

he McMurdo (formerly Boatracs) Omnitracs Vessel Monitoring System (VMS) operated by vessels with Greater Atlantic Region (GAR) permits will not be supported by its satellite provider after March 31, 2020. All current owners of the Omnitracs unit were notified via a letter from McMurdo dated December 19, 2019 about this issue.

### What should you know if you own an Omnitracs unit?

This VMS unit must be replaced by April 1, 2020 or risk being out of compliance with VMS regulations. The unit will not function with any other satellite provider.

Within the GAR, current Type-Approved units include:

• Addvalue iFleetONE (Newly Type-Approved)

• SkyMate I1500 VMS

- SkyMate m1600 VMS
- Woods Hole Group Triton Advanced

For a complete list of approved VMS units by region, visit www. noaafisheries.gov and search "typeapproved VMS units."

While McMurdo has a replacement unit called Omnicom that functions with the Iridium satellite network, this VMS unit is **not yet approved for use in the GAR**.

Vessel owner/operators with questions about their current service or the new Omnicom unit should contact McMurdo directly at 800-262-8722 or fleetsupport@orolia.com.

## What is the status of type-approval of the replacement McMurdo unit?

We are working with McMurdo to test their new Omnicom VMS so that we can recommend

it for approval. However, we cannot say how long this process will take, but have made review of this unit a priority.

#### VMS Reimbursement Program or Information

Reimbursement is available for the purchasing of a new VMS unit **if the vessel owner has never been reimbursed by NOAA for the purchase of a VMS unit for that vessel**. If a vessel owner has previously been reimbursed for a unit for that vessel, reimbursement is not available. Vessel owner/operators with questions on NOAA's VMS reimbursement program or their eligibility for VMS reimbursement should contact the Office of Law Enforcement (OLE) Helpdesk at 888-219-9228 or ole.helpdesk@noaa.gov.

# <u>Wideye iFleetONE</u> <u>Vessel Monitoring</u> <u>System Approved</u> <u>for Use</u>

n February 28, 2020, AddValue Innovation's "Wideye iFleetONE" vessel monitoring system (VMS) was approved for use by commercial fishing vessels with federal permits requiring the use of VMS in the Greater Atlantic Region.

The Wideye iFleetONE is a broadband VMS unit that meets all NOAA VMS requirements, and supports other data, voice, and text services. The unit operates on the Inmarsat satellite network. If you have questions or need more information, please contact Greg Lovingfoss, AddValue Innovation, 732-551-2035 (office) or 954-864-0912 (mobile), or Kleber Moran, Maritime Product Manager, Network Innovations, 954-397-1048.

## New private recreational tilefish permitting and reporting requirements

OAA Fisheries has proposed measures that will require private recreational vessels that intend to target golden or blueline tilefish north of the Virginia/North Carolina border to obtain a federal private recreational tilefish vessel permit. In addition to new permit requirements, these vessels will also be required to fill out and submit an electronic vessel trip report (eVTR) within 24 hours of returning to port for trips where tilefish were targeted and/ or retained. The proposed measures, designed to better characterize and monitor the recreational fisheries for tilefish, were published on January 29, 2020, and we accepted public comments through February 28, 2020. A final rule is pending, which means permit and reporting requirements could begin as soon as May 2020.

The new permitting requirement applies to private boat owners who fish recreationally for blueline and/or golden tilefish. It does not apply to vessels used exclusively for commercial or for-hire tilefish fishing. Because this permit is for private recreational fishing, any fish that are kept may only be used for personal consumption and may not be sold or bartered. Following publication of a final rule, private recreational vessels may apply for a tilefish permit through an online application on the Greater Atlantic Regional Fisheries Office website

There are several platforms available for recreational tilefish anglers to submit the required eVTRs. Fish Online is the simplest system and is the preferred method to submit reports. Users can create an account online at https://www. greateratlantic.fisheries.noaa. gov/apps/login/. Fish Online can be accessed through a computer, a phone, and/or a tablet. The FishOnline app allows fishermen to record their landings and releases during their fishing trips on the boat. The information is stored in the device. Users can then submit their reports to GARFO within



Brad McHale/NOAA Fisheries phot

24 hours of returning to port when an Internet connection is available. The 24-hour submission requirement was intended to coincide with the requirement for Highly Migratory Species permit holders because we expect there to be some overlap between the two groups.

If you would like to receive an announcement when a final rule is published or receive other updates that may affect recreational anglers, you can sign up for our email list by visiting our website at fisheries.noaa.gov and clicking on the "Sign up for our newsletter" at the bottom of the homepage.

For more information, contact Doug Potts at 978-281-9341 or douglas.potts@ noaa.gov.

