Summer Flounder

A PROFILE

By Maryellen Gordon, Senior Fisheries Biologist | Lauren "Maggie" Sager, Seasonal Fisheries Technician | Bryan Carter, Seasonal Fisheries Technician | Jonathan Klotz, Seasonal Fisheries Technician | Erin Mulvenna, Seasonal Fisheries Technician

Common Names: summer flounder, fluke

Scientific Name: Paralichthys dentatus

Range: Nova Scotia south to eastern Florida, but most common in the Mid-Atlantic region.

Size: Males can grow to over 2 feet, with larger females reaching lengths up to 3 feet.

Biological Characteristics: Like all flounder, adult summer flounder are flat-bodied. They are white below and range from shades of brown to grey drab above, with a scattering of distinct, dark identifying spots. Summer flounder have the ability to change their coloring in order to blend with their environment. Summer flounder are considered "left-eyed;" when viewed from above, both eyes are typically on the left side of the body, although rarely a right-eyed variation may occur.

Habitat: Hard, sandy bottoms and salt marsh creeks or seagrass beds with muddy or silty substrate.

Food and Feeding: Larval summer flounder feed primarily on zooplankton, juveniles mainly on crustaceans and adults are opportunistic predators. Their ability to camouflage themselves with the substrate where they spend most of their lives makes them highly efficient ambush predators. Numerous, well-developed teeth allow adult summer flounder to feed on a range of prey, including crustaceans, small fish, squid and sea worms. Summer flounder most actively feed during daylight hours.

Spawning: Summer flounder typically begin spawning around age two to three, with males averaging 10 inches and females averaging 12.5 inches in length. Spawning occurs in the fall and winter (peaking in October and November) when summer flounder migrate from coastal to offshore waters to depths between 120 and 600 feet. Spawning is directly linked to sexual maturity, with older, larger fish migrating first. Since flounder spawn several times per season, a large female may release up to 4 million eggs in a single year. Larval flounder, or fry, begin life in the water column and migrate inshore to shallow coastal nurseries. Here they settle into the sediment and develop their adult form, with the body flattening and the right eye migrating over the top of the head to the left side.

Migration: Their migration patterns are strongly tied to water temperature, with adults spending the warm summer months on the sea floor in shallow coastal waters before migrating to the outer edge of the continental shelf as fall temperatures drop. Commercial/Recreational Importance: Summer flounder are considered one of the most important and sought-after fish in New Jersey, primarily for their great tasting meat. Restaurants, bait and tackle shops, charter and head boats plus beach townships all benefit economically from the influx of both local and visiting anglers that target summer flounder along the New Jersey coastline each summer. The New Jersey commercial summer flounder fishery accounts for a large portion of the summer flounder sold in restaurants and super markets. However, the recreational fishery is equally important in New Jersey. Recreational anglers support the local businesses, enjoy the activity of fishing for summer flounder and can then take part in a fresh, home-cooked meal.

Fishing Methods: Summer flounder can be caught using a variety of methods, one of which is by using a bucktail teaser rig. The bucktail acts as the weight on the bottom of a leader, and a second hook is placed 12–24 inches above on a dropper loop. Both hooks can be tipped with an artificially scented soft plastic lure that summer flounder can't resist. Using light tackle such as 5- to 7-foot medium-action rods and 10 lb. mono/20 lb. braided line is necessary to feel the sensitive bite of a summer flounder.

Applying a small, but rapid vertical jigging action to the rod will present the bucktail and lure like an

injured baitfish, often resulting in a strike from a summer flounder. Since these fish are visual predators, the presented bait should be moving constantly to attract their attention. This usually requires shore-based anglers to continually cast and retrieve; boat anglers drift rather than anchor in one spot.

Summer flounder do not produce drag-ripping fights such as bluefish and striped bass, but can still be sporty on light tackle, especially from boats where their flat profile creates a lot of water resistance. Making up for their lack of fighting skills, summer flounder can often be caught in large quantities in one fishing trip.

