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MLA Wishes A Fine Farewell to the Division of Marine Fisheries Director David Pierce PhD.

After 48 years with the Massachusetts Division of Marine Fisheries, Director David Pierce PhD will be retiring effective November 1, 2019. His many decades of service to the Commonwealth and commercial fishing industry have been often met with scores of tough challenges and decisions to ensure the resources are harvested within the sustainable levels while supporting the many desires of the commercial fleet.

A word from Director David Pierce to the Massachusetts Lobstermen's Association (MLA);

"I've had great respect and appreciation for MLA stretching back to my early days working for the Division of Marine Fisheries that began in 1972.



I've dealt with many gear conflict issues of concern to lobstermen as you've competed for space with mobile gear fishermen. I've learned a lot from MLA leadership, especially Bill Adler and Beth Casoni, and I have relied on their expertise and ability to corral a tough group of fishermen working in a challenging environment made even more difficult by rules and regulations you fishermen have had to embrace, sometimes grudgingly. DMF's staff will continue to benefit from collaboration with MLA membership

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If you tweet and want to follow the MLA this is a great way to stay up to date with all kinds of fisheries related news.



YOUTUBE

<http://www.youtube.com/user/lobsterdiva>

If you have any videos of fishing you would like to share please send them along. The MLA this has the camera rolling with all kinds of fisheries related news videos. Take a look!



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COVER STORY

long after my retirement. I'll still keep track of MLA issues, concerns, and cooperation with DMF especially because I teach a course on ocean policy at SMAST. The fate of the Massachusetts lobster industry due to ocean warming, bait shortages, and the seasonal presence of right whales will prompt all sorts of policy debates. I'll likely weigh-in from time to time, David"

David has been the Director since September 2015 and has been a tried and true manager when he has had to make the tough decisions to reduce quota or increase quota to ensure all stocks are harvested sustainable. Being the Director or a fisheries manager is not a job for the thin skinned and David has taken on the battles when fighting for more quotas for the Massachusetts fleet so they could benefit from all the successful conservation measures.

David currently serves as a Massachusetts representative on several pivotal fisheries boards, including the New England Fishery Management Council and the Atlantic States Marine Fisheries Commission. When David speaks at these meetings others listen as his approach is methodical to the issue at hand and his voice of reason will be missed.

David, from all of us at the Massachusetts Lobstermen's Association we have enjoyed working with you over the years on many fishery issues and wish you the best in the next chapter of your life. Remember buy local and eat lots of fresh LOBSTER J!



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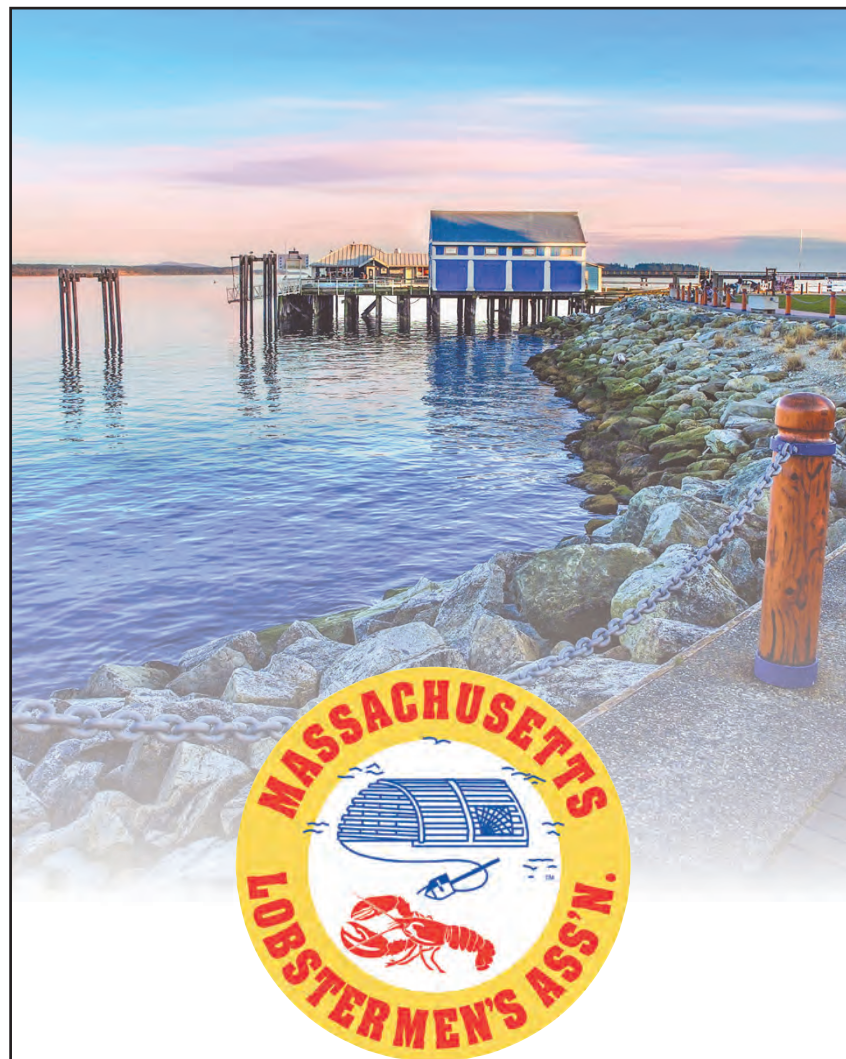
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The Massachusetts Lobstermen's Association would like to welcome the following new members to the Association. Your Association will continue its efforts on your behalf to conserve the resource, protect your livelihood, keep you informed, promote the industry and provide you with increasing benefits as they are developed. MLA stands ready to help you in anyway, at anytime — just let us know how!

Safe on the water and good fishing!

**New Members
October 2019**

	F/V Name	Port
Justin Goodwin	F/V Maverick	Hull
Taylor Smith	F/V Ishmael	Hewitts Cove
Robert Fautz	F/V JoAnn Frances	Gloucester

Calendar of Events

OCTOBER

10/10 MA Seafood Day at the State House

11-1pm Great Hall of Flags

10/14 Columbus Day! MLA and FISH offices are closed. State House, Boston MA

10/16 MLA Delegates meeting 7:00pm
Sons of Italy Hall Quincy, MA 02169

10/17 MA Marine Fisheries Commission 9:00
DFW's Field Headquarters, Westborough, MA

NOVEMBER

NO DELEGATES MEETING IN NOVEMBER

11/11 Veterans Day! MLA and FISH offices are closed

11/14 MA Marine Fisheries Commission 9:00
DFW's Field Headquarters, Westborough, MA

11/27-29 Thanksgiving MLA and FISH offices are closed

DECEMBER

12/4 MLA Delegates meeting 7:00pm
Sons of Italy Hall Quincy, MA 02169

12/19 MA Marine Fisheries Commission 9:00
DFW's Field Headquarters, Westborough, MA

12/24-25 Christmas MLA and FISH offices are closed

Please check the MLA website for more meetings and events as they will be added.



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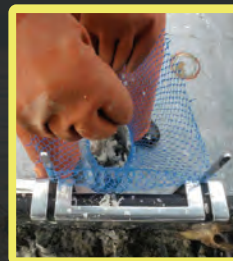


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As the HAULER TURNS

Tick or treat? I am sure in need of a treat after the warm and down right hot September we just had. A lot of people like the warmer weather but its wreaking havoc on the environment as many of you are well aware of. As we welcome the cooler October weather let's hope that we do not have a repeat of the freak anomaly that happened in Cape Cod Bay last month. The MA Division of Marine Fisheries has been on top of this and we would like thank the entire team for the immediate response. Please read the update from the DMF.



David E. Pierce, PhD.
Director

Commonwealth of Massachusetts

Division of Marine Fisheries

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To: David Pierce, Director

From: Bob Glenn, Program Manager

Cc: Dan McKiernan, Mike Armstrong, Kathryn Ford, Mike Hickey

Date: September 26, 2019

Re: Lobster and fish mortality event in Cape Cod Bay

On Monday, September 23rd we received initial reports of a fisherman encountering dead lobsters in his traps in southern Cape Cod Bay (CCB). Staff contacted one fisherman who had reported dead lobsters to the MLA and discussed sampling with him later in the week. Staff also spoke with an MLA representative who provided two additional fishermen's names that had reported dead lobsters in their traps. On Tuesday, September 24th we received an additional seven reports of dead lobsters and finfish coming up in the traps of commercial lobstermen in southern CCB roughly from Scorton's Ledge east to the mouth of Barnstable Harbor at depths ranging from 30 to 70 ft of water. Reports ranged from a dozen to several hundred dead lobsters observed by fishermen within the course of hauling their gear on a fishing day. Subsequent interviews of the fishermen revealed that the first observed incidence of dead lobsters occurred on Friday September 20th off of Barnstable Harbor at 40 to 60' of waters. Additionally, staff spoke with a dragger captain (otter trawl) who observed dead scallops on September 15th and 16th, slightly ENE of the lobster reports in roughly 80' depth (3-4 tows with 50% dead scallop ratio or worse). DMF staff was aboard a commercial lobster vessel on Friday September 20th in western CCB (off of Plymouth) conducting routine monitoring and no dead lobsters were observed out of several hundred trap hauls. Subsequent phone interviews of 2 other fishermen who fish in western CCB revealed that they have not observed any dead lobsters or fish coming up in traps.

On Wednesday, September 25th 2019 MADMF initiated a full scale investigation of the event. We sent a dive team to investigate the Scorton's Ledge area (the area of the initial report). The divers exchanged the temperature logger at our long-term bottom water temperature monitoring station at Scorton's Ledge. Data will be downloaded and investigated for anomalies in the coming days. Divers also conducted three 100 meter visual transect in the Scorton's Ledge area to note the presence of any dead lobsters or fish on the bottom or in lobster traps. The divers did not find any evidence of dead invertebrates or fish on the ocean floor, however, they did note observing a few "very lethargic" looking lobsters present in some of the traps they encountered during the transect surveys. Additionally, on September 25th 2019, DMF staff aboard the dive vessel collected several dissolved oxygen (DO) readings on the sea floor at depths of 15 to 20 meters in the area of Scorton's Ledge. We also had a DMF team out on 9/26 collecting DO readings throughout Cape Cod Bay.

DMF staff has reached out to 4 different commercial lobstermen who reporting observing dead lobsters to arrange sampling trips on their vessels. Two of the lobstermen agreed to take out DMF staff. On September 25th we had a DMF staff biologist aboard a lobster vessel monitoring catch for dead lobsters in the Scorton's Ledge area. Today (September 26, 2019) we have a DMF staff biologist aboard a different commercial lobster vessel

monitoring catch farther to the east off of Barnstable Harbor. In the coming days we will continue to send staff aboard commercial lobster vessels in the vicinity who are willing to take us out.

We collected 20 dead lobsters and 4 dead finfish (3 cunner, and 1 wrymouth) from 3 different commercial lobstermen. One batch of samples (all lobsters) was collected the evening of Sept 24th, the second larger batch of samples (lobsters and fish) was collected Sept 25th. These samples were immediately taken to a pathology lab (Kennebec River Biosciences in Kennebec, Maine) for a full pathology and toxicology work up. Results will be available in a few days.

As part of the investigation DMF staff is collecting all available environmental data, as well as other information that might be pertinent to a mortality event of crustaceans and finfish. This includes retrieving archived environmental data (temperature, wind direction, wind speed, and precipitation) from NOAA. These data will be analyzed and summarized in the coming days. DMF staff also reached out to mosquito control projects in Barnstable, Bristol, Plymouth, Norfolk, Suffolk, and Essex counties to get up to date information on aerial spraying for mosquitoes. The synthetic pyrethroids commonly used for mosquito control are highly toxic to fish and aquatic invertebrates. We are looking at the location, timing, and frequency of aerial spraying to see if it correlates with the lobster and fish mortality in CCB. However, it should be noted that the risk of pesticide toxicity to marine animals *in situ* is extraordinarily low because: 1) All Massachusetts mosquito control programs maintain a wide buffer around bodies of water when spraying; 2) Synthetic pyrethroids rapidly degrade in the presence of sunlight; 3) The volume of water in the bay is so large that pesticides from standard

applications that did make into the marine environment typically dilute to well below toxic thresholds. Additionally, rain events immediately following spraying would be necessary to transport pesticides sprayed over land into nearby bodies of water, and during the time leading up to the reports of dead lobsters there have been no significant rain events, and what little rain occurred (Sept 13, 0.7 inches reported in Hyannis) did not occur in conjunction with spraying.

What we know:

*Between September 20th and present there has been a moderate scale mortality event (hundreds to thousands) of lobsters, crabs, and fish in observed in traps in southern Cape Cod Bay. We also have one report of a dead sea-scallop coming up in one the lobster traps, as well as the dragger report of dead scallops north of Barnstable Harbor. This appears to be isolated to the area roughly from Scorton's Ledge to the mouth of Barnstable Harbor in depths ranging from 30' to 90' of waters.

*The western portion of CCB appears to be fine.

*Preliminary review of information on aerial spraying of synthetic pyrethroids for mosquito control suggests that this has nothing to do with recent lobster and fish mortality events in Cape Cod Bay. The location and timing of spraying do not correlate with the mortality event. In fact no aerial spraying has occurred in the portions of Barnstable County immediately surrounding Cape Cod Bay.

*Pathology results of lobsters and crabs are forthcoming. However, given the acuteness of the event and that mortality was observed in crustaceans, fish, and bivalves it seems unlikely that the mortalities were related to exposure to a pathogen.

*DMF staff have identified a moderate size area in southern Cape Cod Bay (see map below) where the DO concentration in the bottom water is extremely low. Readings taken ranged from 0.3 mg/L to 7.3 mg/L in bottom samples taken over the past two days. Current bottom temperatures range from 10.6 to 17.9 depending on depth; salinities range from 30.3 to 32.1 ppt. At temperatures of 12 °C and salinity of 31.9 ppt, 100% O2 saturation would be 10.6 mg/L. DO levels below roughly 2 mg/L are lethal to most fish and marine invertebrates. The DO observations recorded by DMF suggest severely hypoxic conditions over a fairly large area in southern Cape Cod Bay. All signs point to the mortality event being related to hypoxic conditions. Additional supporting hypoxia as the cause includes reports from two vessels of "weak" lobsters recovering rapidly after being placed in keeper tanks fed with flow-through surface waters (well-oxygenated). DMF staff will continue making trips and taking additional DO readings to try to map the extent of anoxic area.

*Sea surface temperatures in Cape Cod Bay are around 20 °C and bottom temperatures vary between 10 °C and 18 °C, depending on depth. This indicates a moderately high degree of stratification in the water column. In fact, DMF divers noted the presence of strong thermocline between 6' and 8' off of the bottom. This type of stratification can lead to anoxic conditions close to the sea floor as cold water, which is denser than warm water, sinks to the bottom and becomes isolated from the well-oxygenated surface waters.

