

"E-Tools" for Anglers and & Rockfish/Bay Fisheries Update

By Erik Zlokovitz

Maryland Department of Natural Resources Fishing and Boating Services

Annapolis Anglers-updated photos March 2019

E-tools for Anglers



Two main themes of today's presentation

- 1.) E-Tools on computer and phone, to keep the public informed on fishing activity, trends and fish movements, which will help Chesapeake anglers be better educated, and possibly catch more fish!
- 2.) Circle hook regulations review, and updates on weakfish, red drum and cobia.

E-tools for Anglers 2018



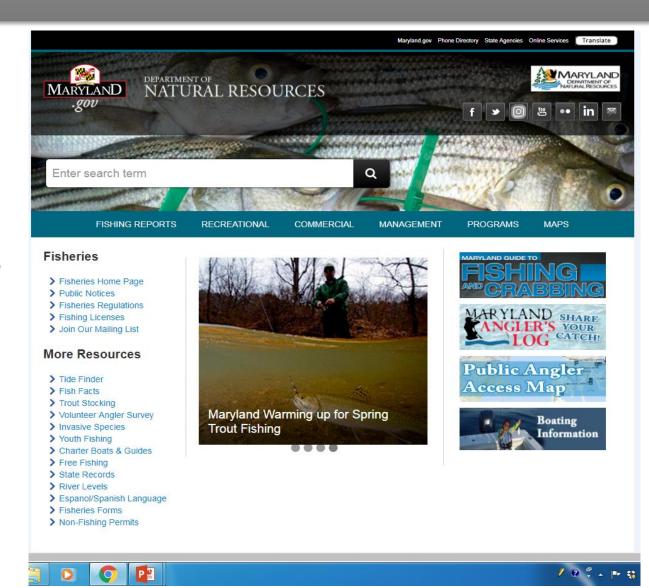
- Maryland Department of Natural Resources Website
- Weekly Fishing Reports online, delivered by email and on App: Sent weekly from March through December, Keith Lockwood has written nearly 700 fishing reports since 2003
- "Click before you Cast" now added to weekly fishing reports, shows water quality and forecasts for fish location
- Angler's Log online: Daily reports and photos from anglers, more than 6,778 entries have been logged in since 2010.
- Eyes on the Bay water quality stations and data buoys

Maryland DNR Fishing and Boating Services dnr.maryland.gov/fisheries



Fishing and Boating Services Home Page

- Public Notices
- Regulations
- Buy fishing license online
- Join email list
- Trout Stockings
- Tide Finder
- Fish facts
- Volunteer Angler Study
- State Records
- Invasive Species (Snakehead info!)
- And more

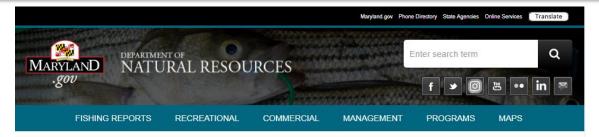


Weekly Fishing Report



Fishing Report

- Starts in mid-March, online and by email
- Covers bay, ocean and freshwater, inland fisheries
- Index for recent reports
- **Historical report** archives
- **Includes Click Before** You Cast



Fisheries

- > Fisheries Home Page
- > Public Notices
- > Fisheries Regulations
- > Fishing Licenses
- > Join Our Mailing List

More Resources

- > Tide Finder
- > Fish Facts
- > Trout Stocking
- > Volunteer Angler Survey
- > Invasive Species
- > Youth Fishing
- > Charter Boats & Guides
- > Free Fishing
- > State Records
- > River Levels
- > Espanol/Spanish Language
- > Fisheries Forms
- > Non-Fishing Permits

Recreational Quick Links

- > Freshwater Fisheries
- > Angler's Public Access Map
- > Kayak and Canoe Fishing

Weekly Fishing Report





weekly fishing report - Natural Resources News

Weekly Fishing Report: February 28

- Most everyone has some observations they consider harbingers of spring. It could be as simple as crocus or daffodils popping up in the yard, geese flying north or even the sound of spring peepers in a nontidal wetland, singing the evening away. For many anglers spring means fishing for yellow perch and white perch as Read the Rest...

More...

Midwinter Fishing Report: January 31

- Maryland started off 2018 with a deep freeze, and it remains to be seen what old man winter has in store for us in the next month. But as long as temperatures remain relatively moderate, there are all kinds of fishing adventures out there from the Atlantic Ocean to Mountain Maryland, Anglers in the tidal Read the Rest... More...

Weekly Fishing Report: December 20

- This fishing report will close out 2017, but there are planty of fiching apportunities for all regions of Manyland

Fishing Reports Links

- > Fishing Reports
- > Anglers Log
- > Hot Spot Map
- > Recent Report Archives
- > Older Report Archives
- > Click Before You Cast

















Click Before You Cast

USING ONLINE FISHING RESOURCES TO CATCH MORE FISH

"Where are the fish?"

Bay is very big with countless tidal creeks, rivers and bays stretching over 4,500 square miles and averaging 21 feet deep.

We all understand that fish are influenced by food, shelter, and water conditions. So where do we find this information?

For Fishermen by Fishermen

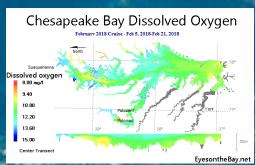
Follow these steps to find where fish are likely to be present on your next fishing trip:

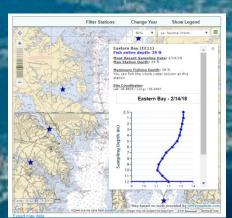


Features

Step by step process to help Maryland Chesapeake Bay fishermen find fish

- Most recent monitoring data
- Detailed tips
- Weekly bay fishing conditions forecast
- Don't fish below this depth maps
- Bay oxygen, temperature and salinity maps from surface to bottom
- Water clarity conditions
- Moving water





Click Before You Cast

eyesonthebay.dnr.maryland.gov



- Includes a weekly fishing conditions forecast
- Learn your fish species and optimum conditions
- Use current online monitoring data to find optimum areas
- Maps showing salinity, oxygen, habitat, water clarity and temperature
- Find moving water and structure, drop-offs, edges.