If a summer flounder is caught along a certain stretch of beach or near a certain underwater feature, continue fishing that same area and you will often catch more fish. When fishing from shore, it is important to work the bucktail right up to the beach. Summer flounder often settle close against the beach lip, feeding on baitfish and crabs washed seaward off the beach face. Typically, most summer flounder caught from the surf are hooked less than 20 yards from shore.

Sources:

Atlantic States Marine Fisheries Commission (2014)
NOAA Fish Watch (2014)
K. Hill, Smithsonian Marine Station at Fort Pierce (2014)
New Jersey Division of Fish and Wildlife, Bureau of Marine Fisheries



A Clear Revival for New Jersey's Artificial Reef Program

By Hugh Carberry, Reef Coordinator

The federal Sport Fish Restoration Program funding for New Jersey's Artificial Reef Program was discontinued on April 12, 2011 by federal officials due to spatial conflicts between anglers and recreational plus commercial fishers using potting gear. Federal officials stated that the Sport Fish Restoration funding source is a "user pays—user benefits" program and that the presence of potting gear precludes access to reefs for which anglers have paid for through excise taxes. These officials further explained that funding would be restored when appropriate action was taken.

Since that time, the New Jersey Department of Environmental Protection (DEP) has worked diligently with representatives from the recreational and commercial sectors in developing a fair plan to balance access on reefs located in marine state waters. The plan includes designating specific locations within these reefs where potting gear can be set and the creation of a new reef in marine state waters where potting gear will be prohibited. The DEP also vowed to petition the Mid-Atlantic Fisheries Management Council for Special Management Zone regulations for the 13 reefs located in Exclusive Economic Zone once regulations are in place for reefs in marine state waters. It is anticipated that these changes will satisfy federal officials and that Sport Fish Restoration funding will then be restored.

These changes, as well as a separate proposal to potentially construct a new reef in Delaware Bay—and a legal agreement to work jointly with nonprofit organizations (501C3s) for future reef construction

efforts—have set the stage for New Jersey's Artificial Reef Program to make an epic comeback. Fish and Wildlife's Artificial Reef Program has been inactive for more than three years but these proposals will breathe new life into a Program that has been recognized as being the best in the nation. Ultimately, it will be recreational users who will benefit from all of these changes.

Under the DEP's plan to balance access, regulations will set aside a portion of the Sandy Hook Reef and two sections of the Axel Carlson Reef to be designated as Full Access Zones. These will be areas where potting gear can be set. Anglers will not be prohibited from utilizing the Full Access Zones but run the risk of losing terminal fishing tackle on submerged potting gear and the associated ground lines between pots. All other forms of commercial fishing will be allowed on these reefs in their entirety, including the Full Access Zones.

Once the Full Access Zone regulations are in place, the DEP has vowed to petition the Mid-Atlantic Fisheries Management Council for Special Management Zone regulations for the 13 reefs located in the Exclusive Economic Zone. The purpose of the Special Management Zone designation is to establish management authority that would allow for options that prohibit or restrain the use of specific types of fishing gear that are not compatible with the intent of the artificial reef.

The Mid-Atlantic Fisheries Management Council's Special Management Zone Monitoring Team will evaluate New Jersey's request and prepare a

written report for the Council's chairman. The Monitoring Team bases recommendations on fairness and equity; promotion of conservation; avoidance of excessive shares; consistency with the summer flounder, scup and black sea bass Fisheries Management Plan; the natural bottom within the reef and surrounding it; and impacts to historical uses. Following a full review by the Council a recommendation will be made to the National Oceanic and Atmospheric Administration's (NOAA) Regional Administrator. Ultimately it is the NOAA's Regional Administrator that makes the final decision on the Monitoring Team's recommendations.

Another component of the DEP's plan to balance access includes the creation of a new reef north of Barnegat Inlet where potting gear will be prohibited. The reef will be located in marine state waters and its size will equate to the total area of the three Full Access Zones contained within the Sandy Hook and Axel Carlson Reefs (0.95 mi²). Through exclusionary mapping, Fish and Wildlife's marine biologists will select a location having adequate depth and substrate that will not adversely impact commercial fishing operations and will not be near productive areas such as rock outcroppings and other live bottom, shipping lanes, anchorages and telecommunication cables. If all the components of the DEP's proposals to balance access reach fruition, the new reef will be ready for construction during the spring of 2016.



