# **JCAA NEWSPAPER FEBRUARY 2015**

Official Newspaper of the JERSEY COAST ANGLERS ASSOCIATION (Published on January 13, 2015)

Monthly Meeting at Jersey Coast Shark Anglers, 385 Herbertsville Road, Brick ''WORKING FOR MARINE RECREATIONAL ANGLERS''

<u>JCAA REGULAR MEETING:</u> Tuesday, January 27<sup>th</sup>, 2015 <u>Starting at 7:30 PM</u> <u>AT JERSEY COAST SHARK ANGLERS</u> <u>NEXT JCAA BOARD MEETING</u> Thursday, February 12<sup>th</sup>, 2015 Starting at 7:30 PM at JCAA Office

**OFFICIAL NEWSPAPER OF THE JERSEY COAST ANGLERS ASSOC.** 1201 Route 37 East, Suite 9, Toms River, NJ 08753

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This publication is printed and mailed one week prior to each regular monthly meeting of the Jersey Coast Anglers Association. One of the prime goals of JCAA is to get accurate information into public hands as soon as possible.

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JCAA General Membership Meetings are for club representatives and invited guests only. These meetings are not open to the general public. If you would like to attend as a guest, call the President at 908-913-0551 or Tom Fote at (732) 270-9102 before the meeting date to ask permission.

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# **IMPORTANT DATES**

January 27<sup>th</sup> JCAA General Meeting February 2<sup>nd</sup>-5<sup>th</sup> ASMFC Winter Meeting February 4<sup>th</sup> -8<sup>th</sup> Atlantic City Boat Show February 12<sup>th</sup> JCAA Board Meeting February 24<sup>th</sup> JCAA General Meeting February 26<sup>th</sup> -March 1<sup>st</sup> Greater Philly Outdoor Sport Show March 5<sup>th</sup> -8<sup>th</sup> Suffern Show March 12<sup>th</sup> JCAA Board Meeting March 20<sup>th</sup> -22<sup>nd</sup> Saltwater Fishing Expo March 31<sup>st</sup> JCAA General Meeting

# **President's Report** By Paul Haertel

# **Striped Bass**

The latest on the pending striped bass regulations is that the Atlantic States Marine Fisheries Commission's (ASMFC) technical committee rejected New Jersey's proposal for one fish from 28" to under 42" with a second fish 42" and over because it only resulted in a 24.8% cut when a 25% cut is the minimum that is required. However, the New Jersey Marine Fisheries Bureau (NJBMF) modified their request making it one fish at 28" to under 43" with a second fish 43" and over. That option was approved as it resulted in a 25.1% cut.

At their meeting on 1/8/15, the New Jersey Marine Fisheries Council (NJMFC) discussed this proposal as well as others and accepted public comment. People spoke passionately about the proposals and although some favored one fish at 28", most favored the two fish option with one fish from 28" to under 43" with a second fish 43" or larger. Ultimately the council voted unanimously in favor of supporting that option. Though the NJMFC does not have the authority to set regulations pertaining to striped bass, legislators are expected to introduce bills reflecting the council's preferred option. Though assemblymen and senators may introduce bills in the very near future, it is unlikely that they will be heard until the full ASMFC board approves the option at their meeting on February 5th.

The bonus bass program is a separate issue that will be decided upon at a later date. However, it will stay in effect with either a small slot fish at 24"-29" or an additional fish over 28". The program will have to be more tightly monitored though as its quota was reduced and tags are expected to be in higher demand due to the regulation change.

#### Fluke

For many years fluke were managed by stateby-state measures with conservation equivalency. Each state was given its own quota while being allowed to set their own regulations. In 2013 we still had state-by-state quotas but, additionally, the ASMFC allowed the projected coastwide underage of fluke to be utilized. Ultimately New Jersey and New York shared this quota. It worked out well in that New Jersey was able to add additional days to its season while New York was able to reduce its size limit.

However, in 2014 regionalization was forced upon us against the will of the vast majority of our fishermen, fishing groups and those who represented NJ on the council. New Jersey's anglers wanted to stay with state-by-state measures or be made its own region. However, despite that the ASMFC, via a conference call, made exceptions for Massachusetts and Rhode Island allowing them to be their own regions even though that option was not in the addendum. Why were they allowed to do that when NJ was not?

New Jersey was forced into a region with Connecticut and New York. In part this was due to a disparity in the regulations in the Raritan Bay area where the commission deemed it was unfair for NJ anglers to be fishing with a 2" lower size limit than anglers from NY who were fishing in essentially the same waters. However, instead of correcting the problem all the commission did was to transfer the problem to Delaware Bay. In 2014 NJ anglers had to abide by an 18" size limit while DE anglers fishing the bay were allowed to keep fluke that were just 16". This was unfair to the anglers of southern NJ and many of our fishing businesses there lost revenue as people opted to fish out of DE instead.

Another problem with the regionalization plan was the fact that a portion of New Jersey's quota was reallocated to New York. Additionally though, fish from other states were also reallocated to our region. The projected harvest was substantially increased for Connecticut and New York target while at the same time New Jersey's projected harvest was decreased.