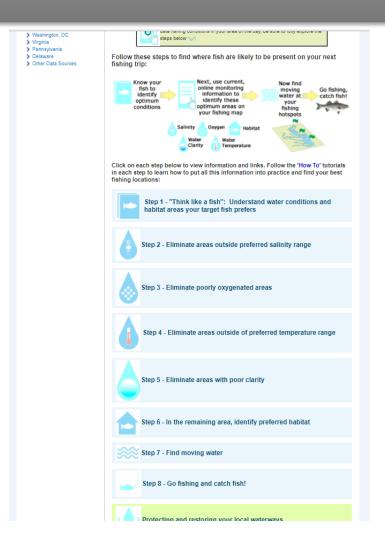


Click Before You Cast: 8 Steps to catch more fish



8 steps to more fish:

- "Think like a fish": Understand water conditions and habitat areas
- Eliminate areas outside preferred salinity range
- Eliminate poorly oxygenated areas
- Eliminate areas outside of preferred temperature range
- Eliminate areas with poor clarity
- In the remaining area, identify preferred habitat
- Find moving water, and...



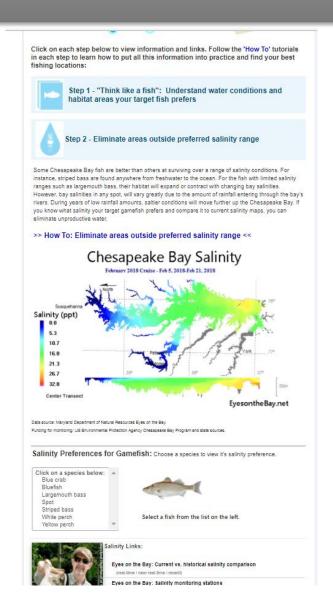
Step 8 - Go fishing and catch fish! Put in your time!

Click Before You Cast Step 2- Salinity example



Salinity examples (Step 2)

- Bluefish and Spanish mackerel are high salinity (salty) species, avoid salinities less than 10 parts per thousand (ppt). Look for salinities in the 10-20 ppt range and follow the "salt wedge as it moves up the bay in summer.
- Striped bass, white perch, and channel catfish tolerate low salinities (fresh/brackish) and may be attracted to freshwater flow (cooler fresh water) and nutrients/food from river mouths. You can find these species in salinities less than 10 parts per thousand.



Maryland Angler's Log Updated daily, year round



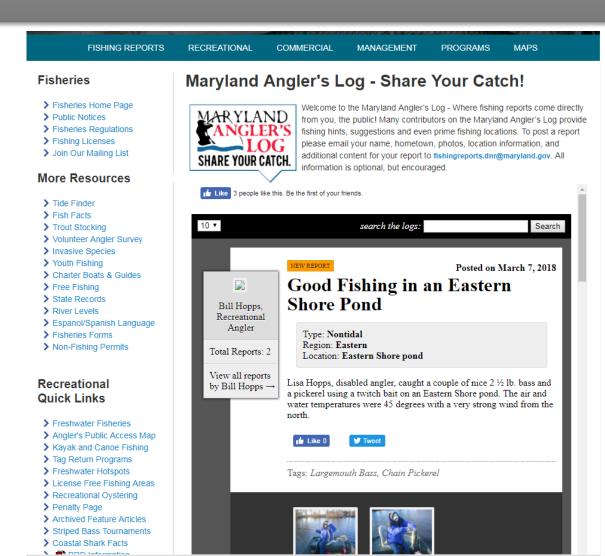
Follow daily activity and fishing reports/photos on the Angler's Log

To participate, send in your log to:

fishingreports.dnr@maryland.gov

Include:

- Your name
- Hometown
- Photos
- Location information
- Any additional content for your report to make it more informative and entertaining!

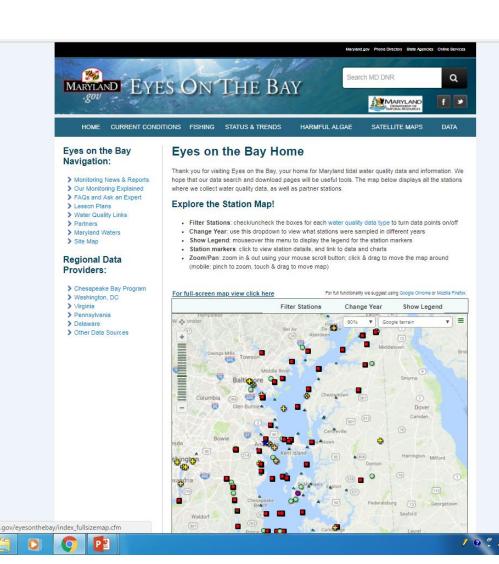


Eyes on the Bay Water quality and conditions



Eyes on the Bay Home Page

- Monitoring News and Reports
- Monitoring Explained
- FAQs and Ask an Expert
- Water Quality Links
- Partners
- Maryland Waters
- stations, turn data points on/off, change year, show legend, station markers, click to view data, zoom/pan

