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News of Jellyfish Takeover Unfounded, Scientists Say

By Wynne Parry, LiveScience.com

Jellyfish have become the subject of what resembles a modern myth, some say.

The story goes like this: Around the world, more and more massive blooms of the gelatinous creatures are cropping up, nurtured by overfishing, climate change, pollution and other human alterations to the environment.

But so far, the paradigm of jellyfish rising to dominate the world's oceans is little more than a myth, without data or analysis to support it, according to a group of scientists who have set out to see what's really going on with this diverse group of animals on a global scale.

Research they have published in the journal BioScience points out that this paradigm has taken on a life of its own. Within the last two decades, news reports on jellies have increased by more than 500 percent, comfortably outnumbering scientific publications on jellyfish outbreaks and carrying headlines that are often alarmist, they point out.

"Basically, this paper [the BioScience article] is just saying, 'Hang on a minute, show me the data that support the current paradigm,'" said Rob Condon, a marine scientist at DauphinIsland Sea Lab in Alabama.

He and other members from the Global Jellyfish Group, a group of about 30 scientists in a variety of fields from around the world, authored the study.

The information currently available does not provide a cohesive picture. Clearly there are places where jellyfish have increased, such as near Japan. In other places, like off the coast of California, they have decreased. And in the Bering Sea, they increased and then decreased, Condon said.

Not only do scientists have a very limited understanding of jellyfish biology, but there is little long-term data available for jellyfish. To address the latter problem, the jellyfish group has assembled a global database called the Jellyfish Database Initiative (JEDI), which contains data from many sources related to the presence of jellyfish as far back as 1790. Anyone can submit an observation to it at Jellywatch.org; the submissions are monitored by experts.

The group, which is based at the National Center for Ecological Analysis and Synthesis at the University of California, Santa Barbara, now has collected enough data that it has begun working toward making global analyses, according to Condon.