Then lo and behold the MRIP numbers came out and showed that New Jersey over fished its projected harvest but since Connecticut and New York under fished theirs, our region is Ok. The data also showed that the coastwide quota was slightly exceeded but that may be neutralized by a slight coastwide quota increase for 2015. However, it certainly seems as though NJ is being forced to stay in the regionalization plan or face significant cuts under state-by-state measures. Regardless, it would seem that NJ would come out of this OK, but not so fast. There are several options that would change the structure of the regions and rumor has it that New York is pushing for a 18.5" size limit so that our region's season could be extended to 153 days, 25 days more than last year. However, once the ASMFC decides exactly what the regions will be then the states in that region will have to battle it out to determine what the regulations will be. Size and bag limits as well season length must be the same in each region. However, each state may have different opening and closing dates if so desired.

Of the various regionalization plans, Option 5A would be the fairest not only to NJ but to other states as well. This option would have Delaware Bay as its own region and it could act as a transitional area between regions to the north and south of it. Perhaps Delaware Bay could have a 17" size limit while the region to its south could have a 16" size limit and the region to the north of it could have an 18" size limit. A 1" difference between any regions is far more acceptable than a 2" difference. Further, having Delaware Bay as its own region should have minimal impact on the other regions. For example, if the option to split NJ in half were chosen, there would likely again be a 2" gap between the regions.

This would pit northern NJ anglers against those in southern NJ. Northern NJ as well as other states within that region would then likely have to sacrifice fish so to accommodate this. There is certainly a lot to consider and the annual fluke wars are about to begin. We are going to need help from our politicians or we will once again be forced to succumb to the regulations preferred by New York with its political might.

# NJ Saltwater Recreational Registry Program / NJ Volunteer Angler Survey

Don't forget to register or re-register with the NJ Saltwater Recreational Registry Program for 2015. You can start re-registering now for 2015. You can register or renew your registration for 2015 by going <u>here</u>. If you do go fishing please consider filling out the NJ Volunteer Angler Survey to help the Bureau of Marine Fisheries better manage our resources by going to <u>this link</u>.

You can also check regulations changes, get current advisories, check launch ramp and park locations, report violations, as well as fill out the NJ Voluntary Angler Survey now on your smartphone or tablet with the new Official NJ Fishing, Hunting & Wildlife <u>application</u>!

# Fisheries Management & Legislative Report By Thomas Fote

# Environmental Reasons for Poor Recruitment

In the last few issues of the JCAA Newspaper, I have discussed the impact environmental issues are having on the bays and estuaries. The National Marine Fisheries Service and the Atlantic States Marine Fisheries Commission have developed plans that are designed to rebuild stocks. But the only factors considered in the management measures are the recreational and commercial fisheries.

There are other factors that need to be considered in developing these plans. The first is endocrine disruptors. Sewer discharges have a huge impact on the sexuality, reproduction and viability of fish in every instance. There are also many bays, estuaries and rivers that are the nursery areas that have suffered long-term chemical pollution that has not been sufficiently remediated. The combination of these two factors is having a negative impact on all species that occupy those bodies of water. I remember attending a scientific workshop on fisheries in 1992. One of the presenters was Doctor Judy Weiss from Rutgers University. At that time she had just completed her first study that looked at the effects of chemical pollution on mummy chubs She found extreme developmental or killies. differences between the killies in Newark Bay and the ones in the more pristine water of Little Egg Harbor. Since that time Judy has done studies on four other species with the same results. With the exception of bluefish, more of the species studied were forage species for summer flounder, striped bass and bluefish. These species suffered handicaps in their development. The one thing Judy did not study was the effects of this pollution on their reproduction.

We know it affected their behavior in nutrition and other areas. We have other studies from Chesapeake Bay, Raritan Bay and many other bodies of water that show endocrine disruptors are having a negative impact on the sexual development and the ability to reproduce for many species. We look at these studies but they are not considered in developing the management rules. In the last few years we have used the phrase "unaccounted natural mortality." This was mentioned prominently in the weakfish stock assessment. It was the only way ASMFC could deal with the fact that they had put in place all the appropriate management measures without seeing the expected growth in the stocks. This problem is also being observed in the poor recruitment in stocks where there is huge spawning stock biomass. The questions I am asking are first, "Have endocrine disruptors contributed negatively to the data?" Second, "Have the pollutants kept these fish from reaching sexual maturity?" The bottom line is that species that are totally ocean dependent and don't come in contact with the contaminants in the bays and estuaries don't seem to be having the same reproductive problems. The problems we face are more clearly linked to global warming, the availability of forage species and other climate factors.

I would really like to tell you that better, more extensive studies will be completed in the near future and considered in developing management plans. However, the current cutbacks in research dollars make that improbable. We need to convince our state and federal legislators that this is a problem that demands their attention. These are not "feelgood" studies or earmarks. This is actual research that should be required of NMFS and the states in their role as protectors of the common good.

# **ASMFC 2015 Winter Meeting**

If you look at the agenda for the upcoming winter meeting you will see that there will be some major discussion about striped bass, summer flounder and other species. The agenda is below. For those of you who are unable to attend meetings, they are broadcast on the web in real time. If you want to know what is going on, tune in.

The ASMFC had field hearings on summer flounder. I attended the meeting in Toms River where important measures were discussed. Unfortunately only 9 people were present. This is not good. There were also many groups that were not represented. You need to get away from your computer and attend these public hearings. Your questions will be answered and, as commissioners, we make ourselves available for as long as it takes. There is much staff and Commission time dedicated to planning these public hearings. It was one of the things I demanded when we developed the legislation for the Atlantic Coast Conservation Act. ASMFC was required to develop a process for obtaining public input. ASMFC has fulfilled its obligation. You just need to fulfill your obligation by attending.