Next steps:

*DMF staff will continue to conduct sampling trips with cooperating commercial lobstermen in Cape Cod Bay to document the extent and distribution of the mortality event.

*DMF will analyze and summarize all available environmental data to help provide context to this event.

*DMF is consulting with oceanographic experts at WHOI to better understand and explain the causes of the hypoxic event in Cape Cod Bay.

*DMF will continue to monitor DO in Cape Cod Bay to try to map the spatial extent and the persistence of the hypoxic conditions in Cape Cod Bay. We may need additional DMF staff, vessels, and YSI meters to adequately monitor this situation.

After you have had a chance to read this and really get your head around the long term implication this can and will have on the lobster resource, events like this will have a ripple effect as the loss to the stock will be felt over many years due to the loss of egg bearing females and the smaller animals. Please remember if you see anything like this happening in your area call 508.738.1245 or email me beth.casoni@lobstermen.com. **DO NOT PUT IT ON SOCIAL MEDIA.**

As always safe fishing, Beth Casoni

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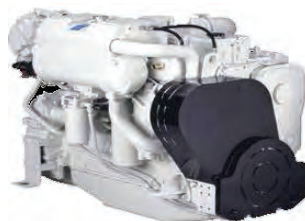


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Marine Fisheries Advisory

Atlantic Herring Management Area 1A Closure for Period 3 Starting September 15, 2019

Area 1A – Period 3 Closure

The directed Atlantic sea herring fishery in Management Area 1A is projected to have harvested 92% of the Period 3 (September 1 – October 31) allocation by September 14, 2019 (Closure Notice). Accordingly, effective at 12:01am on Sunday September 15, 2019, the Area 1A sea herring fishery will move to zero landing days through October 31, 2019. During this closed period, the catch, landing and sale of sea herring taken from Management Area 1, with the following exemptions.

Commercial fishing vessels that have declared into the fishery, and have been issued a Statement of Permit Conditions, from the Division of Marine Fisheries.

These vessels may continue to land an incidental catch of Atlantic sea herring of up to 2,000 pounds per calendar day or per trip, whichever is longer. For the purpose of this closure, landing means transfer of herring from any vessel onto any land, dock, pier,

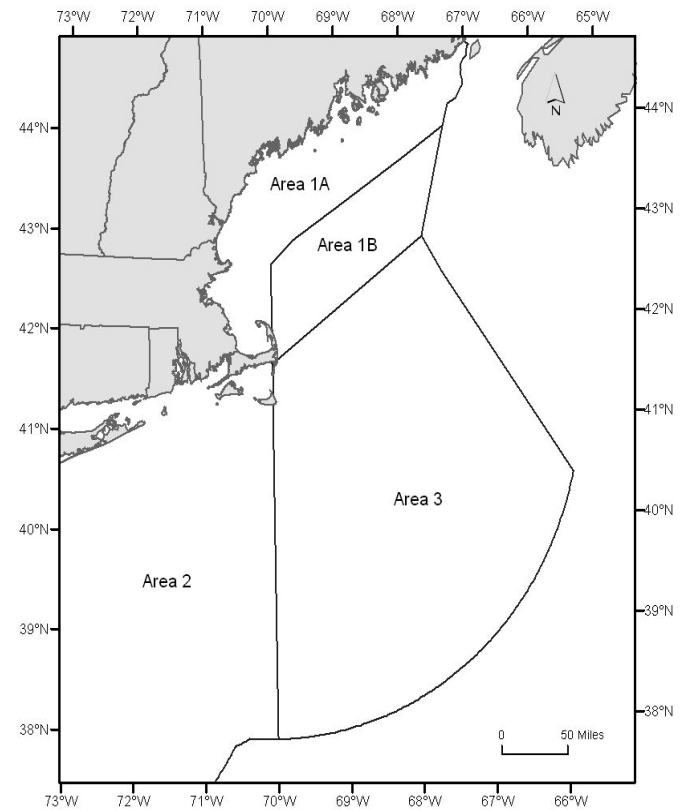
wharf or other artificial structure.

Vessels may transit Management Area 1A in possession of non-conforming quantities of Atlantic sea herring, provided the herring were lawfully caught outside of the area and all gear is stowed.

Dealers acting as primary buyers of Atlantic sea herring are prohibited from purchasing or receiving more than 2,000 pounds of Atlantic sea herring harvested from Management Area 1A by any vessel during any trip or calendar day.

Area 1A – Period 4 Measures

The ASMFC Atlantic Herring Section (states of MA, NH, and ME) will determine the specifications for Management Area 1A Period 4 (November 1 – December 31, 2019) during the next Days Out Conference Call in October.



For more information, please contact Cate O'Keefe (508-742-9744) (Catherine.O'Keefe@mass.gov).

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Dear Colleagues,

At the end of 2019, I will be retiring from the New England Aquarium. I am delighted to report that my accomplished and brilliant colleague Peter Corkeron will be taking my place at the helm of the Marine Mammal Research Program at the Aquarium. In addition, we have hired Jessica Redfern to start a new Spatial Ecology Program which will also have a focus on marine mammals. Combined, I am confident that marine mammal research and conservation at this institution is in excellent hands, and I look forward to seeing their work influence ocean conservation for years to come.

Although I am retiring, I plan to remain engaged in a variety of ocean and whale science and conservation efforts. I will be the Chair of the Right Whale Consortium for three years starting in 2020, and I am giving myself a sabbatical for the first year of my retirement to write a book about the history of, and lessons learned from, the right whale program and conservation efforts in the North Atlantic. I will still

be participating in an automated whale detection project, and I will also be looking for opportunities for expeditions to the Atlantic Canyons and Seamounts monument. My status at the Aquarium will likely be "emeritus" for some time, although I will be using a new email, scottdkraus@gmail.com.

My address and phone numbers will change, and I will send another email out when those have been finalized. If you have crazy ideas in which you think I might add some value, feel free to contact me – I am always up for a good expedition or boondoggle!

With warm regards to you all,

Scott D. Kraus, PhD.
VP, Senior Science Advisor
Chief Scientist,
Marine Mammals
Anderson-Cabot
Center for Ocean Life
New England
Aquarium
Central Wharf
Boston, MA 02110
617-973-5457



David E. Pierce, PhD.
Director

Commonwealth of Massachusetts

Division of Marine Fisheries

251 Causeway Street, Suite 400

Boston, Massachusetts 02114

(617) 626-1520

fax (617) 626-1509



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Kathleen Theoharides
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Mary-Lee King
Deputy Commissioner

September 19, 2019
Marine Fisheries Advisory

EFFECTIVE SEPTEMBER 20, 2019: COMMERCIAL LIMITED ACCESS MENHADEN FISHERY TRIP LIMIT INCREASED TO 25,000 POUNDS

The Division of Marine Fisheries (DMF) has received a transfer of commercial menhaden quota enabling the limited access fishery trip limit to be increased back to 25,000 pounds, effective at 0001 hours on Friday, September 20 ([Re-Opening Notice](#) and [Permit Conditions](#)). This 25,000-pound limited access fishery trip limit will remain in effect until 95% of the adjusted 2019 commercial quota is taken, at which time it will be reduced to 6,000 pounds.

The 2019 commercial menhaden fishery opened with a 6,045,252-pound annual quota. By regulation, the commercial limited access menhaden fishery trip limit starts at 125,000 pounds and is reduced to 25,000 pounds when 85% of the quota is taken and 6,000 pounds when 95% of the quota is taken. Due to reaching these landings thresholds, the trip limit was reduced to 25,000 pounds on August 9 and 6,000 pounds on August 16. DMF then received a combined transfer of 500,000 pounds of additional menhaden quota from the states of Rhode Island and Connecticut. This resulted in landings being between 85–95% of the adjusted quota, allowing DMF to reopen the fishery on August 22 with a 25,000-pound trip limit. The trip limit was again reduced to 6,000 pounds on September 6 after 95% of the adjusted quota was taken. DMF has since received an additional quota transfer from the state of Connecticut. Landings are again between 85–95% of the adjusted quota, allowing the fishery to reopen at a 25,000-pound trip limit. This trip limit increase will allow both small-scale and mid-sized fishery participants continued access to the menhaden population that remains abundant in our state waters.

For more information regarding the management of marine fisheries in the Commonwealth of Massachusetts, please visit our website at www.mass.gov/marinefisheries.

Approved March 29, 2019 Protocol Number: HIRB00007523

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The Northeast Center for Occupational Health and Safety, in partnership with Johns Hopkins University and UMass Amherst, is studying how fishing vessel operators use mobile apps to help with safety issues.

Participants will complete one or two questionnaires about their fishing experience, safety concerns, and use of mobile apps. Some participants will be asked to try a specific mobile app. Each questionnaire takes about 30 minutes. Participants will receive a \$50 gift card for each questionnaire completed.

Eligible participants are commercial fishing vessel captains fluent in English who fish with a crew and who have an iPhone, iPad, iPod Touch, or an Android phone or tablet.



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David E. Pierce, PhD
Director

Commonwealth of Massachusetts

Division of Marine Fisheries

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Boston, Massachusetts 02114

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fax (617)626-1509



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Mary-Lee King

Deputy Commissioner

September 24, 2019

Public Hearing: Updates to Lobster Processing Regulations

Under the provisions of M.G.L. c. 30A and pursuant to the authority found at M.G.L. c. 130 §§ 17A, 44, 80 and 104, the Division of Marine Fisheries (DMF) is proposing regulatory amendments to 322 CMR §6.32 to revise its lobster processing regulations consistent with recent changes to G.L. c. 130 §44 that accommodate additional commerce in shell-on lobster parts and opportunities to process whole live lobsters into shell-on lobster parts. The proposed regulatory amendments include:

1. Authorizing permitted wholesale dealers to process whole live lobsters of legal size into shell-on lobster parts and import shell-on lobster parts into the Commonwealth for processing. All shell-on lobsters tail shall weight at least 3 oz. All processing activity shall be conducted in accordance with the relevant Department of Public Health regulations.
2. Requiring all processed shell-on lobster parts and packages thereof to be labeled. Product processed in Massachusetts shall be labeled with a description of the product, the license number, the address of the facility where they are processed, and the date of processing. All imported shell-on lobster parts must be accompanied by a bill of lading, or similar documentation, describing the product, identity and address of the original processor, name of the receiving dealer in Massachusetts, and the address of the wholesale dealer in Massachusetts where processing will occur.
3. Allowing the in-state wholesale and retail distribution of shell-on lobster parts. All shell-on on lobster tail shall weight at least 3 oz.

Public Hearing Schedule

The Division of Marine Fisheries has scheduled one public hearing for:

9 AM

October 17, 2019

DFW's Field Headquarters

1 Rabbit Hill Road

Westborough, MA

Public Comment Instructions

The Division of Marine Fisheries will accept written public comment through 5PM on Wednesday, October 16, 2019. Please address all written comments to Director Pierce and submit to DMF by e-mail at marine.fish@state.ma.us or by post to 251 Causeway Street, Suite 400, Boston, MA 02114.

For a copy of the strikethrough regulatory text please visit our [website](http://www.mass.gov/dmf) or contact Jared Silva (jared.silva@state.ma.us; 617-626-1534).

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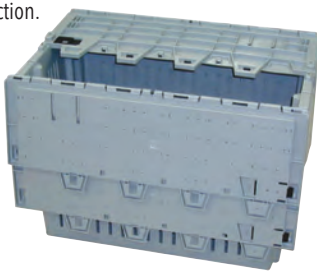
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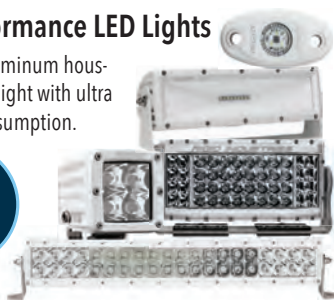
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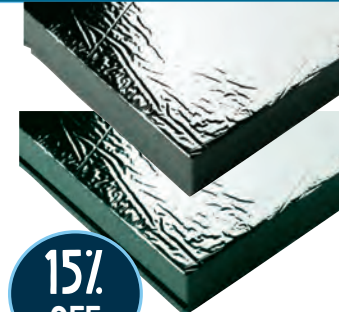
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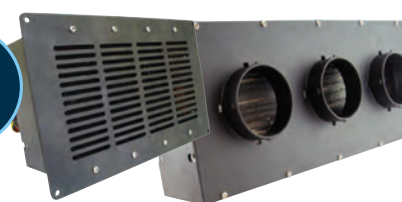


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New England Fishery Management Council

FOR IMMEDIATE RELEASE
September 25, 2019

PRESS CONTACT: Janice Plante
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New England Council Elects Dr. John Quinn as Chair, Eric Reid as Vice Chair; Bids Fond Farewell to Two Long-Time Members

At the start of its September 23-26, 2019 meeting in Gloucester, MA, the New England Fishery Management Council unanimously elected Dr. John Quinn of Massachusetts to serve a fourth consecutive term as Council chairman. The Council also elected Eric Reid of Rhode Island to serve as Council vice chair.

Dr. Quinn is Assistant Dean of Public Interest Law and External Relations at the University of Massachusetts (UMass) School of Law. He is a former member of the Massachusetts House of Representatives, where he spent 18 years serving on numerous important committees. He also represented many fishing interests while practicing law in private practice for over two decades in New Bedford before joining UMass. He is serving his third term on the Council.

"I appreciate everyone's trust in my leading this Council for the next year," said Dr. Quinn.

Eric Reid is serving his second term on the Council. He has been involved with commercial and recreational fisheries for over 45 years. He currently works for Seafreeze Shoreside Inc., a large, full-service seafood processing facility in Galilee, Rhode Island. He previously owned and operated his own business, Deep Sea Fish of Rhode Island, for 11 years before joining Seafreeze in 2013, and he worked for numerous other processing companies before that. In his earlier years, he spent time on for-hire vessels and as a commercial fisherman. He replaces Terry Stockwell of Maine, who served as Council vice chair for the past four years and was chairman prior to Dr. Quinn's tenure.

Executive Committee

The Council's Executive Committee is made up of the Council chair, vice chair, and three elected members. This year, the Council elected **Elizabeth "Libby" Etrie** of Massachusetts, **Terry Alexander of Maine**, and **Dr. Matt McKenzie** of Connecticut to fill out the slate. The committee oversees the Council budget, appoints advisory panel members, addresses administrative matters, and provides Council leadership and direction on numerous policy matters. The committee works closely with the Council's executive director and meets prior to each Council meeting.



Council Chairman Dr. John Quinn. – NEFMC photo



New England Fishery Management Council

Three members of the New England Council were reappointed this summer to serve an additional term. Appointees are allowed to serve three consecutive three-year terms before being required to step down. The reappointed members are: **Mark Godfroy** of New Hampshire, 2nd term; **Dr. Mike Sissenwine** of Massachusetts, 3rd term, and **Rick Bellavance** of Rhode Island, 2nd term.