**THIS SUPPLEMENT PROVIDED BY NOAA FISHERIES SERVICE'S GREATER ATLANTIC REGIONAL OFFICE** Allison Ferreira • Managing Editor • 978-281-9103 • Allison.Ferreira@noaa.gov **The NOAA FISHERIES NAVIGATOR** 

# Fisheries Dependent Data Analysis Supports More Flexible Shortfin Squid Management

he Cooperative Research Branch of our Northeast Fisheries Science Center is working alongside harvesters, processors, scientists, and managers to better understand the northern shortfin squid (Illex illecebrosus) population and fishery to support effective adaptive management. Northern shortfin squid population abundance, biomass, and population characteristics vary widely from year to year, and relatively little is understood about the drivers of recruitment. The most recent stock assessment was conducted in 2006 and the current management is based on a coast-wide quota, preliminary results of this project will be considered for management measures for 2020 and 2021, and further analysis may be considered in the fall 2021 assessment.

Goals of the project include: estimating the spatial impact of the shortfin squid fishery, analyzing patterns in size distribution and catch rates, and developing methods to make in-season predictions of relative abundance. We are working to develop a



habitat map based on a model of probability of encounter using federal, state, and cooperative inshore and offshore fall bottom trawl survey data. Combining records of fishing effort with the habitat map identify the "fishery footprint." Comparing catch or landings rates across years and across segments of the fishery (e.g. between Study Fleet and non-Study Fleet vessels) can help us to understand relative abundance trends and changes in availability of squid to the fishery.

This project will help us develop decisionmaking tools that support more adaptive management measures for shortfin squid. For example, understanding what patterns are associated with years of high (and low) abundance could support an in-season adjustment of quota. This project is just one example of how we aim to make sure research comes full circle from incorporating the data, ideas, and insights from the fishing community into the science that informs management decisions.

For more information on this project, contact Brooke Wright at Brooke.Wright@noaa.gov.

# *Reminder:* <u>Lobster Area 4 Annual Closure</u>

ach year, lobster fishing is prohibited in Lobster Conservation Management Area 4 from April 30 to May 31. During this seasonal closure, federal lobster permit holders may not possess or land lobster taken from

Area 4. We recognize the current challenges to fishing operations, and weare reaching out to permit holders to provide as much time as possible to prepare for this closure.

This measure was developed by the Atlantic States Marine Fisheries Commission to reduce pressure on the Southern New England lobster stock. If you have a federal lobster permit, you must remove all trap gear from Area 4 prior to April 30, 2020, regardless of the species targeted. Federal trap fishermen may not haul, set, store, abandon, or in any way leave their traps in Area 4 during the seasonal closure.

If you intend to fish in this area after the closure, there is a oneweek grace period from May 24 to31 when you are able to reset gear in the closed area. During the grace period, traps that have been reset may not be hauled and no lobster may be possessed or landed.

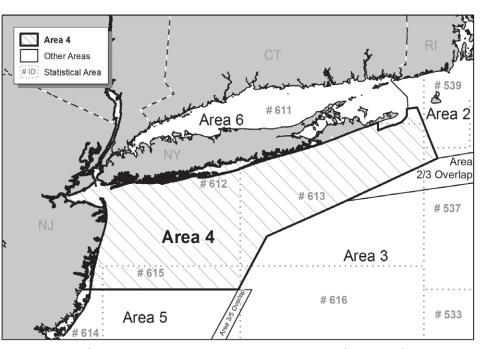


Figure 1. Lobster Conservation Management Area 4 and Surrounding Areas



trap gear in other lobster conservation management areas (such as Area 3 or Area 5) during the closure if your vessel has a valid trap allocation for those areas. If all of your trap gear is stowed, you can transit Area 4 during the closure to reach a destination outside of this area. Where differences in regulations exist between different states or areas, the most restrictive rule applies.

While Area 4 is closed, you can fish

For additional information contact Allison Murphy, Sustainable Fisheries Division, at 978-281-9122 or email her at Allison. Murphy@noaa.gov.

# 2020-2021 Sea Scallop and Monkfish Research Set-Aside Projects Selected

OAA Fisheries has selected 12 sea scallop and two monkfish projects for 2020-2021 awards through research set-aside (RSA) programs. The New England Fishery Management Council established the Sea Scallop RSA Program and the Monkfish RSA Program. They address research questions that support management of commercial fisheries for these species. We expect to make final awards later this month.

"The RSA program improves our scientific understanding of sea scallops and monkfish, which directly contributes to their sustainable management," said Jon Hare, director of the Northeast Fisheries Science Center. Center scientists collect biological data about these species, assess stock condition, and evaluate and monitor fishery performance. The RSA program results are integral to this effort.

The selected projects will investigate sea scallop and monkfish research priorities developed by the council. We expect the awards to generate approximately \$20 million. That includes \$4 million to fund research, and \$16 million to compensate industry partners who harvest the set-aside sea scallops and use monkfish RSA days-atsea.