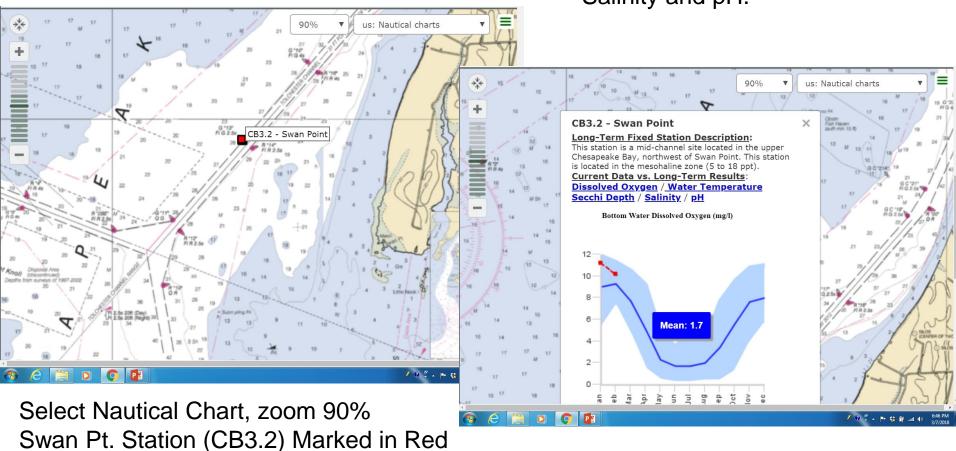


Eyes on the Bay Water quality and conditions



Nautical Chart Version, Swan Pt. Station

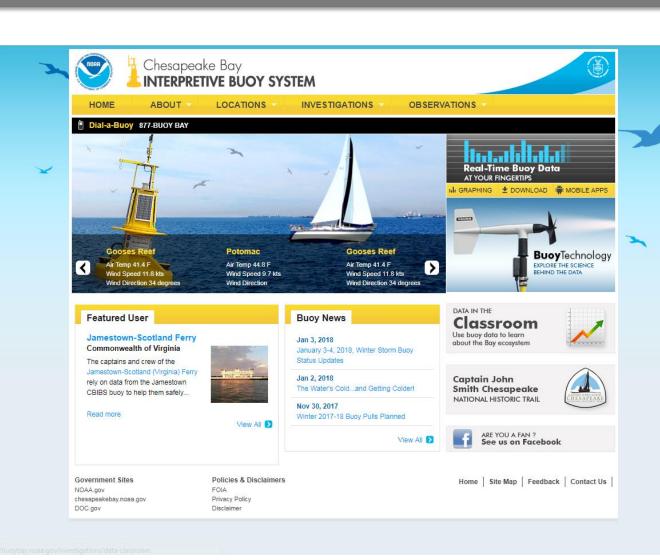
Click on station for description and Oxygen, Temperature, Clarity, Salinity and pH.



Chesapeake Bay Interpretive Buoy System MARYLAND buoybay.noaa.gov

CBIBS Buoy Home Page

- Popular for water, wind and wave conditions
- Links to buoys from Susquehanna Flats to Virginia
- Buoy news
- Real-time observations
- Data downloads
- Graphics tools

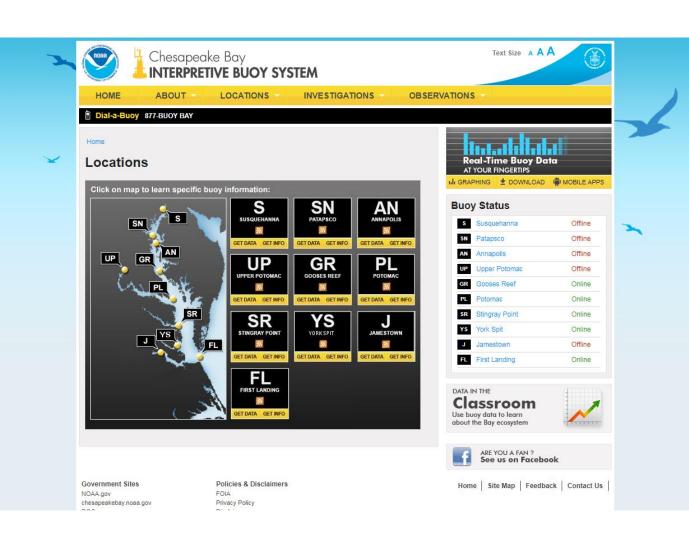


Chesapeake Bay Interpretive Buoy System Locations

MARYLAND DEPARTMENT OF NATURAL RESOURCES

CBIBS Buoy Stations (North to South)

- Susquehanna (S)
- Patapsco (SN)
- Annapolis (AN)
- Gooses Reef (GR)
- Potomac River -National Harbor(UP)
 Point Lookout (PL)
- Virginia/Lower Bay-Stingray Pt., York Spit, Jamestown, "First Landing" near Cape Henry (FL)

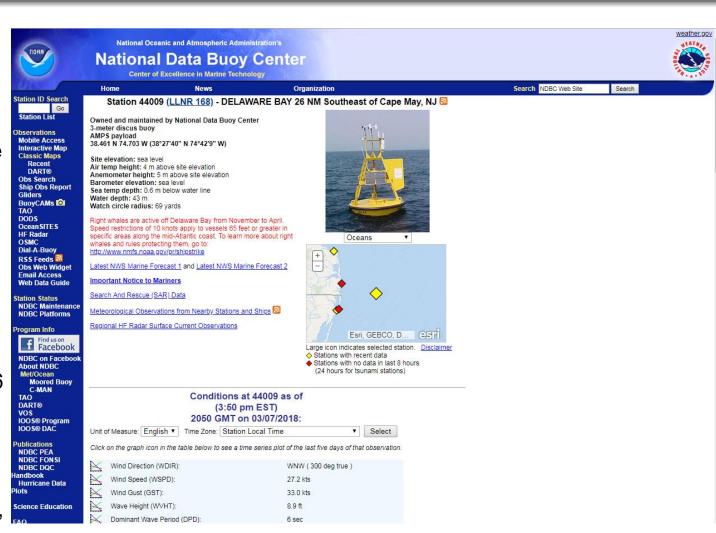


Ocean City Data Buoy



NOAA Data Buoy Off Ocean City

- Popular for Ocean
 City anglers fishing
 the coast or offshore
- Named "Delaware Bay", but is actually in the ocean east of Fenwick Is, off MD/DE Line
- Google searchstation 44009, or "26 NM Southeast of Cape May, NJ"
- Wind speed, barometric pressure, wave height and water temp