Meet Our
Council Members
and Read Their Bios
[HERE](#)

Council Bids Fond Farewell and Pays Tribute to Dr. David Pierce and Doug Grout

The Council also paid tribute to two long-serving members – Dr. David Pierce, director of the Massachusetts Division of Marine Fisheries, and Doug Grout, chief of the New Hampshire Fish and Game Department's Marine Division. Both are retiring from their state positions and, as such, were participating in their last New England Fishery Management Council meeting in an official capacity.

Dr. Pierce has been involved in Council activities for over 40 years, almost from the Council's inception. He brought a wealth of knowledge and experience to the table, and his focused attention on herring and hands-on involvement in the management of all fisheries greatly benefitted the Council during many challenging discussions. Dr. Pierce witnessed the evolution of the groundfish and scallop fisheries as they transitioned from open access to closed access. To many, he will be long remembered for championing fair and measured management of the spiny dogfish fishery.

Chairman Quinn, who pointed out Dr. Pierce's affinity for making very long motions, said, "Through your balanced reasoning and careful study, you often made us think deeply about hard issues. We want to express our thanks for the countless contributions you have made to our work over your storied career."

Doug Grout began sitting at the Council table as New Hampshire's marine fisheries official over a decade ago. He also has made numerous contribution to the advancement of the Council's management actions.

"We appreciated your service in all facets of our work," said Chairman Quinn, "but your leadership on habitat issues is where you truly left your mark on this Council. Once you took over as chair of the Habitat Committee, you navigated the Council through new terrain as offshore energy issues became more prominent in our region. We thank you for this and for the many other times we leaned on you for insight and guidance."



Doug Grout, left, with Dr. David Pierce. – NEMFC photo



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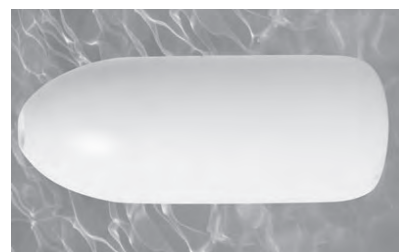
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Huge Turnout for Inaugural Marshfield LobsterFest

By: James Kukstis

The sun came out for the first annual Marshfield LobsterFest – and so did area residents, in numbers far surpassing the expectations of organizers.

“It’s going awesome,” said Lara Brait, Executive Director of the Marshfield Chamber of Commerce a couple hours into the festival, which played host to dozens of food and artisan vendors alongside maritime education, live music and numerous children’s activities on Sunday, Sept. 8.

Brait said the number of community sponsors and local vendors involved strikes at the heart of why they decided to start this new tradition.

“That’s what this event is really all about,” she said. “We started this with the idea of wanting to promote how beautiful Marshfield’s coastline is, of wanting to promote local businesses and restaurants. After all, we’re the Chamber of Commerce, and that’s what we do: support local business.”

Visitors waited in long lines to try the food from a number of different food trucks, including, of course, lobster dishes. The chamber itself was selling lobster-themed t-shirts, baby onesies, lollipops, headbands and foam claws, with all proceeds benefitting their Webster Walkability initiative, which seeks to make improvements to the town center’s walking infrastructure. LobsterFest was initially set to take place the day before, on Saturday, Sept. 7, but organizers made the decision to postpone after seeing the weather forecast impacted by Hurricane Dorian. The change, though, seemed to have little impact on the festival’s success.

“We were so lucky, 98 percent of our vendors were able to switch,” Brait said. “All of our bands were able to switch too, which is unheard of, so we’re very grateful for everyone’s cooperation.”

Marshfield’s hometown brewery, Stellwagen Beer Company, was on hand to pour their flagship drafts, with a line forming even before the event’s official start at noon.

<https://marshfield.wickedlocal.com/news/20190908/huge-turnout-for-inaugural-marshfield-lobsterfest>

Inaugural Marshfield LobsterFest was a Huge Success

The Massachusetts Lobstermen’s Association (MLA) participated in the year long preparation for the inaugural LobsterFest held in the Brantrock section of Marshfield on September 8th. The original date was September 7th

but due to a hurricane coming up the coast was delayed a day, sorry to anyone who did not see all the media coverage about the date change.

The weather was perfect on Sunday and the crowds sure did come by the bus loads. There was music, lobster rolls, boiled lobster, pizza trucks and many more food options. The event hosted a children’s bouncy house area where they could jump to their hearts delight.

No one and I mean no one could have anticipated over 6,000 people attending the event so ALL the food was eaten and ALL the beer was drank and in

the end it was a great day. The MLA worked with Dave Crest Catering to help him procure locally caught lobsters for the event. The lobsters were local for sure!



The MLA booth was manned by Tracey Abboud, Donna Chepren, Julia Logan, Beth Casoni, and Dave Casoni gave a Lobster 1010 talk to the event participants on all things lobster related. The MLA had on display a 20’ inflatable lobster thanks to the Nautical Mile in Hanover.

The MLA would like to thank all the local lobstermen who came to the event and some even came after fishing. This event was created to highlight the importance of the commercial lobster fleet in Marshfield and next year will be even better! See you all there!



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The World's Oceans Are in Danger, Major Climate Change Report Warns

By Brad Plumer

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WASHINGTON — Climate change is heating the oceans and altering their chemistry so dramatically that it is threatening seafood supplies, fueling cyclones and floods and posing profound risks to the hundreds of millions of people living along the coasts, according to a sweeping United Nations report issued Wednesday.

The report concludes that the world's oceans and ice sheets are under such severe stress that the fallout could prove difficult for humans to contain without steep reductions in greenhouse gas emissions. Fish populations are already declining in many regions as warming waters throw marine ecosystems into disarray, according to the report by the Intergovernmental Panel on Climate Change, a group of scientists convened by the United Nations to guide world leaders in policymaking.

"The oceans are sending us so many warning signals that we need to get emissions under control," said Hans-Otto Pörtner, a marine biologist at the Alfred Wegener Institute in Germany and a lead author of the report. "Ecosystems are changing, food webs are changing, fish stocks are changing, and this turmoil is affecting humans."

Hotter ocean temperatures, combined with rising sea levels, further imperil coastal regions, the report says, worsening a phenomenon that is already contributing to storms like Hurricane Harvey, which devastated Houston two years ago.

For decades, the oceans have served as a crucial buffer against global warming, soaking up roughly a quarter of the carbon dioxide that humans emit from power plants, factories and cars, and absorbing more than 90 percent of the excess heat



trapped on Earth by carbon dioxide and other greenhouse gases. Without that protection, the land would be heating much more rapidly.

But the oceans themselves are becoming hotter, more acidic and less oxygen-rich as a result, according to the report. If humans keep pumping greenhouse gases into the atmosphere at an increasing rate, marine ecosystems already facing threats from seaborne plastic waste, unsustainable fishing practices and other man-made stresses will be further strained.

"We are an ocean world, run and regulated by a single ocean, and we are pushing that life support system to its very limits through heating, deoxygenation and acidification," said Dan Laffoley of the International Union for Conservation of Nature, a leading environmental group that tracks the status of plant and animal species, in response to the report.

The report, which was written by more than 100 international experts and is based on more than 7,000 studies, represents the most extensive look to date at the effects of

climate change on oceans, ice sheets, mountain snowpack and permafrost.

Changes deep in the ocean or high in the mountains are not always as noticeable as some of the other hallmarks of global warming, such as heat waves

on land, or wildfires and droughts. But the report makes clear that what happens in these remote regions will have ripple effects across the globe.

For instance, as ice sheets in Greenland and Antarctica melt and push up ocean levels, the report said, extreme flooding that was once historically rare could start occurring once a year or more, on average, in many coastal regions this century. How quickly this happens depends largely on the ability of humanity to reduce emissions of greenhouse gases that are heating the planet.

Around the world, glaciers in the mountains are receding quickly, affecting the availability of water for millions of people who depend on meltwater downstream to supply drinking water, irrigate agricultural land and produce electricity through dams and hydropower.

But some of the report's starkest warnings concern the ocean, where major shifts are already underway.

The frequency of marine heat waves — which can kill fish, seabirds, coral reefs and seagrasses — has doubled since the 1980s. Many fish populations are migrating far from their usual locations to find cooler waters, and local fishing industries are often struggling to keep up. Floating sea ice in the Arctic Ocean is declining at rates that are "likely unprecedented for at least 1,000 years," the report said.

The report notes that some pathogens are proliferating in warmer waters, including vibrio, a bacteria that can infect oysters and other shellfish, and that already sickens some 80,000 Americans who eat raw or undercooked seafood each year.





While the report recommends that nations sharply reduce greenhouse gas emissions to lessen the severity of most of these threats, it also points out that countries will need to adapt to many changes that have now become unavoidable.

Even if, for instance, nations rapidly phase out their greenhouse gas emissions in the decades ahead and limit global warming to well below an increase of 2 degrees Celsius from preindustrial levels — a goal enshrined in the Paris Agreement, a pact among nations to fight warming — the world's oceans and frozen landscapes would still look very different by the end of the century than they do today. Warm-water coral reefs would still suffer mass die-offs. Global sea levels could still rise another 1 to 2 feet this century as ice sheets and glaciers melted. Fish populations would still migrate, creating winners and losers among fishing nations and potentially leading to increased conflicts, the report noted.

To cope with these problems, coastal cities will need to build costly sea walls and many people will likely need to move away from low-lying areas, the report said. Fishery managers will need to crack down on unsustainable fishing practices to prevent seafood stocks from collapsing. Nations could also expand protected areas of the ocean to help marine ecosystems stay resilient against shifting conditions.

But the report also makes clear that if greenhouse gas emissions keep rising, many of these adaptation measures could lose their effectiveness. In the report's worst-case emissions scenario, where greenhouse gases continue piling up unchecked in the atmosphere throughout the century, sea levels could keep rising at a relentless pace for hundreds of years, potentially by 17 feet or more by 2300, the report said.

"Our fate is probably somewhere in between" the best- and worst-case emissions scenarios laid out

in the report, said Michael Oppenheimer, a climate scientist at Princeton University and a lead author of the report's chapter on sea levels. "But if you think about the possibility of indefinite or even accelerating sea level rise for centuries to come, that bodes very poorly for coastal civilization."

For more news on climate and the environment, follow @NYTClimat on Twitter.

Brad Plumer is a reporter covering climate change, energy policy and other environmental issues for The Times's climate team. @bradplumer

"That's a good example of how changes in the ocean can affect even people who live far from the coasts," said Sherilee Harper, a public health expert at the University of Alberta and an author on the report.

The report warns that more dramatic changes could be in store. If fossil-fuel emissions continue to rise rapidly, for instance, the maximum amount of fish in the ocean that can be sustainably caught could decrease by as much as a quarter by century's end. That would have sweeping implications for global food security: Fish and seafood provide about 17 percent of the world's animal protein, and millions of people worldwide depend on fishing economies for their livelihoods.

And heat waves in the ocean are expected to become 20 to 50 times more frequent this century, depending on how much greenhouse-gas emissions increase. Vibrant underwater ecosystems such as coral reefs, kelp forests and seagrass meadows are all expected to suffer serious damage if global temperatures rise even modestly above today's levels.

The potential for these heat waves to wreak havoc in coastal communities is already becoming noticeable in areas like the North Pacific Ocean, where what became known as a "blob" of unusually hot water in 2013 and 2014, partly fueled by global warming, killed thousands of seabirds and helped spawn toxic algae blooms that forced fisheries to close down from California to British Columbia.

Last year, officials in the Gulf of Alaska had to reduce permitted cod catches by 80 percent to allow stocks to rebuild in the wake of the heat wave, roiling the local fishing industry.

"When that happens, it's like a punch in the gut," said Brett Veerhusen, 33, a fisheries consultant

and commercial fisherman based in Seattle and Homer, Alaska. "And it's not just fishermen who are affected, it's an entire supply chain, from processing plants to shipping to grocery stores and restaurants."

Changes in the ocean also threaten to disrupt the complex and often delicate ecosystems that underpin marine environments. The report notes that the upper layers of the open ocean have lost between 0.5 percent and 3.3 percent of their oxygen since 1970 as temperatures have risen. And, as the ocean absorbs more carbon dioxide, it is becoming more acidic, which could make it harder for corals, oysters, mussels and other organisms to build their hard shells.

Acidification and declining oxygen levels are already affecting the California Current, a nutrient-rich pattern of water currents in the Pacific Ocean that supports one of the world's most lucrative fisheries, the report notes. While scientists are still trying to understand the full effects of these changes, one risk is that shifts in the food chain could cause fish to migrate away.

"If the fish leave, that affects the small fishing fleets we have up and down the California coast," said Gretchen Hofmann, a professor of marine biology at the University of California, Santa Barbara who was not involved in the report. "So there's the risk of real economic and social problems."





New England Fishery Management Council

FOR IMMEDIATE RELEASE
September 26, 2019

PRESS CONTACT: Janice Plante
(607) 592-4817, jplante@nefmc.org

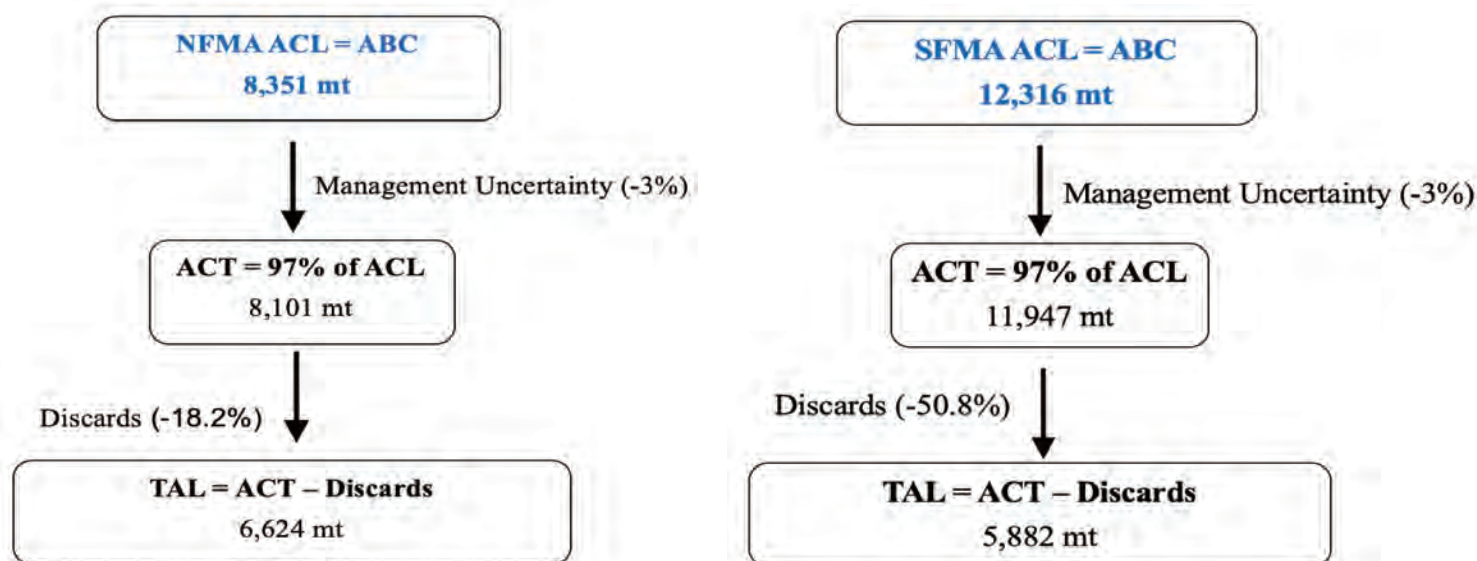
Monkfish: Council Approves 2020-2022 Fishery Specifications

The New England Fishery Management Council has approved new specifications for the 2020-2022 monkfish fishing years. The fishery operates within two areas – the Northern Fishery Management Area (NFMA) and the Southern Fishery Management Area (SFMA) – with a boundary line that roughly bisects Georges Bank. Landing limits and management measures vary by area, as do fishing practices.

