimes yes, sometimes no. Tourism gives reefs and sharks value in Palau, and now they protect them. Great. But take some places in the Caribbean, where reefs have been deteriorating. If they have a large or huge tourist industry, the tourism is worth a huge amount of money. You might think that would mean they would protect their reef. They might. But they also might look the other way if the tourism industry damages the reefs, say, for instance, by releasing sewage, or by cruise ship anchors destroying coral. Along comes a reef biologist, sees the reefs deteriorating, maybe figures out sewage is part of the problem. Is that information welcome??? Often it very much is NOT welcome. The biologist may have any support for his work withdrawn, loose permits, loose visa, and become persona non grata. The important thing is to protect the tourism industry, not the reef. Most divers can't tell the difference between a dead reef and a live one, let alone what killed the reef. So let the reef go down the tubes, but then it becomes very important not to let the truth out.

Mind you, you don't have to have a PhD in psychology to figure that out, and figuring it out may not suggest any easy solutions. Getting strong evidence about what the problem is may help push people to fix the problem. Or it may get you in deep hot water with powerful people who don't want bad news to spoil the lucrative tourist industry they have. They may have ways of modifying your behavior to get you to shut up. Being part of a larger environmental organization might be helpful. Might.

Not all problems are like this, many may involve little things that lots of people do, that add up. Then the strategy might be to work on educational campaigns and so on. Each situation is likely to be different. But one thing in common, and that is that it is critical to change what people do. Preferably in a positive, friendly, helpful way that benefits those people as well as the reef.

Cheers, Doug