JOHN P. GIBBONS

# Doom and gloom won't save the world

*The best way to encourage conservation is to share our success stories, not to write obituaries for the planet, says* **Nancy Knowlton**.

Once upon a time, a career as a marine biologist conjured images of days spent diving amid beautiful sea creatures. These days, it can often feel like being an undertaker for the oceans.

Early in my career, I witnessed first-hand the depressing side of the job. The coral reefs off the north coast of Jamaica, where I had spent several magical years as a graduate student in the mid 1970s, were struck by a category-5 hurricane in 1980. Then came mysterious ailments that devastated two of the most important coral species, along with a species of sea urchin that, because of previous overfishing, had become the last defence against a tide of seaweed that was choking the struggling coral. Ten years after my first dive in Jamaica, the reefs I'd studied were all but gone.

These days, students studying reefs spend their time investigating bleaching and acidification, terms that were never mentioned when I took my first coral-reef class in 1974.

As we observe Earth Day on 22 April, it's worth recounting how researchers like myself have managed to rebound a bit from all this depressing news.

In 2001, my colleagues and I at the Scripps Institution of Oceanography in San Diego, California, founded the Center for Marine Biodiversity and Conservation. Core to our programme was an interdisciplinary summer course, which brought together students ranging from marine biologists to physical oceanographers, economists and anthropologists. We thought of it as medical school for the ocean.

We began with what we thought was a logical starting point — the state of the ocean. These were depressing lectures. Doom and gloom consumed the entire course. Basically, we were training our students to write ever-more-refined obituaries for the seas.

We quickly realized the folly of focusing so much on the problems — we could see it on our students' faces. There had to be another way. After all, in medical school the focus is on preserving life, not describing death. So in 2009, my husband Jeremy Jackson and I began running symposia at academic meetings called 'Beyond the Obituaries', which were about success stories in ocean conservation. A small workshop in 2014 led to a Twitter campaign, #OceanOptimism, which has now reached more than 76 million Twitter accounts.

On the weekend of Earth Day, the first ever Earth Optimism Summits will take place. In Washington DC, more than 235 scientists and civic leaders from 24 countries will share their success stories of conservation on land and water. Sister summits and activities are being held in nine countries around the globe. The goal is to learn from each other, and change the conservation conversation.

This journey has taught me several lessons. First, unrelenting doom and gloom in the absence of solutions is not effective. Social scientists have known for decades that large problems without solutions lead to apathy, not action. Yet much of conservation communication still seems to be focused on scaring people into caring.

As a community, we seem to be addicted to despair. For example, when the West Indian manatee (*Trichechus manatus*) was bumped down from endangered to threatened status under the US Endangered Species Act last month, many environmentalists protested and worried about relaxed protections, rather than celebrating the practices (boat speed limits and winter-refuge safeguards) that enabled the animals' partial recovery.

Second, an extraordinary number of success stories are largely unknown — not just to the general public but also to conservation scientists, policymakers and philanthropists. Searching Twitter for #OceanOptimism (and its offspring #EarthOptimism) is still one of the best ways to find examples. My favourite instance of unrecognized success was the 2015 announcement of the recovery of seagrasses in Tampa Bay, Florida, to 1950s levels. Of the 300 or so people I have mentioned this to (including 200 marine scientists at a research meeting in Tampa), fewer than 10 were aware of this important conservation achievement, which was the result of keeping fertilizer-filled run-off waters from flowing into the bay. Elsewhere, stocks of Chilean loco (an edible sea snail), Madagascar octopus and marine fish in parts of the Philippines are healthier thanks to the establishment of small-scale, locally empowered, sustainable fisheries.

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Many young people have told me and my colleagues that our messages of optimism energize them and provide direction and inspiration. They also tell us that they almost left the field because so many of their courses were dispiriting.

Let me be clear: I am no Pollyanna when it comes to the future of the planet. The catastrophic coral bleaching of the Great Barrier Reef this year and last cannot be denied. The problems remain huge: daunting even. Conservation is often two steps forward, one step back — or frustratingly, one step forward, two steps back.

But we must also celebrate successes: species brought back from the brink of extinction, landscapes and seascapes protected or newly restored, and the integration of sustainability into corporate boardroom decisions. Even when these success stories are shared, we often undermine them with caveats and bury the story of how they were accomplished. Yet talking about these successes is how we will learn to expand them. ■

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