The Council supported a 10% increase in the acceptable biological catch (ABC) for the northern area and status quo for the ABC in the southern area based on recommendations from its Scientific and Statistical Committee (SSC), which worked with guidance from the Monkfish Plan Development Team (PDT). Under the Monkfish Fishery Management Plan, deductions are made from the ABC to account for management uncertainty and discards in order to determine the level of total allowable landings (TAL) for each area (see flowchart below).

A new [operational assessment](#) was conducted for monkfish this summer. While the final peer-reviewed report is not complete yet, the SSC and PDT were able to use preliminary findings to develop the 2020-2022 specifications. Updated assessment data were used to determine discard levels, which are calculated

Revised 2020-2022 Specifications for Northern and Southern Fishery Management Areas in metric tons (mt)



ABC = Acceptable Biological Catch
ACL = Annual Catch Limit

ACT = Annual Catch Target
TAL = Total Allowable Landings

Commentary Support the Young Fishermen's Development Act



Young people in Alaska face mounting challenges to entering commercial fisheries.

Limited entry programs have reduced the size of the commercial fishing fleet and raised the cost of entry. Increased pressure on

natural resource has led to increased regulation, creating what can be a complicated maze of rules ready to ensnare the unprepared. Marketing fish offers new opportunities, but also complex logistics and expensive pitfalls. Finally, global warming and ocean acidification ensure that the oceans of the future will be even less predictable – and almost certainly less productive – than the present.

In short, young fishermen need to know how to catch fish, but they also need to know how to manage a business, stay up to date on ever evolving regulations, and of equal importance, they must learn how to become effective advocates for the ocean, healthy fisheries and their own sustainable fishing business.

Four years ago, Eric Jordan started inviting young people with no background in fishing to work on the back deck of his troller, for a week, a month or a season, and to learn not only practical skills from this experience but also the importance of advocating for the ocean. Eric's work dovetailed with the Alaska Longline Fishermen's Association's (ALFA) Young Fishermen's Initiative, which aims to support entry level fishermen through innovative technology, skill-building workshops, and low risk loans. In 2017, ALFA and Eric combined efforts to launch a crew apprentice program. As interest grew, ALFA engaged six more local skippers in the program, and now ALFA sifts through over 100 applicants each year to offer 14 to 16 young people a first-time commercial fishing opportunity. ALFA works to support next steps for these young crewmembers, and the rest of our membership, by offering workshops on subjects ranging from new marine electronics to bookkeeping, electrical systems, fisheries management and hydraulics. Over the past two years, hundreds of local fishermen have participated in these programs.

Not surprisingly, young people in communities around the nation face similar challenges. Surprisingly, no federal program currently exists to support education and training for young fishermen. A program is in place for farmers, ranchers and aquaculturists, but not for young fishermen. That needs to change.

Last year the bipartisan Young Fishermen's Development Act (YFDA) was introduced in both the U.S. House and Senate. The act would use fines paid by fishermen who violate fishing laws to fund regionally appropriate education and training for young fishermen by working through locally based organizations. ALFA strongly supports the YFDA.

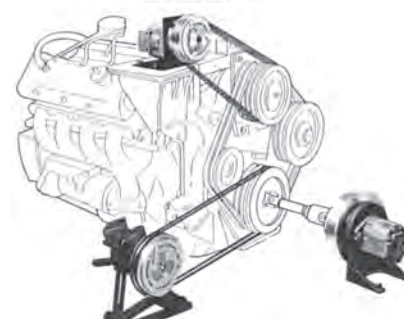
If passed by Congress and signed into law, the YFDA will provide funding for education and training to help young fishermen navigate the challenges and opportunities ahead. In July, the Senate Commerce Committee advanced the bill, thanks to the leadership of Senators Dan Sullivan and Lisa Murkowski, both R-Alaska. Our Rep. Don Young, R-Alaska, has led the push in the House. For the sake of Alaska's fishing communities, let's hope they are able to get this important legislation to the president's desk this fall. You can help us realize this opportunity by contacting Alaska's congressional delegation and voicing your support for the Young Fishermen's Development Act. *By Linda Behnken and Tara Racine*

Linda Behnken is the executive director of the Alaska Longline Fishermen's Association. Tara Racine is AFLA's communications and program development coordinator. <https://www.thecordovatimes.com/2019/09/23/commentary-support-the-young-fishermens-development-act/>

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THE MLA LEGAL DEFENSE FUND

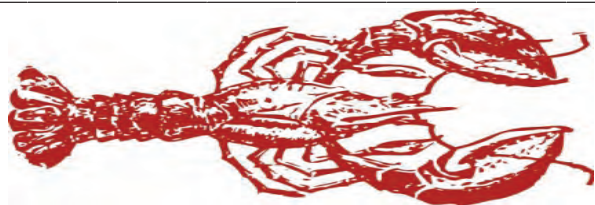
The Massachusetts Lobstermen's Association continues to need support for its Legal Defense Fund. This dedicated fund has been and will be used for the purpose of defending the Massachusetts lobster fishermen from legal and fisheries management actions that could seriously impact our fishermen's ability to conduct their businesses and earn a living.

As we all know, any legal action costs lots of money and this Association needs to be prepared. We certainly would prefer and will continue to try and resolve issues on our fishery without going into court but we must be ready to do so in order to protect our industry and our individual fishermen's livelihoods. These are real threats and our members frequently say – just sue them – well, that's fine to say but to do that we need your support. Any contribution you can afford to make to this fund will be held in our legal defense fund and used only for defraying legal expenses if and when they are needed. **Thank you ALL for your continued support.**

Kenneth Hnis
Paul Mullen
George Mason
William Lister
Paul Dimare
Michael Goodwin
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Eric Knowles
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New England Fishery Management Council

FOR IMMEDIATE RELEASE
September 24, 2019

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Council Approves 2020-2023 Atlantic Deep-Sea Red Crab Specs

The New England Fishery Management Council today voted on new specifications for the Atlantic deep-sea red crab fishery that will increase total allowable landings (TAL) by 12.7% for the next four fishing years. The proposed TAL for 2020-2023 is 2,000 metric tons (mt), a 225-mt increase from the long-standing 1,775-mt landings cap that has guided this fishery for the past three specification cycles.

The Council supported the increase based on a recommendation from its Scientific and Statistical Committee (SSC), which used the best information available for this “data poor” stock. The National Marine Fisheries Service (NMFS/NOAA Fisheries) must review and approve the new specifications before the revised landing limit can be implemented. The red crab fishing year begins on March 1.

Quick Facts

- Only male red crabs are landed. Recent market demand has been high.
- The fishery is conducted in deeper water on Georges Bank, off Southern New England, and in the Mid-Atlantic.

Deep-Sea Red Crab Specifications	Fishing Years 2020-2023
Maximum Sustainable Yield (MSY)	Undetermined
Overfishing Limit (OFL)	Undetermined
Optimum Yield (OY)	Undetermined
Acceptable Biological Catch (ABC)	2,000 metric tons
Annual Catch Limit (ACL)	2,000 metric tons
Total Allowable Landings (TAL)	2,000 metric tons

The Atlantic Deep-Sea Red Crab Fishery Management Plan (FMP) was established in 2002. Since 2011, the Council has identified the ABC, ACL, and TAL for this fishery and set specifications every three years.

This time, however, the Council set specifications for four years in response to the new stock assessment schedule recently adopted by the [Northeast Region Coordinating Council](#).

The Council’s Red Crab Plan Development Team (PDT) conducted the analyses for this action. The last peer-reviewed assessment for red crabs was conducted in 2008 by the Data Poor Stocks Working Group. The overfishing limit for the resource was unknown at that time and remains unknown, but the PDT concluded that, based on fishery-dependent data, which include landings, observer data, and port sampling, the stock is not exhibiting any signs of decline. This conclusion and supporting information was presented to the SSC.



Atlantic Deep-Sea Red Crab (*Chaceon quinque-dens*)
– NOAA Fisheries graphic

The average inflation-adjusted price per pound for red crabs from 2009-2018 was 93 cents.



New England Fishery Management Council

The SSC reviewed the PDT analyses, the 2009 assessment, and all available information and determined that a “modest increase” in the ABC from 1,775 mt to 2,000 mt “was warranted” given that:

- The fishery under the 1,775-mt catch limit has been “routinely operating below the quota” and “has been steady with no negative signals in the population”;
- Available information indicates that economic performance “would not be negatively impacted”; and
- The increase should be accompanied by “precautionary monitoring for a negative response” that would trigger a review of the increased TAL.



Offloading. – Atlantic Red Crab Company photo

The Council’s 2020-2023 specifications package states:

“While the proposed 12.7% increase in the TAL is likely to increase landings, a review of recent fishery information and long-term trends point to a stable fishery. Further, this is a small, cooperative fishery with four active vessels ... (that have) supported industry-funded research to improve data available for this fishery.

Achieving the TAL has historically been related to market demand ... bycatch is minimal ... the proposed TAL will not result in any gear changes or change in distribution of fishing effort.”

What’s This Fishery Like?

This is a small fishery comprised of four active limited access vessels. Most of the fleet docks in New Bedford, MA, where landed crab is processed for human consumption and primarily sold domestically. One smaller vessel lands in Virginia and largely services the “live” crab market.

In addition, 1,300 vessels hold open access permits to land up to 500 pounds of red crabs, but less than 10 vessels have done so in recent years.

Visit the New England Fishery Management Council’s Atlantic Deep-Sea Red Crab [Webpage](#) for More Information.



Participating red crab vessels are highly dependent on the fishery. The market currently could support additional catch. – Atlantic Red Crab Company photo



New England Fishery Management Council

The New England Fisheries Management Council Habitat Committee, AP, PDT, met last month to discuss a wide variety of issues:

- They reviewed the discussion from the August Committee meeting about developing additional policies related to non-fishing impacts to EFH. The Committee recommended and the Council agreed to work on new policies related to the habitat impacts of aquaculture and submarine cables, and to consider if anything is missing from our offshore wind policy given the potential for floating technology in the Gulf of Maine. The Council also agreed
- that scoping these issues through work teams comprised of PDT, AP, and Committee members was a useful way forward.
- They also discussed recent activities in terms of offshore wind development. The Council is interested in participating in ROSA, although we have not yet identified who might sit on the ROSA Council on behalf of NEFMC. The Council was also interested in participating in some way in a BOEM GOM taskforce, although as of last week BOEM had not yet sent out invitations. This would be similar to other state taskforces except it would
- be multistate, including MA, NH, and ME. We also discussed that there are a large number of wind farm COPs and thus BOEM notices of intent to prepare EISs coming in the next six months or so. This means we will need to be strategic about providing comments on those NOIs/projects. Not an issue that we need to work out immediately, but something to consider as we move ahead.
- Finally, Doug Grout gave his last report on behalf of the Committee, as he'll be retiring in November and last week was his last Council meeting. Congratulations Doug, and best wishes for a great retirement!

All Council meeting materials for habitat can be found here: <http://www.nefmc.org/library/september-2019-habitat-committee>.



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Bergie's Seafood, 8 Hahey Street, New Bedford, MA

Safety & Survival and Drill Conductor Training - Cape May, NJ

October 17: Safety & Survival - 8:00 a.m. - 4:00 p.m.

October 18: Drill Conductor - 8:00 a.m. - 3:00 p.m.

Two Mile Landing, 1 Fish Dock Road, Wildwood Crest, NJ

Flu Clinic - Gloucester, MA

October 25 - 9:00 a.m. - 12:00 p.m.

Gloucester Marine Railways, 81 Rocky Neck Ave., Gloucester

Vaccination and Screening Clinic - New Bedford, MA

October 28 - 10:00 a.m. - 3:00 p.m.

Whaling City Auction, 62 Hassey Street, New Bedford, MA

Safety & Survival and Drill Conductor Training - So. Portland, ME

October 31: Safety & Survival - 8:00 a.m. - 4:00 p.m.

November 1: Drill Conductor - 8:00 a.m. - 3:00 p.m.

USCG Station South Portland, 259 High Street, South Portland, ME

For more information, or to register for upcoming programs visit, www.fishingpartnership.org. Pre-registration is recommended for all safety & survival trainings as they fill quickly.

For more information, or to register for a training, contact a Navigator in your area:

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Deb Kelsey (508) 884-6661, Jenny Amaral

and Rob Jardin (508) 991-3043

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Open Enrollment Begins Nov. 1

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About Us

The mission of Fishing Partnership Support Services is to promote the health, safety and economic security of fishing families. Founded in 1997, the Partnership is headquartered in Burlington, MA, and maintains offices in the Massachusetts port communities of Gloucester, Plymouth, New Bedford and Chatham. For more information visit www.fishingpartnership.org.

[In association with Massachusetts Fishermen's Partnership]

New England Survey Activity

Mariners Briefing

Date of Notice: September 26, 2019 Notice No. 034

Overview

These briefings are intended to update mariners on marine operations for Ørsted survey activities. Survey operations are planned for locations throughout the lease areas (see chart) and are expected to last several months. These operations involve only the survey phase of the projects.

Mariners briefings are submitted on Mondays and Thursdays to the U.S. Coast Guard and distributed to the fishing community and interested mariners on our website at: us.ørsted.com/mariners or via email upon request through Rodney Avila (RODAV@ørsted.com).

Vessels will designate a working channel on VHF 16 daily at 0600 and 1800

About the Wind Farms

Bay State Wind (BSW), Revolution Wind, and Sunrise Wind are 50-50 joint ventures between Ørsted and Eversource.

Bay State Wind is a planned offshore wind farm located 14 miles south of Martha's Vineyard.

Ongoing BSW Survey Activities

- Projected Beginning: April 2019
- Projected End: October 2019

Revolution Wind is a planned offshore wind farm located 15 miles south of the Rhode Island coast.

Ongoing Rev Survey Activities

- Projected Beginning: June 2019
- Projected End: November 2019

Sunrise Wind is a planned offshore wind farm located 30 miles east of Montauk Point.