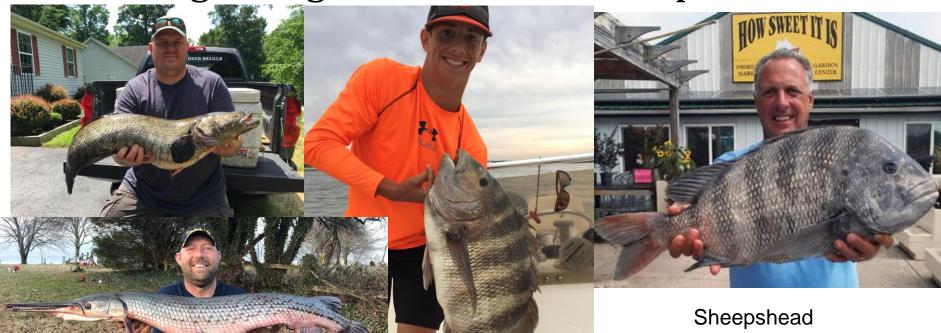


Outreach - State Record Fish



Recent state record fish

Longnose gar, snakehead, sheepshead



Snakehead (Invasive) 19.9 lbs & Gar (Native, Tidal) 17.9 lbs

Sheepshead (Coastal/Ocean) 18.0 lbs., OC South Jetty

Sheepshead (Chesapeake Bay) 13.73 lbs., Holland Straits South Marsh Island

Volunteer Angler Surveys

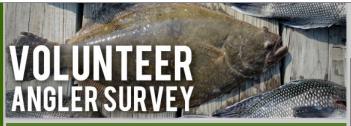


CALENDAR

Choose a Month

USEFUL LINKS

Fisheries Guidebook
Public Notices
Angler's Log
Fishing Licenses
Tide Finder
Fishing Regulations
Maryland Fishing
Challenge



The State of Maryland's Volunteer Angler Surveys

Recreational Anglers, here is your chance to participate directly in fisheries management. Help MD DNR characterize recreational catch and harvest by submitting data from your fishing trip.

MD DNR relies on data from your catch to manage the five following species: striped bass, summer flounder, bluefish, yellow perch, and blue crabs. Click on the species to the right to go to each survey and follow instructions carefully.

Attention Muskie (muskellunge) fisherment. Check out the new addition to our volunteer angler survey family, if you target muskie please <u>print off our survey form</u> and send back to imullican@dnr.state.md.us or mail in to address provided on form.



Welcome to Angler Surveys

First Name: ERIC Email: edurell@dnr.state.md.us ID: 938





Striped Bass

Bluefish

Navigation

- Volunteer Angler Survey Home
- Survey Results
- Horseshoe Crabs

Striped Bass Survey

Welcome ERIC

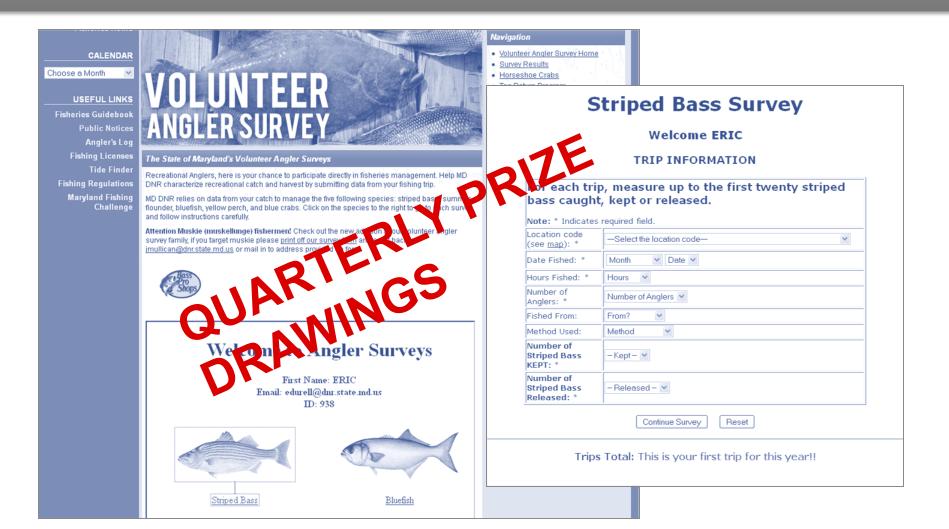
TRIP INFORMATION

For each trip, measure up to the first twenty striped bass caught, kept or released.	
Note: * Indicates required field.	
Location code (see <u>map</u>): *	—Select the location code—
Date Fished: *	Month Date V
Hours Fished: *	Hours 💌
Number of Anglers: *	Number of Anglers 💌
Fished From:	From?
Method Used:	Method
Number of Striped Bass KEPT: *	- Kept- ▼
Number of Striped Bass Released: *	- Released - ▼
Continue Survey Reset	

Trips Total: This is your first trip for this year!!