# **JCAA Newspaper Archives**

JCAA has archived all of our newspapers on our webpage since 1995. When postage was less expensive, we used to send many newspapers to clubs and organizations. The cost to print and mail to individuals is probably more than the cost of an associate membership. We are counting on you to access the newspaper online. If you want the alert when it is posted, just sign up with the directions included below. If you missed the last 2 newspapers, there are articles about the summer flounder and striped bass regulations. It is important that you understand all factors that will impact on the final decision. You can find any topic for the past 20 years. The most surprising part is the similarity across the decades, with problems being repeated again and again. Catch up and be more informed. You should also sign up for the ASMFC MidAtlantic and NOAA releases. These are all free.

## **Getting JCAA Alerts**

People I meet have many questions about JCAA and fisheries management and the JCAA Fluke Tournament. I always ask if they read the current JCAA newspaper. Or I ask if they are on the JCAA email list for frequent updates. Too many of them say no to both. At the risk of sounding like a broken record, there is considerable effort put into every JCAA newspaper and all the email alerts. If you don't read them, all that time and energy doesn't have much payoff. If I don't have your email address, you miss the alerts entirely. If you want to be on the email list, go to the JCAA webpage (www.jcaa.org) and click on the word "subscribe" about half way down the page. Or send me an email and I will add you to the list. All I need is your name and email address. This list is confidential and is never shared with anyone outside of JCAA. What is also disappointing is that every club does not have a representative on the email list. This is something your club can remedy easily. Just send me an email at tfote@jcaa.org and say you are the club representative.

# ASMFC Winter Meeting February 3-5, 2015 at the Westin Alexandria, Virginia

Preliminary Agenda

#### **Tuesday, February 3, 2015** 8:00 – 8:45 a.m. **Winter Flounder Management**

#### 8:00 – 8:45 a.m. Winter Flounder Management Board

- Set Specifications for the 2015 Fishing Season
- Review and Consider Approval of the 2014 FMP Review and State Compliance

#### 9:00 – 10:30 a.m. Atlantic Herring Section

- Review and Consider Approval of Draft Amendment 3 for Public Comment
- Review and Consider Approval of the 2014 FMP Review and State Compliance

### 10:45 a.m. – 12:45 p.m. American Lobster Management Board

• Review and Consider Approval of Draft Addendum XXIV for Public Comment

- Review Preliminary Draft of Jonah Crab Fishery Management Plan
- Review and Consider Approval of Nominations to the Jonah Crab Advisory Panel

#### 1:45 – 5:15 p.m. Atlantic Menhaden Management Board

- Review and Consider Acceptance of 2015 Benchmark Stock Assessment and Peer Review Panel Reports
- Discuss Ecological Reference Points (ERP) Term of Reference
- Discuss Management Objectives Moving Forward Based on Results of the Benchmark Assessment/ERP Term of Reference

# Wednesday, February 4, 2015

### 8:00 – 9:00 a.m. Executive Committee

- Discuss Staff Tenure and Workload
- Review Suggested Changes to Commission Guidance Documents
- Update on 2015 Annual Meeting

# 9:15 – 11:15 a.m. ISFMP Policy Board

- American Eel Fish Passage Update
- Review and Discuss 2014 Commissioner Survey Results
- Discuss Updating the Roles and Responsibilities of the Committee on Economics and Social Science
- Review and Consider Revisions to the ASMFC Committee Guidance and Assessment Process Document

# 11:30 a.m. – 12:15 p.m. Weakfish Management Board

- Review and Consider Approval of the Terms of Reference for the 2015 Benchmark Stock Assessment
- Review Abbreviated Stock Status Update

# 1:15 – 3:15 p.m. South Atlantic State/Federal Fisheries Management Board

- Review and Consider Acceptance of 2014 Black Drum Benchmark Stock Assessment and Peer Review Panel Reports
- Discuss Need for Management Response to the Benchmark Assessment

• Review and Consider Approval of 2014 FMP Reviews and State Compliance for Spanish Mackerel, Spot, and Spotted Seatrout

#### 3:30 – 6:30 p.m. Summer Flounder, Scup, and Black Sea Bass Management Board

- Review and Consider Final Approval of Addendum XXVI
- Set 2015 Black Sea Bass Recreational Management Measures
- Set 2015 Scup Recreational Management Measures

### Thursday, February 5, 2015

#### 8:00 a.m. – Noon Atlantic Striped Bass Management Board

- Review and Consider Approval of Addendum IV Conservation Equivalency Proposals and Implementation Plans
- Review Virginia Proposal to Suspend Tagging Program

# 12:30 – 2:30 p.m. Tautog Management Board

- Review and Consider Acceptance of 2015 Benchmark Stock Assessment and Peer Review Panel Reports
- Discuss Need for Management Response to the Benchmark Assessment
- Review and Consider Approval of the 2014 FMP Review and State Compliance

#### 12:45 – 2:15 p.m. Atlantic Coastal Cooperative Statistics Program (ACCSP) Executive Committee

- Status Updates on the Program and MRIP-APAIS Transition
- Review Action Items from Previous Meeting

#### 2:45 – 4:00 p.m. Shad and River Herring Management Board

- Review and Consider Approval of 2014 FMP Reviews and State Compliance for Shad & River Herring
- Review New Hampshire Proposal for the Removal of Taylor River Monitoring
- Update on Shad and River Herring Related Activities of the Mid-Atlantic and New England Fishery Management Councils
- Update on the River Herring Technical Expert Working Group

#### 4:15 – 5:45 p.m. ACCSP Coordinating Council

- ACCSP Status Reports on the Program, MRIP-APAIS Transition, Committee Activities, and Independent Program Review
- Discussion on Providing Operations Committee with More Authority to Recommend Different Funding Split than the 75/25 When Necessary

# Fast-Warming Gulf of Maine Offers Hint of Future for Oceans

## By Rebecca Kessler, Environment 360 November 17, 2014

The waters off the coast of New England are warming more rapidly than almost any other ocean region on earth. Scientists are now studying the resulting ecosystem changes, and their findings could provide a glimpse of the future for many of the world's coastal communities.