Ongoing SRW Survey Activities

- Projected Beginning: August 2019
- Projected End: January 2020



Enterprise

MV Enterprise is used for geophysical surveying.
Flag: USA
LOA: 170 ft
Beam: 40 ft
Call Sign: WDD9388
IMO: 9473585

Project: Sunrise Wind



Kommandor Iona

MV Kommandor Iona is used for geophysical surveying.
Flag: UK
LOA: 238 ft
Beam: 48 ft
Call Sign: GAAK
IMO: 8401999

Project: Revolution Wind
*Vessel Rep Onboard



Discovery

MV Discovery is used for geophysical surveying.
Flag: Panama
LOA: 230 ft
Beam: 41 ft
Call Sign: 3EKE6
IMO 9152882

Project: Revolution Wind
*Vessel Rep Onboard



Westerly

MV Westerly is used for geophysical surveying.
Flag: USA
LOA: 50 ft
Beam: 16 ft
Call Sign: WDF7918

Project: Bay State Wind
*Vessel Rep Onshore



Searcher

MV Searcher is used for geophysical surveying.
Flag: PA
LOA: 215 ft
Beam: 47 ft
Call Sign: 3EUY6
IMO: 9504011

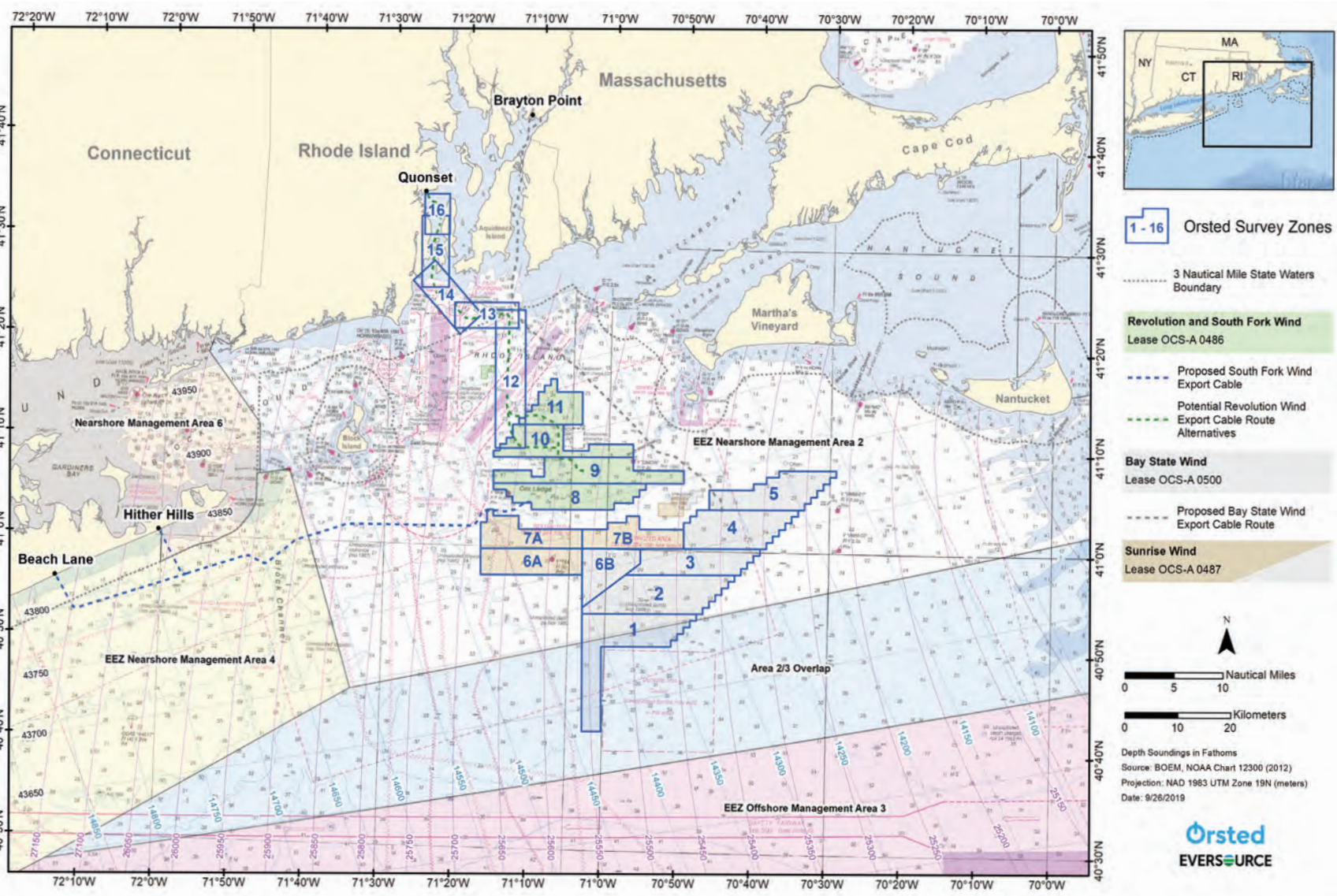
Project: Sunrise Wind
*Vessel Rep Onboard



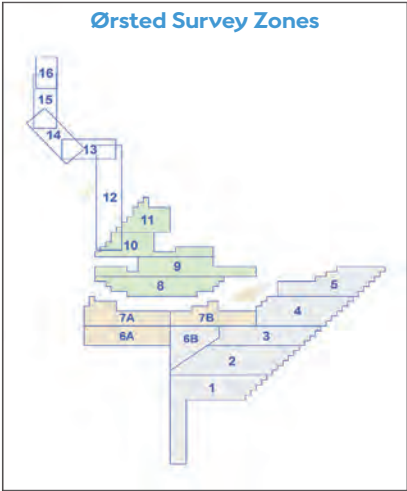
Conti

MV Conti is used for geotechnical surveying.
Flag: USA
LOA: 210 ft
Beam: 54 ft
DWT: 2346 mt
Call Sign: WDD3645
IMO: 9285299

Project: Revolution Wind



New England Survey Activity



Survey briefings are distributed to the fishing community and interested mariners on our website at: us.orsted.com/mariners or via email upon request through Rodney Avila (RODAV@orsted.com).

Survey Zone ID	Latitude	Longitude
1	40° 53.523' N	71° 03.075' W
	40° 53.780' N	70° 47.698' W
	40° 50.485' N	70° 51.026' W
	40° 50.328' N	71° 00.415' W
	40° 41.901' N	71° 00.161' W
2	40° 41.856' N	71° 02.716' W
	40° 53.523' N	71° 03.075' W
	40° 53.780' N	70° 47.698' W
	40° 57.748' N	70° 42.673' W
	40° 57.514' N	70° 57.355' W
3	40° 57.514' N	70° 57.355' W
	40° 57.748' N	70° 42.673' W
	41° 00.391' N	70° 39.316' W
	41° 00.141' N	70° 55.433' W
	41° 00.236' N	70° 49.586' W
4	41° 00.391' N	70° 39.316' W
	41° 04.353' N	70° 34.274' W
	41° 04.152' N	70° 47.980' W
	41° 04.179' N	70° 46.267' W
	41° 04.353' N	70° 34.274' W
5	41° 08.311' N	70° 29.221' W
	41° 08.207' N	70° 36.939' W
	41° 06.213' N	70° 40.320' W
	41° 06.124' N	70° 46.319' W
	40° 57.155' N	71° 16.874' W
6A	40° 59.748' N	71° 16.963' W
	40° 57.413' N	71° 03.196' W
	41° 00.005' N	71° 03.276' W
	41° 00.141' N	70° 55.433' W
	40° 54.137' N	71° 03.094' W
6B	41° 00.005' N	71° 03.276' W
	40° 58.668' N	70° 55.390' W
	40° 59.748' N	71° 16.963' W
	41° 03.653' N	71° 16.242' W
	41° 01.950' N	71° 03.336' W
7A	41° 00.005' N	71° 03.276' W
	41° 00.236' N	70° 49.586' W
	41° 02.181' N	70° 49.639' W
	41° 03.379' N	70° 55.670' W
	41° 00.005' N	71° 03.276' W
7B	41° 01.950' N	71° 03.336' W

Survey Zone ID	Latitude	Longitude
8	41° 06.262' N	71° 15.474' W
	41° 06.635' N	70° 54.908' W
	41° 03.969' N	70° 59.115' W
	41° 03.769' N	71° 10.248' W
9	41° 06.262' N	71° 15.474' W
	41° 06.718' N	70° 49.765' W
	41° 08.015' N	70° 49.801' W
	41° 09.199' N	70° 56.698' W
	41° 08.986' N	71° 08.704' W
10	41° 07.558' N	71° 15.519' W
	41° 09.199' N	70° 56.698' W
	41° 10.495' N	70° 56.737' W
	41° 12.274' N	71° 06.235' W
	41° 09.681' N	71° 06.152' W
11	41° 12.145' N	71° 13.100' W
	41° 08.855' N	71° 15.563' W
	41° 12.161' N	71° 12.242' W
	41° 12.320' N	71° 03.661' W
	41° 15.561' N	71° 03.762' W
12	41° 16.779' N	71° 08.099' W
	41° 09.780' N	71° 15.359' W
	41° 23.489' N	71° 15.832' W
	41° 23.568' N	71° 11.762' W
	41° 09.858' N	71° 11.303' W
13	41° 21.743' N	71° 12.654' W
	41° 24.298' N	71° 12.740' W
	41° 24.126' N	71° 21.382' W
	41° 21.572' N	71° 21.290' W
	41° 20.959' N	71° 20.567' W
14	41° 26.185' N	71° 27.115' W
	41° 28.225' N	71° 24.243' W
	41° 22.997' N	71° 17.696' W
	41° 25.500' N	71° 25.941' W
	41° 25.577' N	71° 22.259' W
15	41° 32.692' N	71° 22.518' W
	41° 32.615' N	71° 26.208' W
	41° 30.761' N	71° 25.756' W
	41° 34.806' N	71° 25.908' W
	41° 34.877' N	71° 22.519' W
16	41° 30.832' N	71° 22.371' W

Orsted Fisheries Outreach Team

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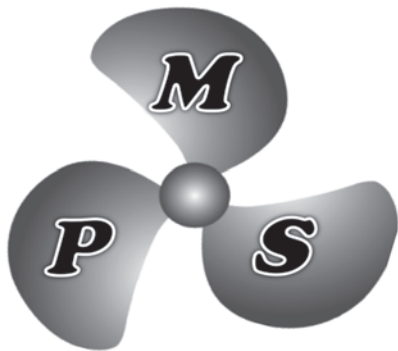
Fisheries Representatives

Mass Lobstermen's Association - Massachusetts
Martha's Vineyard Fishermen Preservation Trust - Massachusetts
New Bedford Port Authority - Massachusetts
Rodman Sykes - Rhode Island
Sid Holbrook - Connecticut
Erling Berg - New Jersey
Julie Evans - New York

Contact Rodney Avila for local fisheries representatives' contact information.



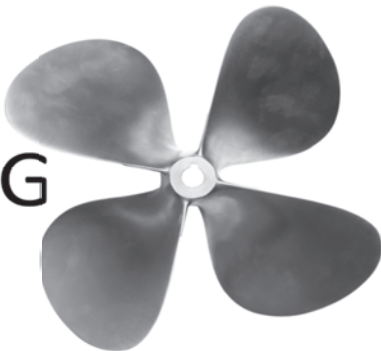
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Vessel Name	Site Function	Project	Outlook 9/26-9/29	Projected Outlook 9/30-10/02
Conti	Geotechnical survey activity	Revolution Wind	Conducting survey activities in Survey Zones 8, 9, 12	Continue survey activities in Survey Zone 10, 11
Westerly	Geophysical survey vessel	Bay State Wind	Conducting survey activities along East Bank Pirates Cove Marina, RI	Transits between East Bank Pirates Cove Marina, Borden Light Marina, and Wickford Marina
Searcher	Geophysical survey vessel	Sunrise Wind	Conducting survey activities in Survey Zones 6A & 7A	Continue survey activities in Survey Zones 6A & 7A
Enterprise	Geophysical survey vessel	Sunrise Wind	Conducting survey activities along South Shore of Long Island	Continue survey activities along South Shore of Long Island
Discovery	Geophysical survey vessel	Revolution Wind	Conducting survey activities in Survey Zones 9	Continue survey activities in Survey Zone 9
Kommandor Iona	Geophysical survey vessel	Revolution Wind	Conducting survey activities in Survey Zones 8, 12	Continue survey activities in Survey Zone 12

****All Mariners transiting or fishing in the survey area are requested to give a wide berth to survey vessels as they may be limited in their ability to maneuver (VRAM) and towing gear out to 300 meters behind the vessel. Vessels in the vicinity of the survey vessels should operate in a manner that will not endanger the vessel or associated equipment****

Contact

For fisheries related inquiries:

Rodney Avila
Corporate Fisheries Liaison
Phone: 857.332.4479
Email: RODAV@orsted.com

John O’Keeffe
Head of Marine Affairs U.S.
Phone: 857.332.4485
Email: JOHNO@orsted.com

Julia Prince
CT/NY Fisheries Liaison
Phone: 857.348.3263
Email: JULPR@orsted.com



OFFSHORE WIND MARINER UPDATE NO. 17

**Geological surveys beginning on or about September 23.
Estimated duration is 10 – 15 days.**



Vessel: RV Cryprinodon

LOA: 25 ft

Flag: US

Project Manager Chip Ryther at 508-693-7970

Project Supervisor Jon Mackie at 902-880-0832

Standing by on VHF Channel 13 & 16



Vessel: RV Lophius

LOA: 26 ft

Flag: US

Project Manager Chip Ryther at 508-693-7970

Project Supervisor Jon Mackie at 902-880-0832

Standing by on VHF Channel 13 & 16

Vineyard Wind will begin a shallow water geophysical survey in and just outside of Centerville Harbor and Muskeget Channel. Vineyard Wind kindly requests no wake from passing vessels to prevent unnecessary vessel roll that could be unsafe to the people and equipment onboard. Please check in with the contact below for the latest information.

Collecting data and working with the local fisheries, Vineyard Wind is committed to communicating and working with the local fishermen in the region during all stages of development of the proposed offshore wind farm.

In advance of and during survey operations, we seek contact with fishermen who are or may be working in the survey area. Please see reverse side for chart of survey area.

Please contact, Crista Bank, Fisheries Liasion, for latest information.