A separate DEP proposal outside the plan to balance access is the creation of a new reef in Delaware Bay. For the past ten years Fish and Wildlife has received hundreds of requests from anglers from the ports of Fortescue, Cape May, Matt's Landing, Bidwell Creek and Dennis Creek to construct reefs in the bay. Anglers from these ports contended that the State of Delaware's reefs within the bay are extremely productive and that New Jersey's Reef Program should move forward with reefs in Delaware Bay to increase recreational opportunities.

After much consideration, Fish and Wildlife elected to move forward with obtaining necessary approvals to construct a new reef in Delaware Bay. Our main concern with reef construction in this area is that juvenile game fishes such as weakfish, striped bass, black sea bass and tautog use the upper Delaware Bay estuary as a nursery area. Reefs will concentrate juvenile and sublegal fishes making

them vulnerable to catch by hook and line, potentially resulting in hooking mortality.

To avoid this possible outcome, the DEP chose to consider only one location in the lower Bay where the likelihood of hooking juveniles and sublegal fishes would be significantly reduced. For the past two years, Fish and Wildlife, has been working diligently towards this goal. The first hurdle was

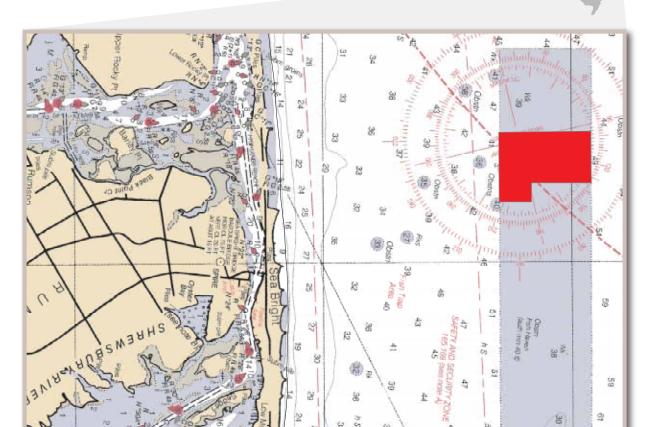
proposing a change in the Coastal Zone Management rules.

Working with DEP officials from Coastal Management, a change in the Coastal Zone Management rules was proposed which would allow for the construction of an artificial reef in lower Delaware Bay. Since the inception of New Jersey's Reef Program in 1984, the Coastal Zone Management rules stated unequivocally that reefs were only to be constructed in the ocean. The proposed rule change appeared in the June 2014 New Jersey Register for a 30 day public comment period. Although the proposed rule change has not yet been officially adopted, it is anticipated that this change will be in effect by June 2, 2015.

This change is the first initial step towards constructing a reef in the lower Delaware Bay. However, other crucial steps include meeting with representatives from the commercial fishing industries from the Delaware Bay area to receive their input. Our main focus on selecting a potential location will be to choose an area that is equidistant from all ports that has adequate depth and substrate composition that will not interfere with established shipping lanes.

Sandy Hook Reef

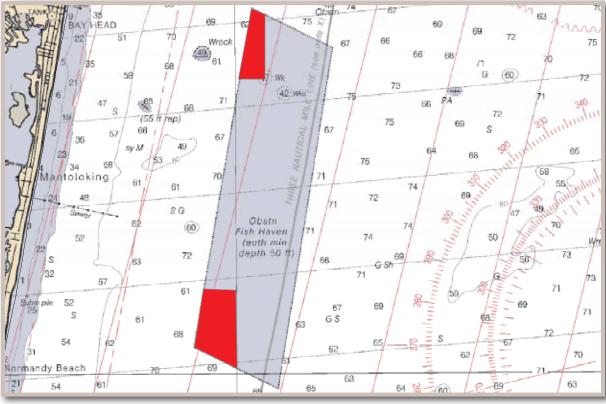
Location of "Full Access Zone" highlighted in red. (Charts not for navigational use.)