After hauling in the cages at his island oyster farm near Biddeford, Maine, Mark Green's boat is loaded with crusty marine life. Baskets of oysters are there, but so are green crabs - invasive and inedible. "My boat will be full," Green says. "The bottom will just be this undulating mass of green crabs by the end of the day. I mean thousands." A native of Europe, green crabs have been present on the U.S. East Coast for more than a century, but until a couple of years ago they didn't cause much trouble in Maine. Now, thanks to rapidly warming waters, their population has exploded. While they don't bother the tough-shelled oysters, the crabs are laying waste to the region's softshell clams - another important commercial stock — and devastating its seagrass meadows, which Green, an environmental scientist at St. Joseph's College in nearby Standish, calls "the most crucial habitat that exists in an estuary."

"It's crazy," Green says. The seething, skittering masses of green crabs and mudflats depleted of clams and seagrass are just a few signs of big changes underway in the Gulf of Maine, the pool of Atlantic waters stretching from Cape Cod to southern Nova Scotia. Scientists report that the gulf's waters are warming faster than 99.85 percent of the rest of the world's oceans, and the marine ecosystem is reorganizing itself apace. The changes are so striking — and the fishery they affect is so important to the region's economy and identity — that they are under close watch by the area's many marine scientists. Observers say the gulf has become a "living laboratory" for how climate change could play out in marine ecosystems around the world.

"At minimum what we're seeing now is a window to what we expect our average conditions to be in the middle or towards the end of the century," says Andrew Pershing, chief scientific officer at the Gulf of Maine Research Institute. "We're kind of seeing a glimpse of the future. Pershing cautions that it remains unclear how much of the warming trend is driven by climate change and how much is simply a result of the gulf's natural variability, and he suggests that the gulf could cool again somewhat in the short term.

But it is clear, Pershing says, that only three other places on earth are heating up as fast as the Gulf of Maine. Using longterm ocean-temperature data, Pershing and a colleague documented the gulf's rapid warming — including an uptick of roughly three degrees Celsius over the past decade. In 2012, a massive, unprecedented oceanic heat wave descended on the entire northwest Atlantic with the gulf at its epicenter, making it the warmest year on record. Last year proved to be the second warmest ever documented, but Pershing says 2014 may beat that — despite last winter's frigid "polar vortex."

Scientists are also documenting other dramatic environmental transformations in the gulf related to rising greenhouse gas emissions, says Jon Hare, oceanography branch chief for the National Oceanic Atmospheric Administration's and Northeast Fisheries Science Center in Narragansett, Rhode Island. Ocean water is becoming fresher, most likely due to Arctic ice melting into the Labrador Sea, one of the gulf's main water sources. Precipitation is increasing, particularly heavy precipitation during storms. And forthcoming research from NOAA confirms that the gulf is becoming more acidic due to rising atmospheric carbon dioxide levels, Hare says. All of this is happening against a backdrop of more familiar problems, like overfishing, pollution, and chronic low-oxygen hotspots, which scientists say can combine to stress organisms and make it difficult to pinpoint why they may be struggling.

"Across the physical spectrum there have been a lot of changes," Hare says, and the gulf's marine life is responding fast, starting at the very bottom of the food web. Hare says there is evidence that seasonal blooms of phytoplankton and zooplankton are changing their timing, magnitude, and species composition, and that these shifts could reverberate throughout the ecosystem, although further research is needed to understand how.

Most striking to Hare and other observers are the species from further south that are turning up in waters once too cold for comfort. Strange sightings peaked during the warmest years of 2012 and 2013, although some reports have continued to roll in this year, they say. Longfin squid, normally found only in the southern gulf and below, rushed north into the gulf's coastal waters in greater numbers than anyone could remember, prompting a squid-fishing spree from the tip of Cape Cod to New Brunswick in Canada. Maine lobstermen hauling their traps found triggerfish, typical of the Carolinas and south, and scientists reportedly even spotted tropical species like filefish and snowy grouper in Maine waters.

One species generating a lot of chatter is the black sea bass, an aggressive, territorial reef fish that used to range mainly from the Gulf of Mexico to Cape Cod. Gulf of Maine lobstermen were surprised when it began showing up regularly in traps a few vears ago, savs Marissa McMahan, a doctoral student at Northeastern University in Boston. McMahan grew up crewing on her father's lobster boat, but didn't see her first black sea bass until 2012. A dozen appeared in their traps that summer, she says. When fall came, McMahan went off to graduate school and decided to focus her research on the species. The next summer her father sent around 40 black sea bass from his traps for her to examine. She heard similar accounts from other fishermen, whom she relies on for samples and reports of sightings. "It skyrocketed, the amount of fish that they were catching as bycatch. I mean, it went through the roof."

McMahan says many fishermen and scientists are concerned black sea bass, voracious eaters, may be developing a taste for juvenile lobsters as they settle into their new home in the gulf. On the bright side, she says, they are also wondering whether sea bass might turn into a new commodity, since the species generates a good price in its native range, where it's fished commercially.