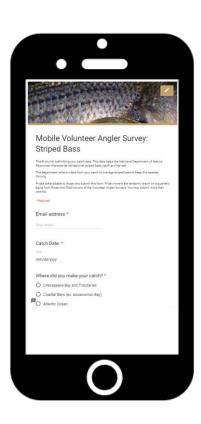
Volunteer Angler Surveys







New Volunteer Angler Survey for Striped Bass



Attention Striped Bass Anglers! This is your chance to participate directly in fisheries management.

Download the Access DNR app for iPhone or Android, select Volunteer Angler Surveys, then Striped Bass

Types of information collected:

- Submit basic trip info (date, region)
- Lengths of striped bass you catch and indicate whether Kept or Released
- Report up to the first 20 striped bass caught in a trip

Quarterly prize drawings using your e-mail address!

Next Steps... The future!



- Mobile friendly volunteer angler surveys to log your catch data and contribute to fisheries management efforts.
- Continue to integrate and improve Click before you Cast
- Fish Maryland Year round fishing contest, log in your catch online



Hooks, Bait and Striped Bass - Fall 2018

~~Recreational Striped Bass Fishery~~

Circle Hooks, Bait Fishing, and Striped Bass:



Spring 2019 Update and Recent History

March, 2019



Hooks, Bait and Striped Bass - Fall 2018

~Recent Changes~

The following slides will highlight the recent changes to the recreational striped bass fishery. We will focus on 4 general topics:

Emergency v. Proposed Regulations
Timeline review of the 2 regulatory tracks 2018-2019

Time and Area of Proposed Changes Chesapeake Bay only, summer/fall 2018-2019

Minimum Size Limit Change
20 inches reduced to 19 inches for summer/fall season

Definitions for Fishing Methods / Hooks



Hooks, Bait and Striped Bass - Fall 2018

~Background~

Discard Mortality Increases - Addendum IV (20 inch min)

Recreational Stakeholders Engage with DNR Ask us to work on solving the problem

Conservation Equivalency Proposal - ASMFC Looked at a wide range of management solutions

ASMFC Approves Proposal in February 2018

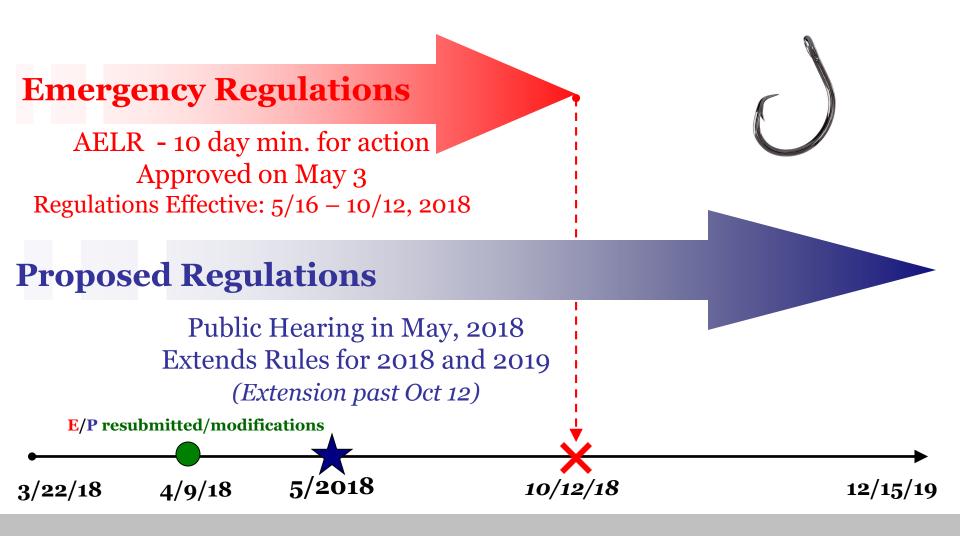
Circle Hooks with Bait and a 19" min

Implemented May 16, 2018



Hooks, Bait and Striped Bass - Fall 2018

~Emergency v. "Proposed" Regulations~

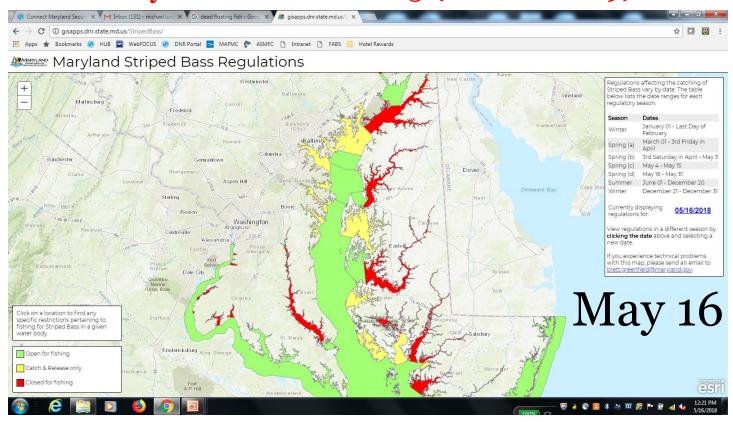




Hooks, Bait and Striped Bass - Fall 2018

~Time and Area Restrictions Map~

(Open Fishing Areas) Chesapeake Bay and Tidal Tributaries May 16 – December 15 (2018 & 2019)