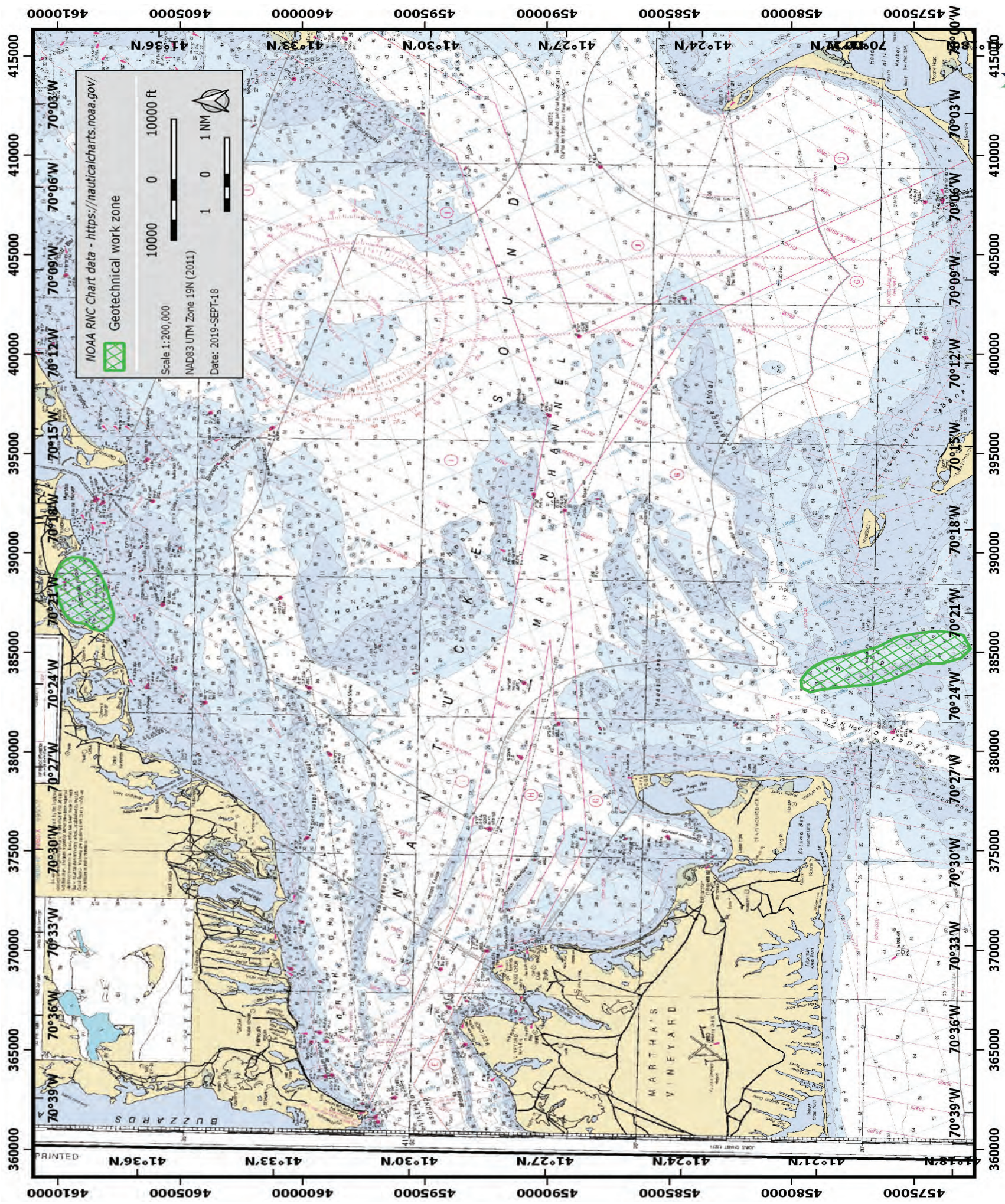
Cell: 508.525.0421 • Email: cbank@vineyardwind.com



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Ways to Stay Happy and Healthy This Fall

Take time for yourself

The holidays will soon begin, starting with Halloween, then Thanksgiving, then suddenly it's Christmas and New Years - oh, my! Before you know it you'll be knee-deep in visiting relatives and not sure exactly where the time went. Take some time to go for a long walk, meditate, write in a journal, or try a new yoga class.

Boost your vitamin D intake.

Our bodies absorb vitamin D through our skins' exposure to the sun, so with the shorter autumn days it's important to be sure we are getting enough. Since vitamin D plays an important role in calcium absorption and immune system function, supplementing with a little extra can help prepare your body for the upcoming sunless season.

Stay hydrated.

Dry air and dropping temperatures can dehydrate your body faster than you think, even without a blazing summer sun overhead. Since every system in our body depends on a sufficient amount of water in order to function properly (from supporting healthy skin, hair, and nails - to regulating heart rate, and blood pressure), it's important to make sure we're getting enough. Adding a little flavor to your water such as True Lemon, made with simple & clean ingredients and no artificial sweeteners, flavors, sodium, or preservatives is a proven way to increase your intake while staying healthy.



Keep moving.

With shorter days, it is easy to decide to spend a lazy evening sitting and watching a movie. Finding some fall-themed activities in your area will not only get you moving, but boost your mood! Corn mazes, fall hikes, tag football, pumpkin-picking, and even volunteering to help with the fall harvest at a local farm will get some great activity in your day while at the same time making lasting memories.

Eat fruits and vegetables that are in season.

Since most fruits and veggies have high water content (another great way to stay hydrated), their quality and nutrition value start to diminish the moment they begin to lose water: when they're harvested. Eating produce that is in season usually means its travelling a shorter distance from the farm to your table, which means a higher retention of vitamins and minerals!

Boost your immune system.

Kids are going back to school and temperatures are dropping, which means our immune systems are working extra hard this time of year to fight off colds and other illnesses. Already catch a cold? Try a few of these ideas to kick that cold a little faster.

Get your workout in early.

As the days get shorter, it'll be more difficult to get outside and exercise if you're driving home from work in the dark. Set the alarm a little earlier and start your day with a workout! You'll have more energy throughout the day, and when the afternoon comes you can use that time to relax and wind down.

The start of autumn should bring new beginnings and positive changes. Supporting good health and mindfulness is the best way to be proactive and embrace the new season! <https://www.truelemon.com/blogs/tc/7-ways-to-stay-happy-and-healthy>



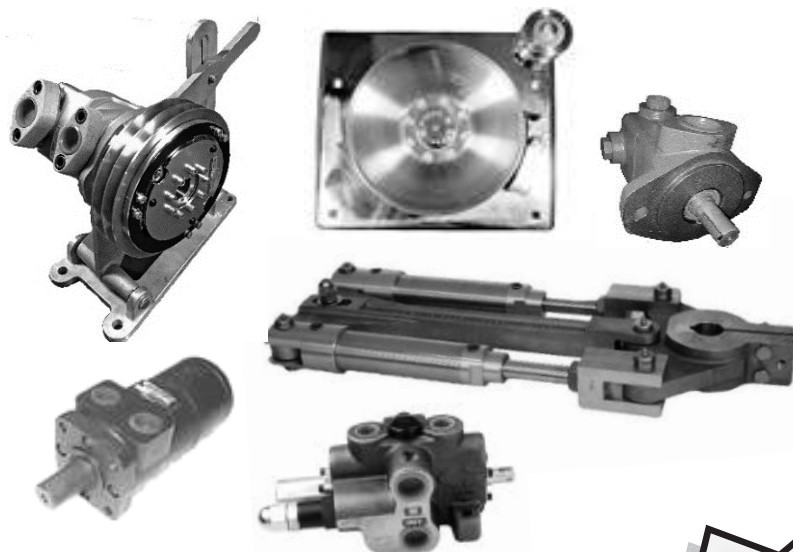
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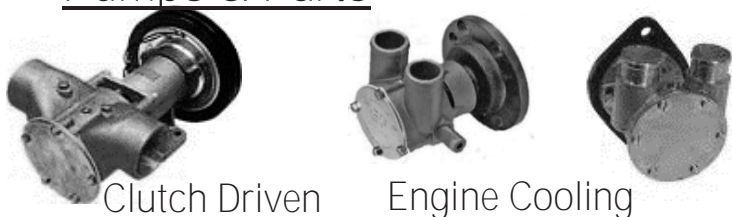


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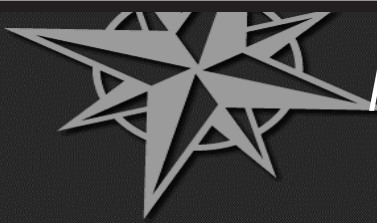
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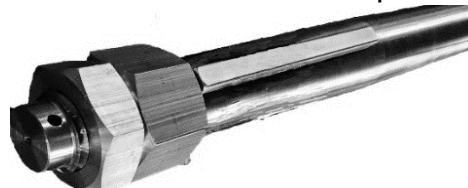


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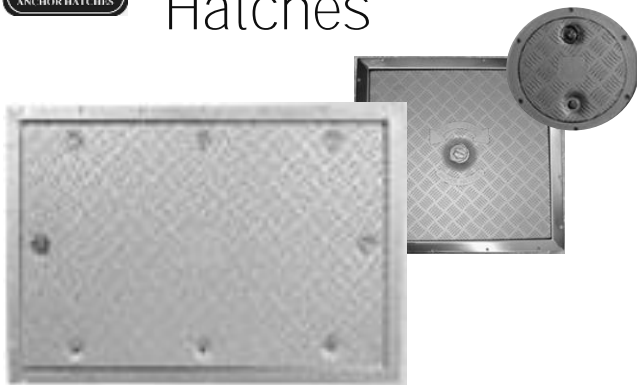
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New England Fishery Management Council

FOR IMMEDIATE RELEASE
September 25, 2019

PRESS CONTACT: Janice Plante
(607) 592-4817, jplante@nefmc.org

Skates: Council Approves 2020-2021 Fishery Specifications

The New England Fishery Management Council has approved Framework Adjustment 8 to the Northeast Skate Complex Fishery Management Plan (FMP). The framework contains specifications for the 2020 and 2021 fishing years, including total allowable landings (TALs) for both the skate wing and skate bait fisheries that are slightly higher than current landing limits.

The Council adopted a 32,715 metric ton (mt) acceptable biological catch (ABC) for the skate complex based on advice from its Scientific and Statistical Committee (SSC). This is 1,388 mt higher than what's now in place. The Council supported the modest increase after the SSC determined it was scientifically justified and because the increase should allow the fishery to achieve optimum yield.

Under the skate plan, the annual catch limit (ACL) is equal to the ABC. Deductions from the ACL are made to account for: (1) management uncertainty; (2) projected dead discards; and (3) projected state landings, all to achieve the TAL for the overall federal fishery.

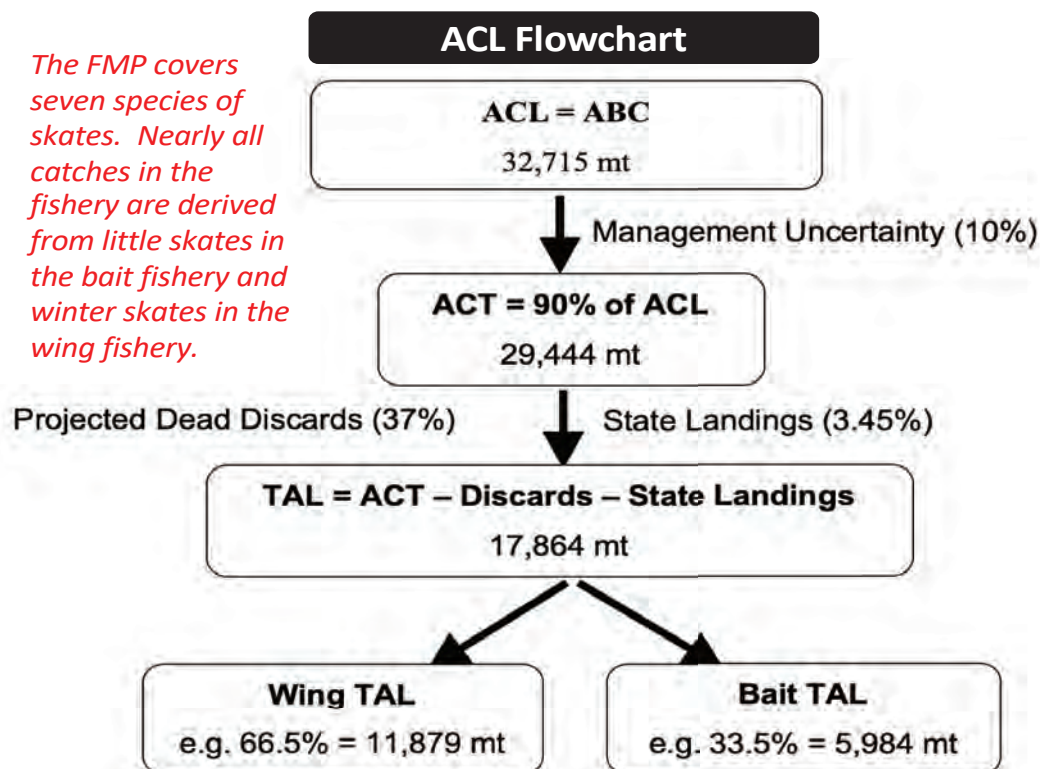
The TAL then is divided between the wing fishery and the bait fishery as defined under Amendment 3 to the FMP. Under the revised specifications, here are the splits for each of the next two fishing years.

- **Wing Fishery:** 66.5% of the TAL, equal to 11,879 mt
- **Bait Fishery:** 33.5% of the limit, equal to 5,984 mt



At left: Tagged winter skate, University of New England (UNE) research cruise. — UNE photo

The FMP covers seven species of skates. Nearly all catches in the fishery are derived from little skates in the bait fishery and winter skates in the wing fishery.





New England Fishery Management Council

The Council also supported increased possession limits for both of the skate fisheries.

Wing Fishery: Skate wing fishermen currently are working under a 2,600-pound possession limit from May through August and a 4,100-pound limit from September through April. Framework 8 proposes to increase the possession limits to 3,000 pounds and 5,000 pounds respectively for each season and retain the 85% landings trigger for dropping down to the incidental possession limit of 500 pounds.

The possession limit for **barndoor skates** also will increase proportionately. It currently is equal to a maximum of 25% of the wing possession limit as established under Framework Adjustment 5. Under these revised specifications, the barndoor skate limit would rise from the current limits of 650 pounds and 1,025 pounds respectively for the two seasons to 750 pounds and 1,250 pounds.

Proposed 2020-2021 Fishing Year Skate Wing Possession Limits

Skate Wing Possession Limit	Barndoor Skate Possession Limit
May 1 to August 31 – 3,000 pounds	May 1 to August 31 – 750 pounds
September 1 to April 30 – 5,000 pounds	September 1 to April 30 – 1,250 pounds



Above: Winter skate.
– NOAA Fisheries graphic

About skate wing possession limits:

According to Framework Adjustment 8, the 2020-2021 revision “results in a small increase in possession limits to allow the fishery to achieve its TAL while mitigating the likelihood of the incidental possession limit being implemented. Fishermen and processors have indicated that keeping the fishery open for the entire fishing year creates economic stability, retains important foreign markets, and reduces discards.”

NOTE: Framework 8 must be reviewed and approved by NOAA Fisheries before being implemented.