Meanwhile, the gulf's native species are shifting fast, too. Populations of cod and northern shrimp, once fishing industry pillars, have plummeted. This month officials announced historic emergency measures to protect cod that effectively shut down the gulf's iconic fishery, at least until spring, after survey results showed stocks around 3 percent of what would constitute sustainable levels. This follows the closing of the northern shrimp season altogether for a second year in a row due to dwindling stocks across the entire North Atlantic. What remains of the cod and the shrimp populations appear to be moving north into cooler waters, leaving devastated fishing families in their wake.

By contrast, the lobster fishery is flourishing. It now dominates the region's post-cod fishing economy, and it's probably no coincidence that cod was once a major lobster predator, scientists say. But even the lobsters' abundance may be precarious. They've been shedding their shells earlier and earlier in the spring, and during the 2012 heat wave they molted a full month earlier than usual. A staggering early catch flooded the market that year and caused prices to plunge. Though the catch has stabilized and lobstermen are making money again, there is some uneasiness about the future.

Green points out that only two studies have explored how lobsters might respond to ocean acidification, with contradictory results. And a disease that rots their shells seems to be creeping slowly northward, he notes, after quickly wiping out lobster industries to the south within a year or two.

Many observers see an ecosystem-wide pattern that extends beyond commercial stocks and will require a great deal more research to fully understand.

"There's this big change happening in the Gulf of Maine in general, for whales and turtles and dolphins and gulls and fish and lobsters and just everything," says Kathleen Hunt, a research scientist at the New England Aquarium in Boston who studies whales and sea turtles. "Every population I know of is changing its distribution. It's either appearing where it didn't used to be or it's disappearing from where it did used to be, or it's starving, or it's getting a new disease. "Clearly there's a big shift going on, which I can't help but suspect is global warming," she adds. "But as scientists we're not allowed to say that yet till we see if it's a 20-year trend or not."

No one wants to wait that long for answers. New research initiatives are looking directly at how climate change is playing out in the Gulf of Maine, with the goal of helping fishermen and managers adapt to what may be one of the fastest-changing ecosystems in the world. NOAA, for instance, has developed new methodology for quickly assessing how vulnerable marine species are to climate change, starting with 79 species from the northeastern U.S. and southeastern Canada, including the gulf. Hare, the project lead, says he expects the techniques will be applied elsewhere.

Scientists are starting to think of the region as a case study for other parts of the world that remain relatively stable for now, Pershing says. "What we've seen is something that everybody around the world is going to be seeing at one level or another, maybe at a more gradual rate, maybe at a faster rate," Pershing says. "But we've seen it here, and I think we have a real duty to learn from it."

Link to original article <u>here</u>.

# Larger 'Dead Zones', Oxygen-Depleted Water, Likely Because of Climate Change

### By Darryl Fears, Washington Post November 10, 2014

Three years ago, the Chesapeake Bay was hit by an unusually large "dead zone," a stretch of oxygen-depleted water that killed fish from the Baltimore Harbor to the mid-channel of the Potomac River and beyond, about a third of the bay.

Another giant dead zone returned last summer, smaller than the first but big enough to rank as the estuary's eighth largest since state natural resources officials in Virginia and Maryland started recording them in the 1990s.

In a future of climate change, those behemoths might not seem so unusual, according to a new report by the Smithsonian. As the global temperatures warm, they will create conditions such as rain, wind and sea-level rise that will cause dead zones throughout the world to intensify and grow, the report says. Ninety-four percent of places where dead zones have been recorded are areas where average temperatures are expected to rise by about 4 degrees Fahrenheit by the turn of the century. In addition to the Chesapeake Bay region, that includes the Black and Baltic seas and the Gulf of Mexico, where a dead zone equal to the size of Connecticut took shape in August.

"Over 40 percent of the world's population lives in coastal areas," said Keryn B. Gedan, codirector of a conservation program at the University of Maryland and a researcher at the Smithsonian Environmental Research Center in Cambridge, Md. "We depend on these resources. No one wants to see a fish kill or harmful algal bloom at their local beach."

Gedan was a co-author of the study with Andrew H. Altieri of the Smithsonian Tropical Research Institute in Panama. They found that the number of dead zone events have doubled each decade since the 1950s and that humans have likely contributed to their growth in intensity and size. "We just don't know how much of this doubling is due to climate change or nutrient runoff," Gedan said. More studies with more "sophisticated modeling" are needed to determine that, she said.

Dead zones are summer plagues that happen when waters warm. As the water temperatures increase, three key events pave the way for a catastrophe that kills any fish, crab, oyster and shrimp that relies on oxygen. The metabolism of animals in the water revs up, turning them into hungry eaters that use more oxygen as they search and feed on algae. Algae that feeds on nutrient pollution that runs off farms in rains and pours out of overflowing sewers bloom and perish in a rapid and enormous death spiral. Microbes feed on the dead algae in a frenzy that sucks out oxygen to a point where it can no longer sustain life.

In a warming world, this process, which currently starts around May, will likely start sooner unless steps are taken to reduce the overabundance of nitrogen, phosphorous and other pollutants that flow into water. Gedan said the Chesapeake Bay cleanup plan is one example of how government can act to mitigate climate driven impacts that create dead zones. Previous research supports that assertion. A study of the bay's water quality by researchers for Johns Hopkins University and the University of Maryland Center for Environmental Science found that dead zones have been reduced since pollution limits were first implemented in the 1980s.

