

By Tony Wu

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CRYING WOLF

Aesop was a slave who lived in sixth-century Greece, who, according to the historian Herodotus, penned a collection of stories known today as Aesop's Fables. Among the many and popular tales attributed to this talented scribe is one that came to mind recently — The Boy Who Cried Wolf.

In short, a shepherd boy without much to do came to the conclusion that screaming “Wolf!” might be a fun thing to do. Each time nearby residents came to the rescue, however, they found only a giggling young shepherd, but no wolf. Eventually, when a hungry wolf really did appear, none of the neighbours answered the young prankster's desperate calls for help, and the fortunate carnivore enjoyed a sumptuous feast of sheep (in some versions, shepherd too).

What got me pondering this lupine lesson recently was a man named Worm.

Dr. Boris Worm, an Assistant Professor of Marine Conservation Biology at Canada's Dalhousie University, published (with colleagues) an article in the 3 November 2006 issue of *Science* that warned of the collapse of fisheries by the year 2048.

Media outlets immediately picked up on the story. Headlines pronouncing the impending demise of all fish appeared worldwide in print and online. To quote but one of hundreds of reports, the *Los Angeles Times* highlighted Dr Worm's statement that “100% of [fished] species will collapse by the year 2048, or around that”.

northern cod



fishmongers

Claims like this recall Thomas Malthus' famous 1798 prophesy that the world would run out of food and suffer global famine by the mid-1800s. In the same vein, writer Paul Ehrlich predicated in his 1968 best-seller *The Population Bomb* that: "In the 1970s and 1980s hundreds of millions of people will starve to death in spite of any crash programs embarked upon now." Despite being spectacularly wrong, both Malthus and Ehrlich received disproportionate attention and credence. Fortunately, within hours of the global media mania spurred by Dr. Worm, more sensible voices intervened, though they received decidedly much less publicity.

The United Nations Food and Agriculture Organization (FAO) noted that while conservation efforts must be improved, it was "unlikely" that major sources of seafood would disappear by the middle of the century. It labelled the report "statistically dangerous". (Note: Dr Worm's study was based in large part upon FAO data.)

Serge Michel Garcia, director of the FAO's fishery resources division, criticised: "Such a massive collapse... would require reckless behavior of all industries for four decades, and an incredible level of apathy of all world citizens... without mentioning economic forces that would discourage this from happening".

Other scientists chimed in. Dr. Ray Hillborn, professor of fisheries management at the University of Washington cited major flaws in analysis and admonished Dr. Worm et al. for making exaggerated claims. "This particular prediction has zero credibility within the scientific community," he said.

Steve Ralston, senior fishery biologist with the US National Oceanic and Atmospheric Administration, pitched in, calling the report "enviro-sensationalism".

Here's the thing — some fisheries really are in trouble. Stocks of bluefin tuna are down. Overfishing of deep-sea species is rampant. Some species of sharks are literally being wiped from existence. We need to act, but apocalyptic (and inevitably inaccurate) claims about the end-of-the-earth are counterproductive. They distract from real issues, in the end alienating people, rather than garnering support.

One of the major consequences of doomsday predictions is the very lesson that Aesop tried to impart so many years ago — people stop listening. The challenge for us all is to learn to focus our efforts on addressing real issues, while ignoring little boys who cry wolf.



MATING mandarins

By Tony Wu

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My dictionary defines the word “frustrating” as defeating one from completing a purpose or fulfilling a desire. I equate the term with my nemesis, the mandarin fish. Try photographing one of these and you’ll see what I mean.

The first time I tried to photograph *Synchiropus splendidus*, I was muttering muffled expletives more often than triggering the camera shutter. These colourful fish have a wide range, from Japan down to Australia and through Micronesia. They live in shallow water, often in open rubble areas and reach a maximum size of something like 60 mm. Since they’re relatively common in shallow water, the problem isn’t necessarily finding them, but getting them to pose for a nice picture.

By day, they’re usually hidden, so the best time to see them is in the evening when they come out to feed. Again, perfect for taking pictures, since there is very little light for focusing. When they do come out, they sort of “glide” across the rubble, stopping and starting irregularly, ducking behind dead coral branches, hovering for a moment in midwater then darting around an urchin. They often pause to look mockingly at the camera lens, rarely staying long enough for a portrait to be taken.

After one particularly frustrating and fruitless attempt, I heard from one of my friends that he had seen mandarin fish mating! That did it. I was officially obsessed and had to get pictures of these elusive fish mating. Of course, first I had to do some research.

Among the more interesting facts I uncovered, mandarin fish are dimorphic, meaning that the males and females are shaped slightly differently. The males are larger, and have more colourful dorsal fins for courtship and territorial displays. Knowing this made it easier to identify which individuals to follow around. Males initiate mating, so I figured that by following around a male, I’d maximize the chances of capturing candid moments of amorous mandarins. Another useful piece of information is that the fish mate in the evening, generally around sunset.

One text pointed out that mandarin fish, like other members of the dragonet family (Callionymidae), have a tough, slimy bad-tasting skin instead of scales. I wondered who tasted the skin, but I decided not to try it myself.

Armed with this knowledge, I took a trip specifically to look for mating mandarins. With the help of an experienced dive guide, I was able to locate a sizable group of mandarins, and spent several



days observing them, including several mating sessions. What my research didn’t prepare me for though was the “personal” side of mandarin courtship.

Watching the same fish day after day, I picked up on some entertaining behaviour. I noticed that there is a point in time when most of the mating activity begins, almost as if the fish were obeying some romantic cue. This generally occurred during daylight, but when light levels were at their absolute lowest. Couple after couple would come together, gracefully ascend above the rubble and then separate suddenly as they released their eggs and sperm into the water.

While this in itself was fascinating enough, there were more interesting things to come. On several occasions, I watched as males were apparently “rejected” when they approached females. The females would turn their backs and flit away. Perhaps I’m thinking too much of my own experience, but I could’ve sworn that the fins on those males sagged a bit after that.

Then there were the fights. Males encountering each other around mating time would often extend their dorsal and pectoral fins and briefly attack. They didn’t seem to do any harm to one another, but there was one fellow with a good portion of his caudal fin missing. I referred to him as Scrappy, as he seemed to get into a disproportionate number of confrontations.

Finally, once there was a male who was surrounded by four or five females. I watched him mate, and mate, and mate, and mate... ten or more times in all! Highly impressed and hoping for a repeat performance, I found him the following evening. Unfortunately, he showed no interest in the females that day, worn out perhaps, from overextending himself the previous night. I suppose there’s a valuable lesson in that for us all!