Bait Seasons and Proposed 2020-2021 Possession Limits When Fishing Under a Skate Bait Letter of Authorization

Season	Possession Limit	Dates
1	25,000 pounds	May 1 – July 31
2	25,000 pounds	August 1 – October 31
3	25,000 pounds	November 1 – April 30

Bait Fishery: Skate bait fishermen work under three seasons. The current possession limit is 25,000 pounds for seasons 1 and 2 and 12,000 pounds for season 3. Framework 8 would set the bait possession limit at 25,000 pounds for all three seasons. The framework would not adjust the seasonal incidental possession limit triggers – 90% of the TAL for seasons 1 and 2 and 80% for season 3 – nor would it modify the incidental possession limit of 8,000 pounds.



New England Fishery Management Council

The bait fishery did not achieve its TAL during the 2017 or 2018 fishing years and likely will not achieve the TAL by the end of the 2019 fishing year. The increase is not expected to negatively impact the stock.

Annual Monitoring Report: The Council also received a presentation on the annual monitoring report for skates covering the 2018 fishing year. The report states that overfishing is not occurring on any of the seven species in the complex, which include barndoor, clearnose, little, rosette, smooth, thorny, and winter skates.

Six of the seven skate species are not overfished, thorny skate being the single exception. Discards in the fishery continue to decrease notably. The report is available at [Northeast Skate Complex Annual Monitoring Report](#).

Looking for More Information?

- All documents and presentations used during this meeting are available at [September 2019 Skate Report](#).
- Visit the New England Council's [skate webpage](#).
- Contact Dr. Fiona Hogan, the Council's skate plan coordinator, at (978) 465-0492, ext. 121, fhogan@nefmc.org.

Landings and Percent of Total Allowable Landings Achieved in the Wing Fishery Between Fishing Years 2012 and 2018

Fishing year	TAL	Landings	Percent of TAL
2012	15,538	10,113	65%
2013	14,338	7,981	56%
2014	11,169	10,605	97%
2015	10,896	8,911	81.8%
2016	8,372	8,268	98.8%
2017	8,372	8,465	101.1%
2018	10,499	7,837	74.6%

Landings and Percent of Total Allowable Landings Achieved in the Bait Fishery Between Fishing Years 2012 and 2018

Fishing year	TAL	Landings	Percent of TAL
2012	7,827	5,504	70%
2013	7,223	5,596	77%
2014	5,626	4,499	82%
2015	5,489	5,541	100.9%
2016	4,218	4,262	101%
2017	4,218	3,978	94.3%
2018	5,289	3,356	63.5%



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AD#3 (6/19) FOR SALE- Rocker Style Clam Dredge- Call Rob @ 860-235-5498

AD#4 (6/19) LOOKING TO BUY- Used Danforth 22 pd anchors for gillnetting- Approx: 30-50 also looking for used high flyers & monk fish nets. Bob @ 732-609-4013

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AD#9 (5/19) FOR SALE – Lampara Bait Seine 1,000 ft x 52 ft deep brand new ready to fish. Call Dean @ 401-932-3382

AD#10 (5/19) FOR SALE- ZF 301c 1.1 to 1 gear Only 275 hours \$2800. obo Call Wayne 401-837-2417

AD# 11 (9/19) FOR SALE- Area 1 Coastal Lobster Permit/Call 978-283-2438 or 978-879-7353

AD# 12 (5/19) LOOKING- for fish lugs & carts, tubs to store fresh fish. Contact Ted @ 843-267-3473 or mrfish.com

AD# 13 (5/19) HELP WANTED– Commercial lobsterman position. Experience preferred. Must be hard working with fast hands. Non-smoker. Non drinker. Completely drug free. Must have own vehicle. Port of Gloucester. No calls @ 6 P.M. 781-249-2818 Call Mike

AD#14 (5/19) FOR SALE- Marine jet-Ultra jet 300/3 (12" dia) suitable for up to 350hp diesel and boat weight of 13000lbs. Complete unit including electro hydraulic package only 275 hours (boat too heavy) \$8000. obo Call Wayne 401-837-2417

AD#15 (5/19) FOR SALE – 32 “Lobster Boat -Fiberglass Maine lobster or tuna boat Holland 1984. 454 gasoline engine 3 years old, 12” pot hauler. Currently used for lobster fishing everyday. New boat coming, must sell. 28,000.00 Call 978-884-2988

AD#16 (5/19) FOR SALE –#30 new condition 36x21x13 ½ \$35 ea-#80 used patched 36x21x15 \$20ea-or \$15 ea if purchased the lot Call 978-774-4074 between 5-7 pm

AD#17 (5/19) FOR SALE – BUNGEE CORD ON SPOOLS. Made in New England area. Call Jonathon “Mr. Bungee” 401-447-7973 or Jon@marineropeinternational.com 5/16” x 300’ft \$35.00/spool 5/16”x 500’ft \$50.00 spool All sizes, colors to choose from. Located in Cranston, RI

AD#18 (5/19) HELP WANTED- Stern-man for Lobster Season in Marblehead area- Experience preferred- No Drugs-own transportation-Needed ASAP- Call Dave @ 978-375-9359

AD#19 (5/19) FOR SALE – LOBSTER BOAT in Harpswell ME 1977, 31Ft JC, 353 Detroit (4000 hr since major rebuild)2:1 Borg Warner gear, Hydro Slave steering, 700 traps avail. Call 207-833-5505

AD#20 (5/19) FOR SALE- 30” Crosley net lifter& set bar \$2500 OBO 941-779-5207

AD#21 (5/19) FOR SALE- Traps 4ftx23x15-yellow wire-rope included –great for recreational -\$20.00 ea Call Mark @ 978-408-9329

AD#22 (10/19) FOR SALE- 42 Sea Bass Traps Cement runner 21 1/2 x 15 \$35 each 508-889-9180

AD#23 (8/19) FOR SALE- 10 totes of 200 count 12/0 Mustard J hooks all pinned # 3998ID good condition \$ 80.00 each, also 2” 3 hp Hydraulic Pacer pump used once, pump was to small for adequate flow. New \$ 600 will sell for \$ 375.00. Call/ text Mike 508-922-1344

AD#24 (7/19) LOOKING FOR-20 ft., refrigerated container w/chassis. Ted 843-267-3473 mrfish@mrfish.com

AD#25 (5/19) FOR SALE-42’ Novi lobster/gillnetter 1983 Detroit 8-v-71 (275 hp). twin disc 509 3:1 ratio, all U.S. Coast Guard required safety equip; 500 gal., fuel tank, 4 berths, Furuno 36 mile radar, Northstar 951x plotter, Furuno plotter, Furuno colo sounder, standard horizon VHF, Comnav 1001 auto-pilot, 2 Furuno 2 gp 32’s GPS,



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WHAT WE DO

- ◆ Helped to establish Limited Entry in Area 3 lobster fishery
- ◆ Lobbied for Area 3 historic participation & transferability
- ◆ Secured funds to offset costs of sinking groundline
- ◆ Advocated for Jonah Crab Fishery Management Plan
- ◆ Led industry’s response to the marine monument
- ◆ Strong advocate of common sense whale rules
- ◆ Leadership roles on the ASMFC’s Lobster Board, Lobster and Jonah Crab Advisory Panels, and Area 3 LCMT
- ◆ NEFMC’s Habitat Committee and NOAA Fisheries’ Atlantic Large Whale Take Reduction Team member

2019 ISSUES

Right Whales	Marine Monument
Bait Species	GOM/GB Lobster Stock
Wind Energy	Coral Closures & Habitat

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AD#26 (9/19) FOR SALE- 36' Harris Lobster boat
220 John Deere engine 2 1/2 -1 twin disc transmission
\$20,000. 339-224-0224

AD#27 (5/19) FOR SALE - 13ft 30HP Evinrude
outboard w/trailer \$4,500. obo 781-724-4780

AD#28 (8/19) FOR SALE - 40 3ft. traps/all hoop gates/
most have rope/good shape \$25.00 each Bill @ 339-
793-1291

AD#29 (9/19) FOR SALE-301-2-F Transmission 2 point
69 to 1/\$1,000. Call Skip 781-844-8162

AD#30 (8/19) FOR SALE- 350 traps 45 in/ Shrimp
Mesh Heads-4-6 years old- Bob 508-510-7792

AD#31 (9/19) FOR SALE-State coastal lobster permit-
100+traps, lines & buoys. \$18,000.00 617-846-
3714@5:00 P.M.

AD#32 (8/19) FOR SALE- 8.2 Detroit Diesel - 320 HP
with after-cooler, running takeout with Borg Warner
transmission, runs great, no smoke. Have video of engine running and wet exhaust
- \$3,000.00 Also, spare 8.2 Detroit Diesel, (rebuilt by Lew Bacon) with Twin Disc
transmission and spare starting motors - \$3,000.00 Located in Gloucester Call / text
Dave at 603-422-4335

AD#33 (9/19) FOR SALE- 10/ 15 pot ground lines for knots \$25.00 each
Call 781-831-1609

AD#34 (9/19) FOR SALE-Gill net lifter, Bandolier style, new \$1,000.00-Mantis
style shrimp dredging gear -net culling table- 2 vats-plumbed circulation W/ trailer
\$1,500.00- Propellar 34x34, right hand 2 1/2 in bore-4 blade-\$1,500.00-3/4 net
chain sweep W/5in Cod end\$500.00 - 6 new gill nets W/ 6in mesh\$200.00 each &
misc: nets Call Bill @ 508-264-1076

AD#35 (6/19) FOR SALE- 40 ft., Novi Lobster Boat- Call Rob @ 860-235-5498
for more info

AD#36 (4/19) FOR SALE- 1987 42'Duffy open stern lobster boat- 2003 CAT
3406 w/ 580 hp. Rebuilt in 2011 w/ 5900 hrs., since rebuild 4 1/2' aluminum
extension-tailgate 14" hauler, rope locker, survival suits, hot tank & pressure
washer, 4 GPS's, 2 sounding machines, above & below tanks. Located in Gloucester
@ State Fish Pier. Boat is available now. \$130,000.00 OBRO Area 1 permit w/
good lobster history, including multi-species permit, available. Can be sold as a
package/separatel. Permit will not be sold until boat is sold. Call 978-807-0307
E-mail- frankdavis1949@yahoo.com

AD#37 (6/19) FOR SALE- Area 2 Trap Tags- Call Rob 860-235-5498

AD#38 (6/19) HELP WANTED-Stern help out of Hingham Shipyard. 3-4 days a week
now till December. Year end bonus if you finish. MUST be reliable and on time. call or
text 617-653-2560.

AD#39 (6/19) FOR SALE- 35ft Duffy 1988 200 HP Volvo Penta TAMD 4000 hrs 2014
SIMRAD electronics suite (3 frq SONAR, 4G RADAR, GPS) 2014 Deck & Wheelhouse
fiberglassed 2 color MFD Displays (8 & 12 inch) 2 Comm Radios 60 gal live well, and
RAYCOR., Custom Mast w/ full Commercial Lighting Dual Hydraulics for Lobster &
Long-line Dogfish \$45,000 Call Clark 619-987-2192 or email- CaptainBinley@gmail.
com

AD#40 (6/19) HELP WANTED- Stern man Nth. shore area, good pay, no drama-call-
978-880-2093

AD#41 (8/19) FOR SALE- 100 traps 48" yellow double parlor Good shape. \$
40.00 firm. Serious inquiries only. Call/leave message No calls after 6 p.m.
Mike 781 249 2818



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May The Moon
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May The Rain
Wash away your worries
May The Breeze
Blow new strength into your being
May You Walk
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it's beauty, all the days of your life*

Apache Blessing

AD#42 (7/19) FOR SALE- Fiber-glassed Bait cooler, holds 18 boxes -3 high \$1,500.00
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AD#43 (7/19) FOR SALE- 100 Lobster traps 3ft., w/rope \$15.00 each 617-688-0914

AD#44 (7/19) FOR SALE- Brand new skiff - built at the MLA weekend \$500.00
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AD#45 (8/19) FOR SALE- Custom made Wright Trailer. Just over 1 year old, used
3 times, \$2,500. Deck Dimensions 82" Wide by 16' long. 2-Dexter 3500# EZ Lube
Axles. Auto FSA Electric Brakes. Spring Suspension. ST205/75R-15 LRC Radial Tires,
15" Steel Wheels, spare tire included. 7K Drop Leg Jack. Adjustable Height Coupling
(Pintle Ring or Ball). Diamond Plate Fenders with Sealed Seams and Center Support.
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Rubber Mounted LED Lights, Breakaway Kit w/ Charger & Tester and 7 RV Style Plug.
Pressure Treated Planks. Ketcham Traps, 111 Myrtle St, New Bedford MA, phone 508-
997-4787.

AD#46 (8/19)FOR SALE- MA Conch permit w 24'Privateer & gear \$50,000.00 Call
508-274-8126

AD#47 (8/19) HELP WANTED- Sternman wanted inshore lobster boat 2019-season
Marshfield area Call Bob- 781-767-4130

AD#48 (8/19) FOR SALE- Outer cape lobster permit with 406 trap tag allowance for
sale. Asking 200k , willing to negotiate comes W/ traps. Zach 774-216-0913

AD#49 (9/19) FOR SALE- MA Coastal Lobster Permit Area 1 800 trap allocation
asking \$30,000. Or B/O John Moran 401-525-0981

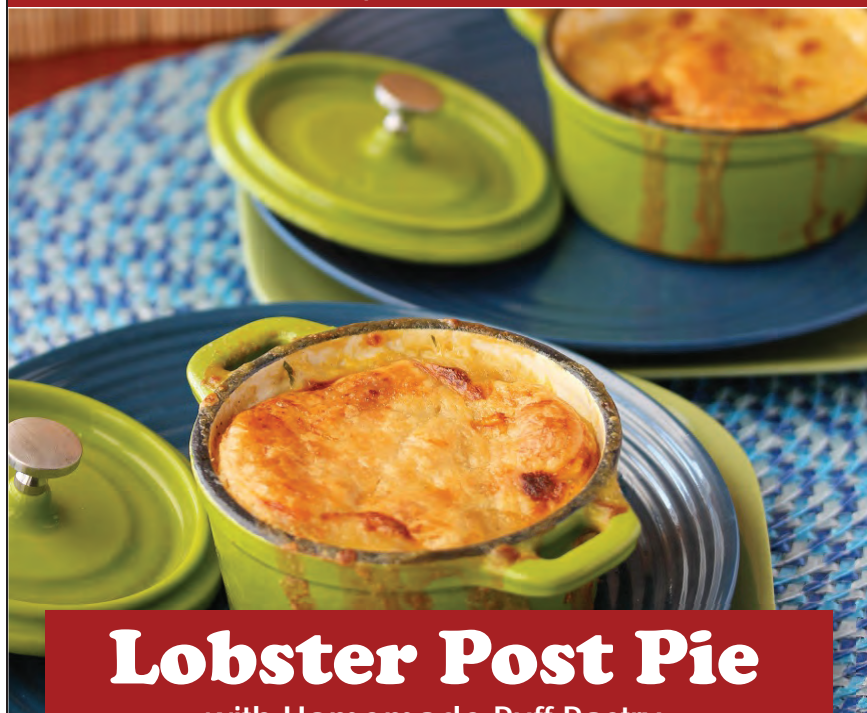
AD#50 (9/19) FOR SALE-34' Aluminum Lobster boat CAT 3208T (320hp) built by
Gladding & Hearn 1982. 14" hauler & hydraulic wash-down pump asking \$ 90,000 or
B/O- MA Coastal Area 1 Lobster Permit w/800 trap allocation. John Moran 401-525-
0981.