They studied water-quality data for the Chesapeake from 1949 to 2009 and found "evidence that cutting back on the nutrient pollutants pouring into the bay can make a difference," the study's lead author, Rebecca R. Murphy, a doctoral student at Johns Hopkins, said when the study was released in 2011.

There is no certainty that cleanup plans such as the bay's so-called pollution diet, which calls for the governments in six states and the District to reduce sewer overflows and nutrient runoff from farms, can counteract changing climate and its accompanying ill effects. Downpours, wind storms and sea-level rise are a lot to overcome. Downpours cause sewers to overflow, wind storms wipe fertilizers off yards and push them down drains and sea-level rise threatens to drown wetlands that block pollution's path to rivers that feed bays and oceans.

Unlike crabs and bivalves such as oysters, striped bass, an iconic Maryland and Virginia fish, could swim to the shallows to escape deeper oxygen depleted water. But as the weather warms and raises the temperature in shallow water, that refuge could go away.

High temperatures in shallows cause "thermally induced hypoxia," the report said. "This combination is predicted to reduce habitat for striped bass. In extreme situations, the temperatures of shallow water may exceed thermal tolerance of organisms, leaving them with the dilemma of choosing death by hypoxia at depth or by thermal stress in the shallows."

Darryl Fears has worked at The Washington Post for more than a decade, mostly as a reporter on the National staff. He currently covers the environment, focusing on the Chesapeake Bay and issues affecting wildlife. Link to original article <u>here</u>.

### Ocean Life Faces Mass Extinction, Broad Study Says By Carl Zimmer, New York Times January 15, 2015

A team of scientists, in a groundbreaking analysis of data from hundreds of sources, has concluded that humans are on the verge of causing unprecedented damage to the oceans and the animals living in them.

"We may be sitting on a precipice of a major extinction event," said Douglas J. McCauley, an ecologist at the University of California, Santa Barbara, and an author of the new research, which was published on Thursday in the journal Science.

But there is still time to avert catastrophe, Dr. McCauley and his colleagues also found. Compared with the continents, the oceans are mostly intact, still wild enough to bounce back to ecological health.

"We're lucky in many ways," said Malin L. Pinsky, a marine biologist at Rutgers University and another author of the new report. "The impacts are accelerating, but they're not so bad we can't reverse them."

Scientific assessments of the oceans' health are dogged by uncertainty: It's much harder for researchers to judge the well-being of a species living underwater, over thousands of miles, than to track the health of a species on land. And changes that scientists observe in particular ocean ecosystems may not reflect trends across the planet.

Dr. Pinsky, Dr. McCauley and their colleagues sought a clearer picture of the oceans' health by pulling together data from an enormous range of sources, from discoveries in the fossil record to statistics on modern container shipping, fish catches and seabed mining. While many of the findings already existed, they had never been juxtaposed in such a way.

A number of experts said the result was a remarkable synthesis, along with a nuanced and encouraging prognosis.

"I see this as a call for action to close the gap between conservation on land and in the sea," said Loren McClenachan of Colby College, who was not involved in the study.

There are clear signs already that humans are harming the oceans to a remarkable degree, the scientists found. Some ocean species are certainly overharvested, but even greater damage results from large-scale habitat loss, which is likely to accelerate as technology advances the human footprint, the scientists reported.

Coral reefs, for example, have declined by 40 percent worldwide, partly as a result of climate-change-driven warming.

Some fish are migrating to cooler waters already. Black sea bass, once most common off the coast of Virginia, have moved up to New Jersey. Less fortunate species may not be able to find new ranges. At the same time, carbon emissions are altering the chemistry of seawater, making it more acidic.

"If you cranked up the aquarium heater and dumped some acid in the water, your fish would not be very happy," Dr. Pinsky said. "In effect, that's what we're doing to the oceans."

Fragile ecosystems like mangroves are being replaced by fish farms, which are projected to provide most of the fish we consume within 20 years. Bottom trawlers scraping large nets across the sea floor have already affected 20 million square miles of ocean, turning parts of the continental shelf to rubble. Whales may no longer be widely hunted, the analysis noted, but they are now colliding more often as the number of container ships rises.

Mining operations, too, are poised to transform the ocean. Contracts for seabed mining now cover 460,000 square miles underwater, the researchers found, up from zero in 2000. Seabed mining has the potential to tear up unique ecosystems and introduce pollution into the deep sea.

The oceans are so vast that their ecosystems may seem impervious to change. But Dr. McClenachan warned that the fossil record shows that global disasters have wrecked the seas before. "Marine species are not immune to extinction on a large scale," she said.

Until now, the seas largely have been spared the carnage visited on terrestrial species, the new analysis also found.

The fossil record indicates that a number of large animal species became extinct as humans arrived on continents and islands. For example, the moa, a giant bird that once lived on New Zealand, was wiped out by arriving Polynesians in the 1300s, probably within a century.

But it was only after 1800, with the Industrial Revolution, that extinctions on land really accelerated.

Humans began to alter the habitat that wildlife depended on, wiping out forests for timber, plowing under prairie for farmland, and laying down roads and railroads across continents.

Species began going extinct at a much faster pace. Over the past five centuries, researchers have recorded 514 animal extinctions on land. But the authors of the new study found that documented extinctions are far rarer in the ocean.

Before 1500, a few species of seabirds are known to have vanished. Since then, scientists have documented only 15 ocean extinctions, including animals such as the Caribbean monk seal and the Steller's sea cow.