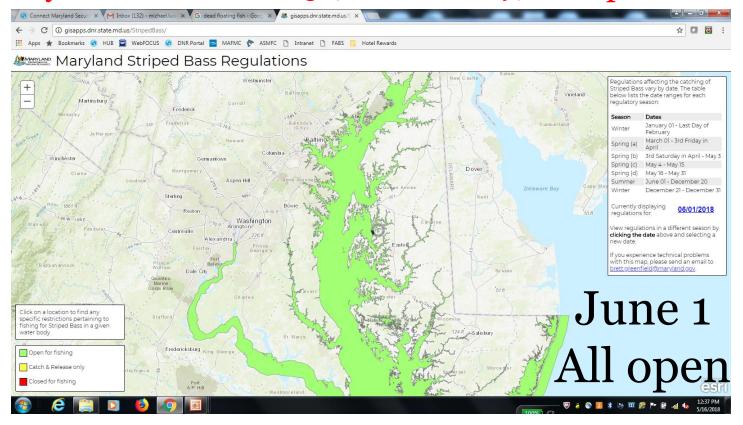




Hooks, Bait and Striped Bass - Fall 2018

~Time and Area Restrictions Map~

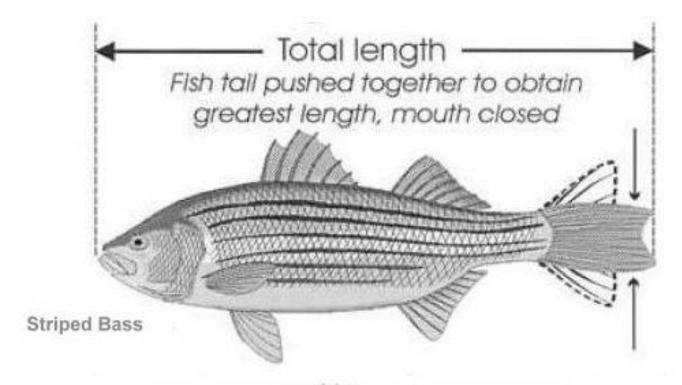
(Open Fishing Areas) Chesapeake Bay and Tidal Tributaries May 16 – December 15 (2018 & 2019)-All open June 1





Hooks, Bait and Striped Bass - Fall 2018

~Minimum Size~



19 Inches

Chesapeake Bay and Tidal Tributaries May 16 – December 15 (2018 & 2019)



Hooks, Bait and Striped Bass - Fall 2018

~Definitions / Fishing Methods~

Chumming

...means placing fish, parts of fish or other natural or manmade attractants upon which fish might feed, in the water, not attached to a hook, for the purpose of attracting fish to a particular area so that they might be caught.

Live-Lining

...means using a live finfish* on a hook for the purpose of catching other fish with: (a) Hook and line; (b) Rod and reel; or (c) Handlines.

(*Includes live fish/eels, NOT shrimp, crabs or worms)



Hooks, Bait and Striped Bass - Fall 2018

~Definitions / Fishing Methods~

When chumming or live-lining, a person recreationally angling in the Chesapeake Bay and its tidal tributaries during the periods May 16, 2018 through December 15, 2018 and May 16, 2019 through December 15, 2019 *shall only use a non-offset circle hook*.



A circle hook is defined as: a <u>non-offset</u> (inline) hook with the point turned perpendicularly back to the shank.





Hooks, Bait and Striped Bass - Fall 2018

~Definitions / Fishing Methods~

(Bait Fishing...but NOT Chumming or Live-Lining)...when using fish, crabs, or worms as bait, or processed bait, a person recreationally angling in the Chesapeake Bay and its tidal tributaries during the periods May 16, 2018 through December 15, 2018 and May 16, 2019 through December 15, 2019 shall only use a: (a) Circle hook; or (b) "J" hook. (No treble hooks with bait)

Circle Hook



Treble Hook



J Hook





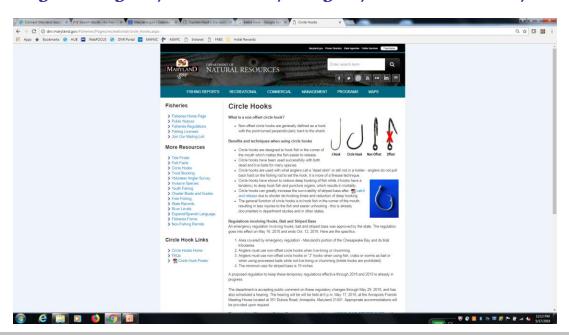
Hooks, Bait and Striped Bass - Fall 2018

~Need More Information~

View the Proposed/Recent Regulation Change Online http://dnr.maryland.gov/fisheries/Pages/regulations/changes.aspx#circle

DNR Website and FAQs

http://dnr.maryland.gov/Fisheries/Pages/recreational/circle_hooks.aspx





Hooks, Bait and Striped Bass - Fall 2018

~Recent Actions/Next Steps~

Comment Period ran through May 29, 2018

Fisheriespubliccomment.dnr@maryland.gov

Mail: 580 Taylor Avenue – E4 (Attn: SB Regulations)

Fax: 410.260.8310

Submission of Final Regulation: June 22, 2018

Proposed Action Effective: July 2, 2018 extend into Dec, 2019

Annual Report / Review to ASMFC

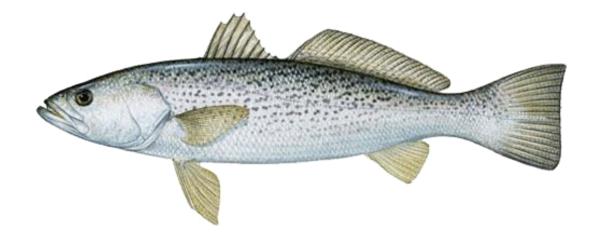
Consider Extending Past 2019...Late 2019





Weakfish/Grey Trout/Tiderunners

Historical Info and Recent Trends



Historical Info and Fall 2018 ASMFC Update

November, 2018



Weakfish/Grey Trout/Tiderunners

Historical Cycles, Part 1, 1790-1840s

- Historical cycles of abundance of weakfish, dating back to the late 1700's were described in "The Complete Book of Weakfishing", by Lyman and Woolner, 1959.
- Weakfish were plentiful in northern waters between NY and MA at the end of the 18th century (late 1700's).
- Weakfish became rare in New England in the early 1800's.
 One weakfish, caught off Providence, MA in June of 1838, was sent to Boston for an ID, because no local fishermen recognized the species.