#### **RSA Program**

In the Northeast's RSA programs, researchers compete for funding through a federal grant competition managed by us. No federal funds support the research. Instead, the programs award pounds of sea scallops and monkfish RSA days-at-sea from amounts "set-aside" annually for this purpose. There are active RSA programs for Atlantic sea scallops, Atlantic herring, and monkfish.

For more information, contact Ryan Silva, Cooperative Research Liaison, at 978-281-9326 or ryan.silva@noaa.gov.



Institution		Set-Aside
(Collaborators)	Scallop Project Title	Award (\$9.50/lb)
Coonamessett Farm Foundation (F/V Kathy Marie)	An intensive optical assessment of sea scallop abundance and distribution in select areas of Georges Bank and Mid Atlantic: Southern Closed Area 2, Southern Flank, Nantucket Lightship South Deep, Elephant Trunk, Hudson Canyon (2 year project)	2020: 256,651lb (\$2,438,180) 2021: 167,467 lb (\$1,590,940)
Rutgers Univ. (Univ. of Southern Mississippi, Old Dominion Univ., Virginia Inst. of Marine Science)	Economic Impacts of Offshore Wind Energy Development on the Commercial Sea Scallop Fishery (2 year project)	2020: 138,076 lb (\$1,311,722) 2021: 19,818 lb (\$188,267)
Maine Dept. of Marine Resources (Univ. of Maine, F/V Nicole Leigh)	Sea Scallop Assessment on Stellwagen Bank	2020: 18,422 lb (\$175,005)
Virginia Inst. of Marine Science (VIMS)	An Assessment of Sea Scallop Abundance and Distribution in the Nantucket Lightship Closed Area (2 year project)	2020: 42,377 lb (\$402,578) 2021: 39,880 lb (\$378,863)
VIMS	An Assessment of Sea Scallop Abundance and Distribution in the Georges Bank Access Areas and Surrounds (2 year project)	2020: 42,020 lb (\$399,192) 2021: 43,460 lb (\$412,870)
VIMS	Age based assessment in the sea scallop Placopecten magellanicus (2 year project)	2020: 109,718 lb (\$1,042,322)
Univ. of Maine (Maine Dept. of Marine Resources, F/Vs Shearwater, Eleanor J)	Quantifying scallop growth and evaluating its spatio- temporal variability in the Northern Gulf of Maine	2020: 20,451 lb (\$194,280)
Univ. of Massachusetts, Dartmouth (SMAST)	High-resolution drop camera survey examining the scallop recruitment event in the Gulf of Maine (2 year project)	2020: 113,834 lb (\$1,252,419)
SMAST	High-resolution drop camera surveys to track scallop and predator populations in Nantucket Lightship and Elephant Trunk, and examine the effects of increase quadrat sampling	2020: 91,671 lb (\$870,875)
SMAST	Drop camera survey to track scallop aggregations in Closed Area II access area and Closed Area II Extension	2020: 50,005 lb (\$475,049)
SMAST	A seasonal video-trawl survey to assess the population size of yellowtail flounder (Pleuronectes ferruginea) and windowpane (Scophthalmus aquosus) in Closed Area II	2020: 121,676 lb (\$1,155,924)
Woods Hole Oceanographic Inst. (Northeastern Univ., F/Vs Liberty, Justice, Venture, Edgartown)	Investigating Links Between Environmental Conditions and Scallop Meat Condition to Predict the Regional Vulnerability of Fishing Stocks Under Future Ocean Acidification and Warming (2 year project)	2020: 140,148 lb (\$1,331,402) 2021: 75,316 lb (\$715,503)
Monkfish Projects		
Arizona State University (New England Aquarium)	The use of novel fishery-independent tagging technology to investigate the movements and stock structure of adult Monkfish (Lophius americanus) along the United States East Coast	2020: 400 DAS (\$2,102,582) 2021: 399 DAS (\$2,099,397)
University of Delaware	Using Deep Learning Image Analysis to Detect Monkfish from Seabed Imagery - Development and Implementation of a Convolutional Neural Network for Survey Applications	2020: 100 DAS (\$526,300) 2021: 101 DAS (\$531,563)

# The NOAA FISHERIES NAVIGATOR

# Fish Passage Milestones Celebrated on Maine's Sheepscot River

n 2019, NOAA celebrated two restoration milestones on Maine's Sheepscot River, where fish passage barriers were removed at the two lowermost dams on the river in partnership with the Atlantic Salmon Federation and two local towns. The Coopers Mills dam in Whitefield, Maine was fully removed in 2018, while the Head Tide Dam in Alna, Maine, was partially removed and fish passage rebuilt in 2019.