While these figures are likely underestimates, Dr. McCauley said that the difference was nonetheless revealing.

"Fundamentally, we're a terrestrial predator," he said. "It's hard for an ape to drive something in the ocean extinct."

Many marine species that have become extinct or are endangered depend on land — seabirds that nest on cliffs, for example, or sea turtles that lay eggs on beaches. Still, there is time for humans to halt the damage, Dr. McCauley said, with effective programs limiting the exploitation of the oceans. The tiger may not be salvageable in the wild — but the tiger shark may well be, he said.

"We better pick them up and use them seriously."

Dr. McCauley and his colleagues argue that limiting the industrialization of the oceans to some regions could allow threatened species to recover in other ones. "I fervently believe that our best partner in saving the ocean is the ocean itself," said Stephen R. Palumbi of Stanford University, an author of the new study.

The scientists also argued that these reserves had to be designed with climate change in mind, so that species escaping high temperatures or low pH would be able to find refuge.

"It's creating a hopscotch pattern up and down the coasts to help these species adapt," Dr. Pinsky said. Ultimately, Dr. Palumbi warned, slowing extinctions in the oceans will mean cutting back on carbon emissions, not just adapting to them.

"If by the end of the century we're not off the business-as-usual curve we are now, I honestly feel there's not much hope for normal ecosystems in the ocean," he said. "But in the meantime, we do have a chance to do what we can. We have a couple decades more than we thought we had, so let's please not waste it."

# NJ Outdoor Alliance Report By John Toth

# Pots Off the Reefs - Update

Many of us anglers have signed petitions at club meetings, various fishing shows and have sent letters and emails and all sorts of communications to our legislators to get the traps off the Axel Carlson and Sandy Hook reefs that have made fishing for recreational anglers very difficult with our anchor lines and fishing lines being snagged on traps placed there by commercial anglers. The building of these reefs, largely paid for by recreational anglers, proved to be a great place for fish to habitat to protect them from predators. However, it did not take long for commercial anglers to recognize how productive they can be to harvest fish and they placed their traps all over these reefs and basically using the reefs for themselves and not for recreational anglers.

Trying to remove these traps has been a long and difficult process stretching roughly over10 While the NJOA and its membership years! organizations (including the JCAA) have lobbied in Trenton on this issue (myself testifying on behalf of the JCAA) at Assemblyman Nelson Albano's Agricultural and Natural Resources Committee on March 8, 2012., we have been stymied by commercial interests in trying to remove these traps though the legislative process. While the NJOA and the JCAA was able to have a majority of Senators and Assemblypersons to support the removal of these traps, Assembly Speakers (Roberts and Nelson) would not post the bills in the Assembly for a vote. (If a bill is not posted, it cannot be voted upon).

We were told by various legislators that in order to have these traps removed that we would have to accept some type of compromise solution to this issue by allowing some portion of the two reefs to be accessible to commercial trappers or otherwise any solution to remove the traps would not be legislatively possible. I have heard many anglers say to me at fishing trade shows "what, these traps are not off the reef already!" To resolve this ongoing issue that has continually resisted resolution, the NJOA agreed to a compromise solution for it.

This compromise solution was announced at the New Jersey Marine Fisheries Council meeting on January 8, 2015. This compromise calls for a portion of the two reefs to be reserved for commercial trappers and the major areas of the two reefs for recreational anglers. As part of this compromise, the NJ DEP will build a new reef site for recreational anglers only to ensure "no net loss" of reef area for hook and line, and spear fishing." The issue of removing fixed gear on reefs located in federal waters off the New Jersey's coast continues to be pursued by the NJOA. DEP Commissioner Martin who has stated that the Christie Administration will petition the federal government to have fixed gear removed from these reefs in the near future.

This compromise (too lengthy for me to write up for this newsletter) will be available for public comment shortly and may be reviewed on the NJ DEP website at <u>this link</u>.

I will keep you updated on this reef issue as it hopefully becomes resolved to our satisfaction.

# Membership Report By John Toth

With the beginning of the new year, club memberships are due for payment and invoices have been mailed to member clubs. Club dues still remain at \$50, and sponsorships of \$50, \$100, \$250 and \$500 are available for publication in this newsletter and would be very much appreciated. Please completely fill out not only the Dues and Sponsorship form, but also the Club Survey form so that we can update information about your club and our mailing list.

**Please note** that we have a glitch in our computer system and multiple renewal letters are going out for differing amounts. Please ignore the multiple letters and just send in whatever amount you are comfortable with. Sorry for the confusion.

Please send in your payments to our address: JCAA, 1201 Route 37 East, Suite 9, Toms River, NJ 08753.

Two clubs are "early birds" in their dues and sponsorship payments with the Berkley Striper Club not only paying their 2015 dues, but also their sponsorship of \$750, and the Newark Bait & Flycasting Club of \$100. Thank you for your generous and quick payments!

If there are problems with the JCAA sending newsletters to the wrong addresses or to the wrong club members, please let me know so that corrections can be made. I can be reached at (732) 656-0139 or at tothjohn@verizon.net.

As always, **thank you**, for your continued support of the JCAA!

# **Youth Education Report**

By Greg Kucharewski

#### NJDEP STUDENT SUMMER PROGRAMS

This is a great opportunity for students that want to experience the outdoors. There will be three exciting summer programs for teenage students. The programs will be held at the Sedge Island Natural Resource Education Center just off Island Beach State Park in Barnegat Bay. Offered by the NJDEP Division of Fish and Wildlife and its partners, the three sessions include the Sedge Island Fishing Experience, the Sedge Island Field and Research Experience, and the Sedge Island Field Experience.

