



# Rhode Island’s warming marine waters force iconic species out, disrupt catch limits and change ecosystem services

by FRANK CARINI / ecoRI News

The Ocean State’s warming waters are causing a biomass metamorphosis that is transforming the state’s commercial and recreational fishing industries. **Winter flounder** have all but disappeared, and lobsters are following them out.



Ocean State’s marine waters. The changes also impact ecosystem functioning and services. There’s no end in sight, as the type of fish and their abundance will continue to turn over as waters warm.

For generations, winter flounder was one of the most important fish in Rhode Island waters.



**Capt. Rich Hittinger**

Longtime recreational fisherman **Rich Hittinger** recalled taking his kids fishing in the 1980s, dropping anchor, letting their lines sink to the bottom, waiting about half an hour and then filling their fishing cooler with the oval-shaped, right-eyed flatfish.

Now, four decades later, once-abundant winter flounder is difficult to find. The harvesting or possession of the fish is prohibited in much of Narragansett Bay and in Point Judith and Potter ponds. Anglers must return the ones they accidentally catch to the sea.

Overfishing is easily blamed, and the industry certainly bears responsibility, as does consumer demand. But winter flounder’s local extinction isn’t simply the result of overfishing. Sure, it played a factor, but the reasons are complicated, from habitat loss, pollution and energy



**Winter flounder (NOAA photo)**

production — i.e., the former Brayton Point Power Station in Somerset, Mass., pre-cooling towers, when the since-shuttered facility took in about a billion gallons of water daily from Mount Hope Bay and discharged it at more than 90 degrees Fahrenheit.



**To escape the heat, Rhode Island lobsters are moving northward and into deeper waters to keep cool.**

The climate crisis, however, is likely playing the biggest role, at least at the moment, by shifting currents, creating less oxygenated waters and warming southern New England’s coastal waters. These impacts, which started decades ago, have and are transforming life in the

Rhode Island’s warming water temperatures are causing a biomass metamorphosis that is transforming the state’s commercial and recreational fishing industries, for both better and worse.

**The average water temperature in Narragansett Bay has increased by about 4 degrees Fahrenheit** since the 1960s, according to data kept by the University of Rhode Island’s Graduate School of Oceanography.

Locally, iconic species are disappearing (winter flounder, cod and lobsters), southerly species are appearing more frequently (spot and ocean sunfish) and more unwanted guests are arriving (jellyfish that have an appetite for fish larvae and, in the summer, lionfish, a venomous and fast-reproducing fish with a voracious appetite).

**Dave Monti**, a charter boat captain for the past two decades (and RISAA 2nd VP), has been fishing in Rhode Island and Massachusetts waters for 45 years. He’s seen a lot of change in a fairly limited amount of time.



**Capt. Dave Monti**

He said the type of fish in Rhode Island’s marine waters today is much different than a decade ago. He pointed to the impact of a changing climate. Warm-water fish such as black sea bass, summer flounder and scup are here in abundance, according to Monti. These species are now an integral part of his charter business.

“It would have been unheard of 10 years ago to say black sea bass would be so abundant in our waters, and that it would be a big part of my charter business,” Monti said.

This transfer of fish along the Atlantic Coast is having an impact on commercial fisheries, most notably regarding the issue of assigning stock allocations.

For example, Monti noted that summer flounder moving north has created havoc with catch limits. He said Mid-Atlantic vessels, which possess the summer flounder quotas but now have fewer of the fish in their waters, have moved up the East Coast to fish. New England boats now have the fish in their waters but little allocation.

He said the laws that govern commercial fishing need to keep up with the impacts of the climate crisis. He also noted that as warming waters change the type and abundance of fish in different regions, commercial fishermen have to retool their boats and gear and learn how to catch the species new to their waters. **(to page 35)**