AD#50 (10/19) FOR SALE- 25 ft BHM 180 HF 453T Detroit engine-600 hrs. on rebuilt
engine. Furuno radar-new- 4ft extended hull Garmin plotter-new 2 Furuno GPS Sitex
depth finder- Auto-pilot VHF radio CB radio New hydraulic steering- new wash down
pump-dripless shaft bearing-new battery-new alternator-bilge alarm 150 gal., fuel
tanks-14ft deck area- 2 propellers-Fished daily. \$23,500 or \$37,500.00(w/ dragging
gear) Call Frank @ 203-868-8481

AD#51 (9/19) FOR SALE-Sternman / helper wanted for Nahant based lobsterboat F/V
Walter Marie II . Experience is preferred. email joel.w.marie@gmail.com or phone 781
581 0324

AD#52 (10/19) - Scallop quota available for leasing -e-mail hiflyer2@verizon.net

RECIPE of the MONTH



Lobster Post Pie

with Homemade Puff Pastry

Ingredients

- 2 leeks, sliced
- 2 medium carrots, peeled and sliced
- 2 large ribs celery, sliced
- 3 red potatoes, diced
- 2 cloves garlic, minced
- 1 tsp old bay seasoning
- 1 bay leaf
- salt and pepper
- 1 tbsp olive oil
- handful of parsley, finely chopped
- 1 cup peas
- 2 lobster tails
- 3 tbsp butter
- 1/3 cup flour
- 1/2 cup white wine (I used Chardonnay)
- 3 cups seafood stock
- 1/2 cup half and half
- 1 sheet puff pastry

Directions

Bring a large pot of water to a boil. Preheat oven to 350 degrees. Prep all your veggies. Heat olive oil in a large pot over medium heat.

Add leeks, carrots, celery, potatoes, garlic and bay leaf. Season with old bay seasoning and a little bit of salt and pepper. Sauté for about 5 minutes, until veggies start to soften. Add butter and melt. Once butter has melted, sprinkle flour in and stir to combine well. Cook for about 1 minute. Add wine and cook until thickened. Stir in seafood stock and then half and half. Bring to a bubble and simmer for about 15-20 minutes. Cut lobster into 1 inch chunks. Add

lobster, peas and parsley to the rest of the sauce. Cook until peas are warmed through and lobster is fully cooked. Roll puff pastry out until it's big enough to cover 4 – 2 cup ramekins. Put ramekins upside down on pastry and press down to make an indentation. Remove ramekins and cut around the circles with a knife. Coat ramekins with cooking spray and spoon in filling. Top with a puff pastry round. Cut several slits in the top, to allow steam to escape. Place ramekins on a baking sheet and bake in preheated oven for about 30 minutes, until pastry is golden brown and filling is bubbly.



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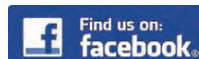
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15 Amazing Science Facts

That Will Blow Your Mind

1. Babies have around 100 more bones than adults

Babies have about 300 bones at birth, with cartilage between many of them. This extra flexibility helps them pass through the birth canal and also allows for rapid growth. With age, many of the bones fuse, leaving 206 bones that makes up an average adult skeleton.

2. The Eiffel Tower can be 15 cm taller during the summer

When a substance is heated up, its particles move more and it takes up a larger volume – this is known as thermal expansion. Conversely, a drop in temperature causes it to contract again. The mercury level inside a thermometer, for example, rises and falls as the mercury's volume changes with the ambient temperature. This effect is most dramatic in gases but occurs in liquids and solids such as iron too. For this reason, large structures such as bridges are built with expansion joints which allow them some leeway to expand and contract without causing any damage.

3. 20% of Earth's oxygen is produced by the Amazon rainforest

Our atmosphere is made up of roughly 78 per cent nitrogen and 21 per cent oxygen, with various other gases present in small amounts. The vast majority of living organisms on Earth need oxygen to survive, converting it into carbon dioxide as they breathe. Thankfully, plants continually replenish our planet's oxygen levels through photosynthesis. During this process, carbon dioxide and water are converted into energy, releasing oxygen as a by-product. Covering 5.5 million

square kilometres (2.1 million square miles), the Amazon rainforest cycles a significant proportion of the Earth's oxygen, absorbing large quantities of carbon dioxide at the same time.

4. Some metals are so reactive that they explode on contact with water

There are certain metals – including potassium, sodium, lithium, rubidium and cesium – that are so reactive that they oxidise (or tarnish) instantly when exposed to air. They can even produce explosions when dropped in water! All elements strive to be chemically stable – in other words, to have a full outer electron shell. To achieve this, metals tend to shed electrons. The alkali metals have only one electron on their outer shell, making them ultra-keen to pass on this unwanted passenger to another element via bonding. As a result they form compounds with other elements so readily that they don't exist independently in nature.

5. A teaspoonful of neutron star would weigh 6 billion tons

A neutron star is the remnants of a massive star that has run out of fuel. The dying star explodes in a supernova while its core collapses in on itself due to gravity, forming a super-dense neutron star. Astronomers measure the mind-bogglingly large masses of stars or galaxies in solar masses, with one solar mass equal to the Sun's mass (that is, 2×10^{30} kilograms/ 4.4×10^{30} pounds). Typical neutron stars have a mass of up to three solar masses, which is crammed into a sphere with a radius of approximately ten kilometres (6.2 miles) –

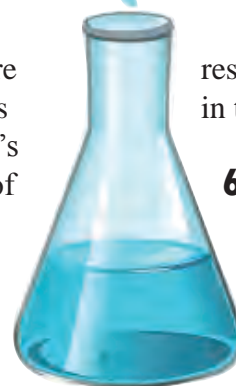
resulting in some of the densest matter in the known universe.

6. Hawaii moves 7.5cm closer to Alaska every year

The Earth's crust is split into gigantic pieces called tectonic plates. These plates are in constant motion, propelled by currents in the Earth's upper mantle. Hot, less-dense rock rises before cooling and sinking, giving rise to circular convection currents which act like giant conveyor belts, slowly shifting the tectonic plates above them. Hawaii sits in the middle of the Pacific Plate, which is slowly drifting north-west towards the North American Plate, back to Alaska. The plates' pace is comparable to the speed at which our fingernails grow.

7. Chalk is made from trillions of microscopic plankton fossils

Tiny single-celled algae called coccolithophores have lived in Earth's oceans for 200 million years. Unlike any other marine plant, they surround themselves with minuscule plates of calcite (coccoliths). Just under 100 million years ago, conditions were just right for coccolithophores to accumulate in a thick layer coating ocean floors in a white ooze. As further sediment built up on top, the pressure compressed the coccoliths to form rock, creating chalk deposits such as the white cliffs of Dover. Coccolithophores are just one of many prehistoric species that have been immortalised in fossil form, but how do we know how old they are? Over time, rock forms in horizontal layers, leaving older rocks at the bottom



and younger rocks near the top. By studying the type of rock in which a fossil is found palaeontologists can roughly guess its age. Carbon dating estimates a fossil's age more precisely, based on the rate of decay of radioactive elements such as carbon-14.

8. In 2.3 billion years it will be too hot for life to exist on Earth

Over the coming hundreds of millions of years, the Sun will continue to get progressively brighter and hotter. In just over 2 billion years, temperatures will be high enough to evaporate our oceans, making life on Earth impossible. Our planet will become a vast desert similar to Mars today. As it expands into a red giant in the following few billion years, scientists predict that the Sun will finally engulf Earth altogether, spelling the definite end for our planet.

9. Polar bears are nearly undetectable by infrared cameras

Thermal cameras detect the heat lost by a subject as infrared, but polar bears are

experts at conserving heat. The bears keep warm due to a thick layer of blubber under the skin. Add to this a dense fur coat and they can endure the chilliest Arctic day.

10. It takes 8 minutes, 19 seconds for light to travel from the Sun to the Earth

In space, light travels at 300,000 kilometres (186,000 miles) per second. Even at this breakneck speed, covering the 150 million odd kilometres (93 million miles) between us and the Sun takes considerable time. And eight minutes is still very little compared to the five and a half hours it takes for the Sun's light to reach Pluto.

11. If you took out all the empty space in our atoms, the human race could fit in the volume of a sugar cube

The atoms that make up the world around us seem solid but are in fact over 99.99999 per cent empty space. An atom consists of a tiny, dense nucleus surrounded by a cloud of electrons, spread over a proportionately vast area. This is because as well as being particles, electrons act like waves.

Electrons can only exist where the crests and troughs of these waves add up correctly. And instead of existing in one point, each electron's location is spread over a range of probabilities – an orbital. They thus occupy a huge amount of space.

12. Stomach acid is strong enough to dissolve stainless steel

Your stomach digests food thanks to highly corrosive hydrochloric acid with a pH of 2 to 3. This acid also attacks your stomach lining,

which protects itself by secreting an alkali bicarbonate solution. The lining still needs to be replaced continually, and it entirely renews itself every four days.

13. The Earth is a giant magnet

Earth's inner core is a sphere of solid iron, surrounded by liquid iron. Variations in temperature and density create currents in this iron, which in turn produce electrical currents. Lined up by the Earth's spin, these currents combine to create a magnetic field, used by compass needles worldwide.

14. Venus is the only planet to spin clockwise

Our Solar System started off as a swirling cloud of dust and gas which eventually collapsed into a spinning disc with the Sun at its centre. Because of this common origin, all the planets move around the Sun in the same direction and on roughly the same plane. They also all spin in the same direction (counterclockwise if observed from 'above') – except Uranus and Venus. Uranus spins on its side, while Venus defiantly spins in the complete opposite direction. The most likely cause of these planetary oddballs are gigantic asteroids which knocked them off course in the distant past.

15. A flea can accelerate faster than the Space Shuttle

A jumping flea reaches dizzying heights of about eight centimetres (three inches) in a millisecond. Acceleration is the change in speed of an object over time, often measured in 'g's, with one g equal to the acceleration caused by gravity on Earth (9.8 metres/32.2 feet per square second). Fleas experience 100 g, while the Space Shuttle peaked at around 5 g. The flea's secret is a stretchy rubber-like protein which allows it to store and release energy like a spring.

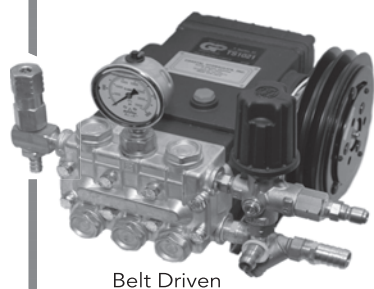
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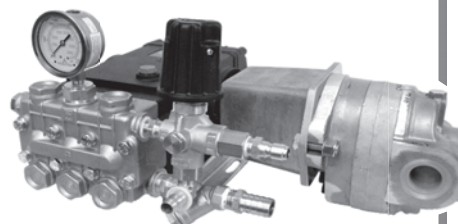
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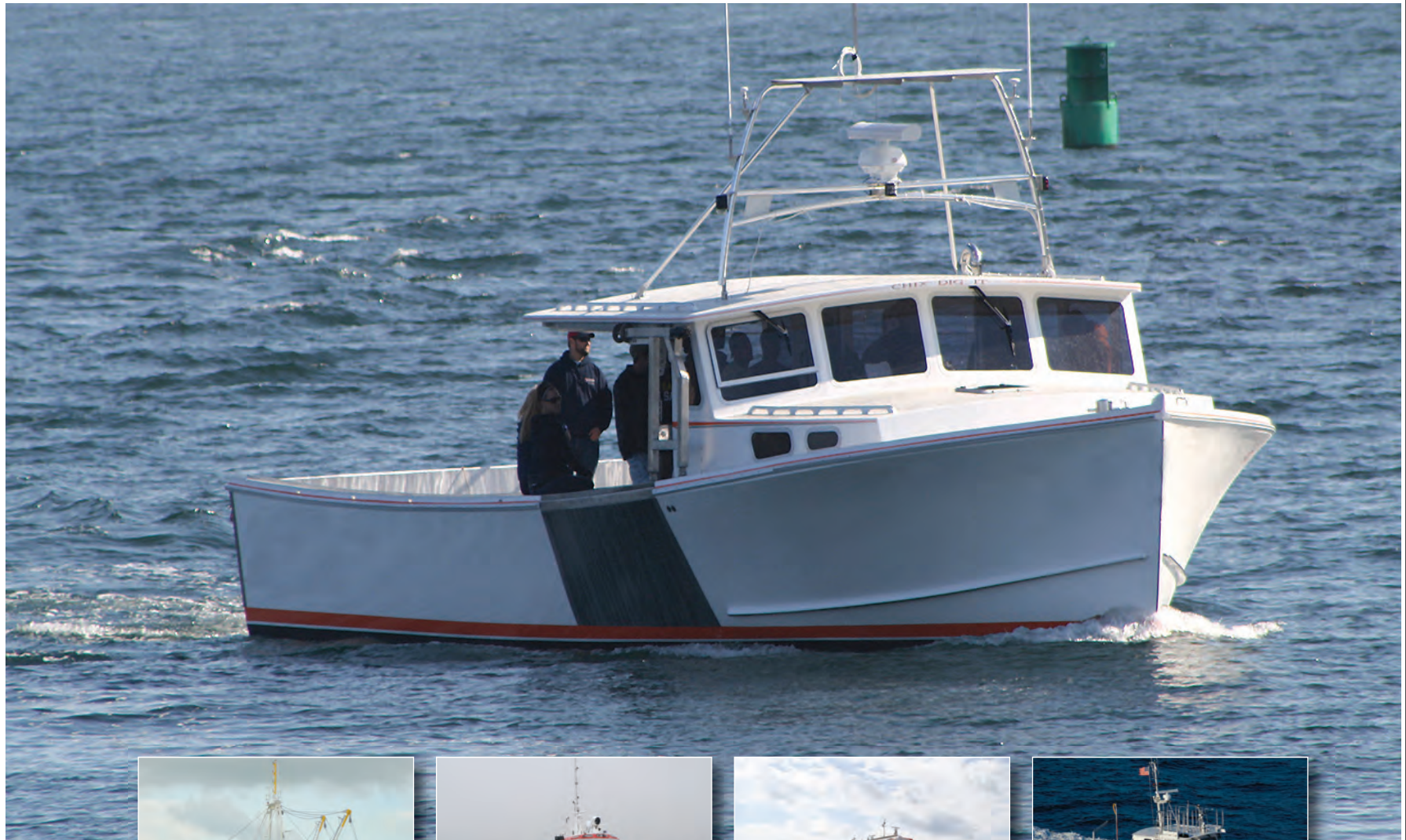
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