For more information on each session, including dates, fees and application forms, visit <u>this</u> <u>link</u>.

#### **BHCFA JUNIOR MATE**

News from Captain Lindsay Fuller: The Beach Haven Charter Fishing Association, Inc., in conjunction with Berkley Fishing, sponsors the BHCFA Junior Mate Training Program. This is a real job training program for teenagers who want to learn the necessary skills to become certified charter boat mates. This is the only program of its kind. While the 2015 Curriculum is not yet posted, the Registration requirements and Forms are posted and may be downloaded.

Registration for the 2015 Junior Mate Training Program will be held on Thursday, June 25, 2015 at 7 p.m. at the New Jersey Maritime Museum, Dock Rd at West Avenue in Beach Haven. Check the BHCFA website at www.BHCFA.com for more details, the requirements and forms for applying for the Program or call Capt. Lindsay Fuller at 609-685-2839 or e-mail him at <u>captlindsay@fishjunebug.com</u>.

This year, pre-registration WILL BE REQUIRED. Registration Forms including the Application and Parental Blanket Permission Form must be signed and sent to BHCFA with a check for the \$25 Program Fee early enough that BHCFA has your application material at least a week prior to Registration Night. The mailing address for the paperwork is BHCFA c/o Capt. Lindsay Fuller, 204 West Rt 38, Moorestown, NJ 08057. Please make sure that your Application is complete and is legible. All Applicants need access to e-mail since that is how we communicate with participants. The e-mail address may be the Applicant's or a parent's.

Applicants will also be required to enroll in the recommended Coast Guard approved drug test program and have taken their "pre-employment" drug test soon enough that they can bring the results of that test to Registration Night. It takes about 10 days from the date you enroll to receive the "preemployment" test instructions and then 3 weeks from the date of your drug test for the results to be received in the mail so don't wait until the last minute to enroll and to take your test. First year Applicants who show up without their drug test results will not be permitted to join the program this season. If you wait until Registration Night to register, the Program may have been filled for this season.

#### TOMS RIVER SOUTH STUDENTS

Tim Burden and Paul Harris spent time at Toms River South High School to present an introductory program about supporting a youth fishing program at the school. It was an initial meeting of their student fishing club that the NJBBA will support. Twenty students were in attendance including a NJBBA family member student.

#### **EVENT INFORMATION REQUEST**

The Jersey Coast Anglers Association's Youth Education Committee is asking JCAA member clubs/organizations for a listing of scheduled youth and family events that are going to be held by your club or organization during 2015. The purpose of this request is to alert other fishing clubs and organizations that would like to participate in your youth and family event. The JCAA Newspaper is a way to get the word out about what's happening in your club. Use this opportunity to others about your inform events fishing club/organization is doing to promote fishing. The Jersey Coast Anglers Association's Youth Education Committee will support your event with Hook On Fishing Not On Drugs materials. Please contact Greg Kucharewski with your listing of youth and family events and don't forget the Sportsmen Shows. Include your booth location, fishing club or organization that will attend. By providing this information, your fishing club or organization can improve membership and increase consumer participation.

#### JCAA YOUTH EDUCATION AWARD NOMINATIONS

The JCAA Youth Education Committee is accepting nominations for the 2015 Youth Education Award. It takes the support of many volunteers to bring successes to the fishing community but sometimes individuals and sport-fishing organizations go above and beyond to make the future of fishing better for our youngsters. Criteria: Promoting NJ Hooked On Fishing Not On Drugs (HOFNOD), Certified HOFNOD instructors. number of fishing or aquatic education events, JCAA lending library usage, and creativity for promoting youth fishing events. There are many fishing clubs,

organizations and individuals providing opportunities for youngsters to learn about fishing. Some go unnoticed. Please take the time to write (250 words or less) so they can be recognized. Submit your nominations in writing at the JCAA May meeting or email the JCAA Youth Education Committee, <u>gkucharews@jcaa.org</u>.

#### NEWARK BAIT & FLY CASTING CLUB YOUTH FISHING SEMINAR

The JCAA Youth Education Committee will support the Newark Bait and Fly Casting Club's Free Youth Fishing Seminar by providing a "Guess the Fish" activity. Members of the Newark Bait and Fly Casting Club hosts this annual event at the Knights of Columbus Hall, located in Union, NJ. The seminar is scheduled for 7:30 p.m., Tuesday, March 3, 2015 and it's always a lot of fun for the youngsters.

Children and their families are welcome to come and enjoy a night of fun fishing activities and refreshments. We always enjoy working with the membership of this club because they are devoted to teaching the joys of fishing to our young people.

#### NJ HOFNOD ASSISTANCE NEEDED

Help is needed for the Cumberland County NJ HOFNOD 4H program. Joe Haase needs two NJ HOFNOD Certified Volunteers to co-lead the program with him. He has about 50 or more youth interested in participating, an indoor meeting location on the water, and supplemental resources. His program is weekly and will begin April 2015. Please visit www.hofnodcc.org for more information and how you can assist with this program. If you can assist please phone 732-785-9278. To receive more information about becoming a NJ HOFNOD volunteer/facilitator, please contact Liz Jackson, NJ HOFNOD Program Coordinator, at 908-637-4125 x122 or by e-mail at <u>liz.jackson@dep.nj.gov</u>.

# Double Your Fun Take a Child Fishing