

Island Ad-Vantages

THE VIEW FROM ATLANTIC AVENUE

December 9, 2021: NOTE - It appears the sea surface sensor on the oceanographic buoy has malfunctioned as we have not had a new reading for a couple of weeks.

Readers interested in climate change are aware of the assertion that the Gulf of Maine has been warming faster than 95% of the world's oceans over the past decade. This was a conclusion that was published several years ago and is certainly of concern as these elevated ocean temperatures are having an impact on the habitat and marine critters of all types. At MCCF, we have assumed that this situation is more a reflection of the transport of warm water into the Gulf of Maine rather than some mysterious phenomenon causing localized warming. This warming is actually being caused by disruptions in the currents out in the Atlantic Ocean.

A paper recently published by a group of scientists at the University of Rhode Island analyzes these offshore oceanographic trends and provides an interesting, but troubling set of conclusions about this warming. The lead author is Alfonso Goncalves Neto and the article, titled "*Changes in the Gulf Stream preceded rapid warming of the Northwest Atlantic Shelf,*" is published in Nature and is available through open access online (contact our office if you'd like a link or hard copy). The paper uses observations of ocean temperature and satellite data over the past few decades to demonstrate that oceanic forces including the Labrador Current and the Atlantic Meridional Overturning Circulation (AMOC) have shifted thereby allowing warm Gulf stream waters to make their way into the Gulf of Maine more than usual. Rather than a stagnant pot of water on a stove, we need to think about the Gulf of Maine as a tub of water with a spigot filling it up and a drain letting water out. The amount of that water that comes from the south as part of the Gulf Stream causes the warming. The paper makes some other interesting observations about how these currents are affecting sea level along the Atlantic coast. We need to pay attention to these changes as conditions and the habitat fluctuates, to be able to respond to chance and to manage our fisheries as effectively as possible.

Do you have a question about our fisheries? Send it to info@coastalfisheries.org or call 207.367.2708. Learn more about MCCF by visiting us online at www.coastalfisheries.org

FISHERIES LOG

Prices to Harvesters in Stonington

Scallops: \$20/lb.

Lobsters (shedders): \$5.30/lb.

Bait (frzn. redfish heads): \$37.50/50lbs.

Fuel (diesel): \$3.29/gal.

Oceanographic Buoy I-01

44°6'10"N 68°6'44"W – Frenchboro

Sea Surface Temperature: NA (avg. for this date: 47.5°F)

Bottom Temperature: 50.6°F (avg. for this date: 47.6°F)

Source: www.neracoos.org