

11-16-2012

# Newsroom: The Marine Effects of Climate Change

Roger Williams University School of Law

Follow this and additional works at: [https://docs.rwu.edu/law\\_archives\\_life](https://docs.rwu.edu/law_archives_life)

---

## Recommended Citation

Roger Williams University School of Law, "Newsroom: The Marine Effects of Climate Change" (2012). *Life of the Law School (1993- )*. 341.

[https://docs.rwu.edu/law\\_archives\\_life/341](https://docs.rwu.edu/law_archives_life/341)

This News Article is brought to you for free and open access by the Archives & Law School History at DOCS@RWU. It has been accepted for inclusion in Life of the Law School (1993- ) by an authorized administrator of DOCS@RWU. For more information, please contact [mwu@rwu.edu](mailto:mwu@rwu.edu).

# Newsroom

## The Marine Effects of Climate Change

The 9th Marine Law Symposium at RWU Law focused on global warming and its effects on the marine ecosystem, people who live near it and work on it, and the management decisions affecting them all.

**From the Cape Cod Times:** "Scientists: Record temps will alter landscape" by Doug Fraser



**BRISTOL, R.I., November 16, 2012** — Given the Katrina-like devastation after Superstorm Sandy slammed into New York and New Jersey, it was no surprise Thursday when panelists at a global warming symposium were told that water temperatures in the Northeast for the first half of 2012 were the warmest in more than 150 years of record keeping.

The region experienced record heat on land in 2012, and water temperatures hit all-time highs from top to bottom, all along the continental shelf from the Mid-Atlantic states to Canada. This was due in part to a slowing of a cold water ocean flow, known as the Labrador Current, that tends to cool off New England waters.

"The second half (of the year) looks much the same," said Kevin Friedland, a panelist and researcher with the National Marine Fisheries Service Narragansett Laboratory.

**The ninth Marine Law Symposium at Roger Williams University focused on global warming and its effects on the marine ecosystem and the people who live near it and work on it, and the management decisions affecting them all.** The real concern for Friedland is that if the Labrador Current slows, this past year could become the new norm, in which case global warming projections for Northeast coastal waters jump ahead by 20 to 30 years.

For fisheries, the effect of warmer waters goes right up the food chain. Some fish species, such as haddock, time their spawning cycle to coincide with the spring plankton bloom so that their progeny have

a good food source. With higher temperatures, the spring bloom began as much as a month earlier than usual in some New England waters.

The real effects of 2012's record temperatures are still not known, but scientists already believe that species are headed north to find cooler waters. Some species like red hake, once a fixture in the Mid-Atlantic, are now virtually unknown there because they moved to the cooler Gulf of Maine.

Atlantic cod is at the southernmost portion of its temperature range off Cape Cod on Georges Bank. Both Gulf of Maine and Georges Bank cod stocks are way below where fishery managers thought they would be after nearly 20 years of heavy regulations. Fisheries scientists think cod may ultimately be forced off the fertile Georges Bank and into the Gulf of Maine where there is less food. A southern species, croaker, is already moving in.

Commercially important species such as scallops may find it harder to produce their protective shells as the ocean acidifies because of increased levels of carbon dioxide, Friedland said.

Other panelists expressed concerns that scientists, trying to communicate global warming data that was inherently complex and contained a higher level of uncertainty, faced an increasingly hostile audience in trying to get the message of global warming to politicians and the public.

Alison Rieser, a professor of ocean policy at the University of Hawaii, thought that scientists needed protection from liability to do their work.

She pointed to the case of Italian scientists who were recently tried in court for not giving residents enough warning of an earthquake that killed hundreds. In this country, a judge ordered Woods Hole Oceanographic Institution researchers Christopher Reddy and Richard Camilli to turn over more than 3,000 emails to BP lawyers questioning their research on how much oil was spilled during the Deepwater Horizon disaster.

Rieser also was critical of the trend toward managing resources by using the "best available science" when that science could be fraught with unknowns and may not be ready for use in making management decisions.

"I think we are relying too much on 'best available science,'" Rieser said.

The wealth of unknowns and the possibility of error leaves scientists open to criticism, loss of reputation or liability, and could inhibit research.

University of Utah law professor Robin Kundis Craig advocated flexible planning to adapt to a changing ocean. Salmon farmers in Australia work with the government to get scientific predictions on water temperature, so that they can locate their fish farms in areas that won't become too warm for the fish.

Craig also recommended more flexible regulations that account for change. When scientists determined that longline fishermen were catching a lot more endangered sea turtles in areas with higher water temperature, the fishermen volunteered to avoid those areas.