

[Print This Page](#)

[E-Mail This Page](#)

September 11, 2007

Reefer Madness

Trying to understand the real ecological problems can drive you crazy.



Richard MacLean atop the Great Barrier Reef about 10 miles off the coast of Townsland, Australia.

By Richard MacLean

For more than a decade, I heard stories about coral bleaching. Until I went on a snorkeling trip on the Great Barrier Reef in 2006, the potential magnitude of that destruction never really hit home (see **In Your Face (Mask)**, 15 August 2006).

I returned this year prepared to examine the rate of degradation (okay, so I am overstating this a bit). I found out that bleaching is but one, possibly even a secondary, factor in a string of ecological threats. Off the coast of Townsville, Queensland, where I was snorkeling, the crown-of-thorns starfish (*Acanthaster planci*) is the main threat.

Say what?

These starfish have voracious appetites and can devour entire reef outcroppings in short order. The nasty critters were kept in ecological harmony by natural enemies such as certain species of shrimp, worms and various reef fish. Now during the critical spawning cycle, agricultural runoff provides the perfect growth media for the starfish's eggs. Just one female can produce up to 60 million eggs in a single season. The survivors can grow up to one meter in diameter and can consume up to

six square meters of living reef per year.

Not just the coral is under attack. The ecology of Melbourne's Port Phillip Bay is threatened now by the Pacific seastar (*Asterias amurens*). This invasive species most probably was introduced from free-swimming larvae in the ballast water for ships. The oceans off the coast of Tasmania have been under attack for more than a decade.

I'm no marine biologist, but anyone can clearly see that the dynamics are complicated. Politics and media myopia shape our thinking on what is good or bad for the environment. It certainly affected my perceptions. Coral bleaching only recently has received the prominence it deserves, even though it is a story that has been around for more than a decade.

Why?

The environment has become very political, especially over global warming, a primary contributor to coral bleaching. I suspect that it has afforded another opportunity to attack the Republicans and the president for their lack of a sound environmental policy.

The law of unintended consequences plays havoc with us. Expand the agricultural industry and find a reef under stress. Unload ballast water and watch Port Phillip Bay become an ecological wasteland. Promote ethanol fuel and see food prices soar. Manufacture goods cheaply in China and export our pollution. The environment is not simple – there are consequences from ill-conceived actions.

Everything we do in life involves risk. Just going on this eco tour involved some risk from, among other things, the stinging blue bottle jellyfish and the lethal box jellyfish (*Chironex fleckeri*) that the Australian travel industry prefers not to mention.

But I'm a firm believer in the precautionary principle: I wore a stinger suit and swam during the winter season when there were relatively few dangers around. This strategy definitely helped to ward off panic when I was surrounded by a smack (not a school) of jellyfish although they were of the nontoxic variety.

Even on this one principle, nations cannot seem to agree. Europe is on board, but in the U.S., the precautionary principle is generally viewed by business with disdain, if not outright scorn.

My trip gave me a better appreciation of both the beauty of the environment and the

complexity of the forces impacting it today. The environment is in for some rough treatment, and it's driving me crazy.

Richard MacLean is president of Competitive Environment, a management consulting firm in Scottsdale, Arizona, and the executive director of the Center for Environmental Innovation, a university-based nonprofit research organization. He can be contacted at maclean@competitive-e.com. His commentaries are available on the Web at <http://www.Competitive-E.com>.

Close Window

Visit www.crosslandsbulletin.com

© Victor House News, Co.