Weakfish/Grey Trout/Tiderunners

Historical Cycles, Part 2, 1850-1950s

- Starting around 1850, supply of weakfish slowly increased, and from 1901-04 weakfishing was "the best in the history of the new world."
- Another decline started around 1905, and by 1910, few weakfish were taken.
- Weakfish began to make a comeback in 1921, and increased steadily until 1949, when another slump occurred.
- A slight gain was reported around Peconic Bay, NY, in 1957-58, but not at the levels reported in 1901-04.

Fishing & Boating Services

Weakfish/Grey Trout/Tiderunners

Historical Cycles, Part 3, 1960s-2018

- Fishing for large "tiderunner" weakfish, 8-15 lbs, improved through the 1970's in Chesapeake Bay, Delaware Bay, and Great South/Peconic Bays, Long Island, NY.
- Once again, numbers of large weakfish started to decline between 1982-85 as bluefish expanded to peak numbers along the east coast.
- Weakfish made another comeback in the late 90s and early 2000s, with good fall jigging action in deep water in Chesapeake Bay.
- 2010-2018 weakfish slumped again, a few small ones caught in lower Bay near Point Lookout.



Weakfish Life History and Current Stock Status



2018

Range and Migration



- Range from Massachusetts to Florida, but are most common from New York through North Carolina.
- Migrate northward and inshore in spring and summer, and offshore and southward in fall.
- Are considered non-migratory in the southern most part of the range.

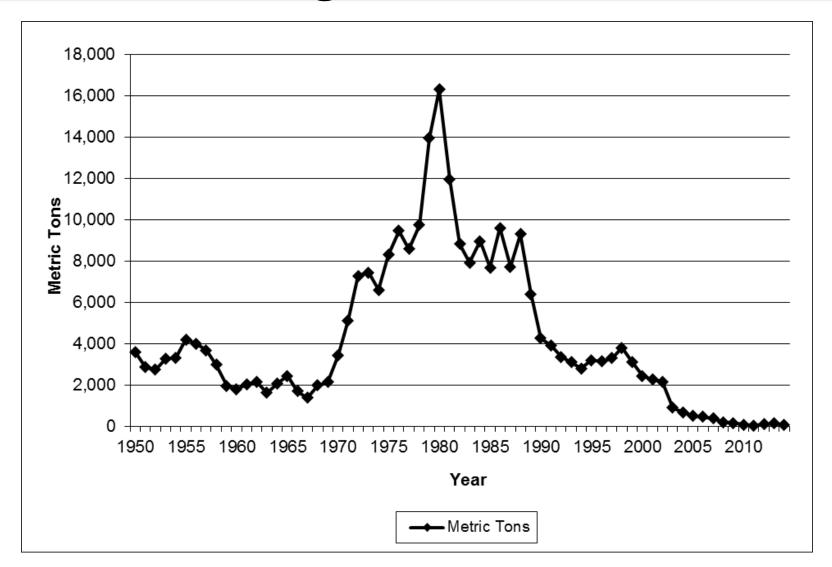
Age and Growth



- Rapid growth rate and early maturity.
- 90% 97% mature at age one.
- Maximum age 17 (Delaware Bay), fish over 12 years old are rare.
- Spawning occurs from March to September Coastwide (May- August in our region).
- Variable length at age due to long spawning season.