"Removing these barriers to fish passage on the Sheepscot River has restored access to valuable upstream spawning habitats for endangered Atlantic salmon as well as for other sea-run fish, such as river herring and shad. Not only will the return of these fish benefit local fisheries and the ecosystem, but it will also support popular recreational and commercial fisheries for striped bass and cod, which prey on these sea-run fish," says Michael Pentony, regional administrator for NOAA Fisheries Greater Atlantic Region. "After more than a decade of collaborative efforts, we congratulate the many partners in these projects on this success, and look forward to seeing the return of sea-run fish in the Sheepscot River."

The Sheepscot River is the southernmost river in the United States where Atlantic salmon, a NOAA Species in the Spotlight, consistently spawn in the wild. The river also supports a longstanding commercial alewife fishery, where lobster fishermen regularly line up in the spring to purchase bait.

#### Head Tide Dam Removal

On a very rainy October 31, 2019, the restoration community celebrated the breach of the Head Tide dam on the Sheepscot River, but the weather didn't dampen the spirits of the many people who showed up to celebrate this historic event. John Kocik, research fisheries biologist with the Northeast Fisheries Science Center, gave remarks on behalf of NOAA, thanking the many partners and NOAA's Restoration Center for their work overseeing the design, permitting, and construction of the fish



passage improvements.

The project was a creative and collaborative workaround to a deeded agreement to the town of Alna that stipulated that the dam not be destroyed. The fish passage improvements included a partial removal of the dam, building on the success of the 2018 removal of the Coopers Mills dam upstream. As part of the project, partners worked on improvements to an adjacent park, installation of interpretive signage, and an observation deck. The project also included twodimensional hydraulic modeling to verify fish passage for all sea-run species, and innovative roughness elements like form liners and bedrock scarification to make passage resemble natural conditions.

The Atlantic Salmon Federation led the project, partnering with Town of Alna, Maine, U.S. Fish & Wildlife Service, Maine Department of Marine Resources, The Nature Conservancy, Midcoast Conservancy, Inter-fluve (design engineer) and SumCo Eco-Contracting, LLC (construction contractor).

#### **Coopers Mills Dam Removal**

Earlier in 2019, on May 20, more than 30 people from the town of Whitefield, Maine, Atlantic Salmon Federation, Midcoast Conservancy, and state and federal agencies gathered on the banks of the Sheepscot River to celebrate the removal of the Coopers Mills dam, a milestone nearly two decades in the making.

The dam removal underscored the crucial role of NOAA's Restoration Center in funding projects in support of the recovery plan for Atlantic salmon. The Coopers Mills dam removal—also designed by Interfluve and constructed by SumCo Ecocontracting, LLC—included an innovative dry hydrant system that provides water for firefighting (important to the rural community and a condition of permitting) and a small park with scenic overlook constructed with stone from the former dam and pathways around historic mill foundations referred to by locals as the "Zen Garden."

#### Looking to the Future

Biologists from the Maine Department of Marine Resources confirmed the presence of adult Atlantic salmon last fall upstream of the Head Tide and Coopers Mils dam removal projects, swimming freely.

In 2020, NOAA, the Atlantic Salmon Federation and other partners are looking at the feasibility of other fish passage projects in the Sheepscot River watershed, especially at historic alewife ponds to restore this important sea-run species to its native range.

For more information, contact Matt Bernier, NOAA Restoration Center, at 207-866-7409 or matthew.bernier@noaa.gov.



## **Thinking About Getting into Aquaculture?**

ur region has a vibrant commercial marine aquaculture industry supported by a world-class research and technology sector. Farmed species include finfish, shellfish, and sea vegetables. Oysters, clams, mussels, scallops, Atlantic salmon, and kelp are commonly farmed marine species in the region. Hatchery-raised species are also grown to support important commercial and recreational fisheries, as well as for habitat and endangered species restoration.

Aquaculture production in the region is on the rise. Shellfish aquaculture is now the third most valuable fishery in terms of economic revenue behind sea scallops and American lobster, and there is capacity for increased aquaculture production in our waters. NOAA Fisheries, along with a number of states in the region, are looking toward aquaculture as a means of diversifying and increasing the resilience of our coastal communities and promoting the ecosystem services associated with aquaculture.

We work with state and federal agencies in the region to support increased aquaculture



opportunities, while ensuring they are compatible with NOAA's conservation objectives and diverse use of our coastal and ocean resources.

If you are thinking about getting involved with aquaculture, we offer numerous resources on our website https://www.fisheries.noaa.gov/topic/ aquaculture that provide information on a variety of related topics, including raising different species, siting and permitting your facility to avoid environmental and user group impacts, and combating disease.

A good first place to start is by contacting one of our Regional Aquaculture Coordinators:

Kevin Madley: (978) 282-8494, Kevin. Madley@noaa.gov

Chris Schillaci: (978) 281-9311, Christopher. Schillaci@noaa.gov