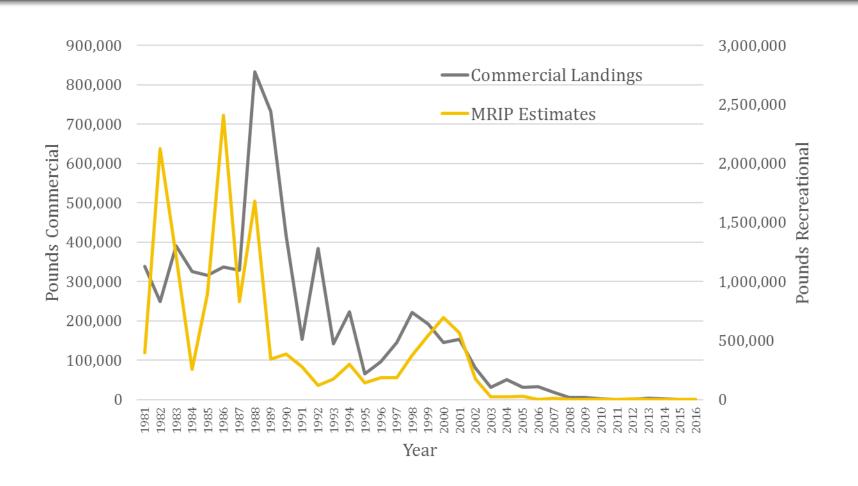
Coastwide Weakfish Landings





Maryland Landings

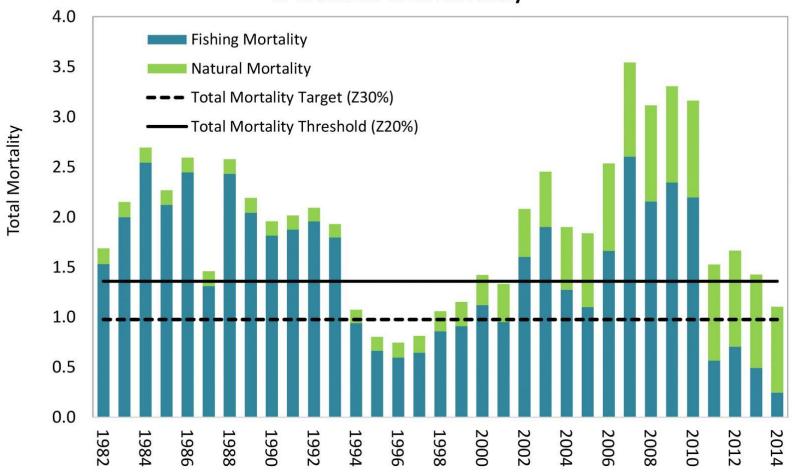




Total Mortality from 2015 Assessment

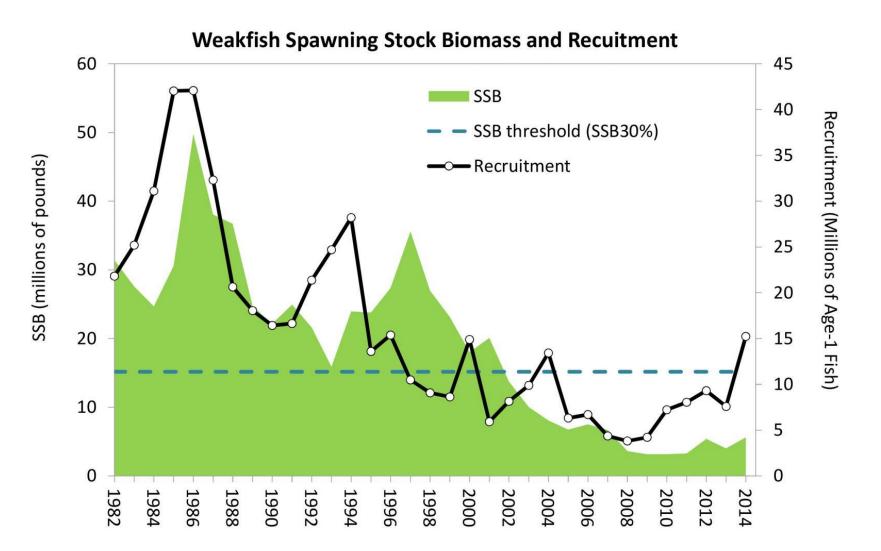


Contributions of Fishing and Natural Mortality to Weakfish Total Mortality



Spawning Stock Status from 2015 Assessment







Status Summary



- Coastwide stock of Weakfish is currently depleted.
- Fishing mortality has been reduced to acceptable levels.
- Elevated natural mortality is preventing stock recovery.
- Weakfish availability in Maryland will increase when natural mortality decreases.

Red Drum Life History



- Atlantic Migratory Stock: MA through FL
- Spawning
 - Season: August October, Peaking earlier in north and later to the south.
 - Early maturing: males by age 1-4, females ages 3-6
 - Batch spawners (spawn multiple times season)
- Max observed age: 62 years
- Fast growing: reach 26" TL at age 3 and 33" TL at age 5
- Majority of adults remain offshore, Juveniles primarily remain inshore

Current Stock Status



- Last stock assessment conducted in 2017
 - The stock is divided north to south at the NC/SC border.
 - Genetic differences found in adults during spawning season, but not outside of spawning season
 - Overfishing not occurring in the north, but
 Overfished status could not be determined.
 - Primarily due to lack of data on mature adults

Current Regulations



- ASMFC adopted Amendment 2 in 2002
 - It established slot and bag limit combination that provide the same level of protection for juvenile red drum.
- Maryland recreational and commercial fishermen elected two different options
 - Recreational 18"- 27" TL and one fish
 - Commercial 18" 25" TL and five fish
- There is prohibition on fish greater then 27" coast-wide, and the EEZ is closed to harvest

Cobia Life History



- Atlantic Cobia Migratory Stock: GA through NY
- Spawning
 - Season: May-August w/ peaks in May in SC, June in NC, July in VA
 - Early maturing: males by age 2, females ages 2-4
 - Batch spawners (approx. every 4-6 days)
- Max observed age: 16 years
- Fast growing: reach 36" FL at age 4
- Evidence of winter migrations offshore or to the south (north of central east coast FL)

Current Stock Status



- Last cobia stock assessment conducted in 2013
 - New stock boundaries
 - Based on tagging and genetic information
 - Atlantic Migratory Group: GA through NY
 - Stock not overfished, overfishing not occurring
 - Did show a decline in spawning stock since 2002
- Stock assessment currently in progress
 - Expected in fall/winter 2019
 - Updates on progress can be found on SEDAR 58 website

Current Management Changes



- 2017: ASMFC develops complementary cobia fisheries management plan (FMP) to the South Atlantic FMP
- 2018: South Atlantic and Gulf States approve amendment for sole management authority to go to Atlantic States from FL to NY (ASMFC), dependent on approval by the Secretary of Commerce
- 2019: Amendment 1 to the ASMFC FMP is being developed and will eventually be open to public comment

Current Regulations



- MD cobia regulations follow VA regulations
- Do not anticipate regulatory changes in the upcoming season
- Season: June 1-Sept 30
- Size: 40" TL min.
- 1 fish daily possession limit or 3 fish daily vessel limit (whichever is more restrictive)

Questions?



Thanks for listening! Any questions? Erik.Zlokovitz@Maryland.gov or 410-260-8324