Axel Carlson Reef

Locations of "Full Access Zones" highlighted in red. (Charts not for navigational use.)





If our efforts are successful, the proposed reef will be one mile in area and be comprised of low profile structures such as reef balls, dredge rock and demolition concrete and low vertical relief deck barges. The final outcome will be an outstanding location for anglers to catch tautog, summer flounder, black sea bass, striped bass and transient species such as sheepshead, spadefish and cobia. Similar to the new reef being proposed further north as part of the DEP's plan to balance access, potting type gear will be prohibited at the proposed lower Delaware Bay reef.

The last exciting change regarding the Reef Program is a Memorandum of Understanding that was

developed by the DEP for any interested nonprofit organizations and reef material providers that want to participate with New Jersey's Artificial Reef Program in building reefs. This agreement, when finalized, will serve as a catalyst for reefing more vessels and other acceptable materials within New Jersey's Reef Network in a quick and timely manner.

The agreement is very specific in that it identifies responsibilities of the DEP, nonprofit organizations, reef material providers and contractors for preparing and towing of vessels to reefs for deployment. Perhaps the greatest benefit though will be a system set in place that will allow interested nonprofit organizations to serve as a repository

for donations from fishing clubs, scuba clubs and the Reef Program's very popular adopt-a-reef and memorial reef programs.

New Jersey's Reef Program is recognized nationally as being the most progressive and served as the model for other states now active in constructing artificial reefs. Our Program has reefed more vessels and deployed a greater volume of materials than any other state in the nation, an amazing statistic given the size of New Jersey compared with other states having an active reef program such as Florida, California and North Carolina.



In the shadow of Old Barney—Captured from atop the lighthouse as it passed by, landing craft *Benjamin Maybe* transports 50 reef balls to the Barnegat Light Reef.

Although the conflicts that arose between recreational and commercial fishers using potting gear were an unfortunate outcome, the measures proposed by the DEP to ameliorate access issues should satisfy federal officials from the Sport Fish Restoration Program. It is anticipated that our federal funding will be restored by the spring of 2016 and that New Jersey's Reef Program will once again set the gold standard for other states to follow.

New Jersey Fish & Wildlife Digest

Governor's Surf Fishing Tournament

= GET OUTSIDE & ENJOY A DAY OF FISHING WITH FAMILY AND FRIENDS

By Karen Byrne, Senior Biologist

Mark your calendar for May 17, 2015 when Island Beach State Park will host the 24th annual Governor's Surf Fishing Tournament! Hundreds of anglers from New Jersey and neighboring states are expected to hit the beach that day in hopes of catching the longest fish and to enjoy a great day of fishing with family and friends at the Jersey Shore.

The tournament aims to encourage youngsters and adults to learn more about surf fishing while taking advantage of a great family activity. Since its inception in 1991, the tournament has generated more than \$130,000 for various marine education and restoration efforts, construction of access ramps for disabled saltwater anglers, surf fishing



Tournament winner Chris Follmer of Hasbrouck Heights landed the top position with a 36-inch bluefish. L-R: John Toth (Jersey Coast Angler Assoc.), Chris Follmer (Governor's Cup winner), John Rogalo (NJ State Federation of Sportsmen's Clubs), Lt. Governor Guadagno, Tim Burden (NJ Beach Buggy Assoc.) and Dave Chanda (Director, NJ Division of Fish and Wildlife). instruction programs and equipment and the purchase of the first mobile automatic heart defibrillator for use at Island Beach State Park. In 2014, funds from the tournament and partnering organizations provided Island Beach State Park with more than eight new specialized wheelchairs that provide beach access for the disabled and elderly.

Last year was the first time in tournament history that the event was not held in the fall. The change to May was beneficial with a significant increase in the number of participants over recent years. More than 600 anglers participated this year. A bluefish blitz kept tournament judges on the move with nearly 200 fish being measured. However, it was Chris Follmer of Hasbrouck Heights, NJ, who took the grand prize and New Jersey Governor's Cup with a 36-inch bluefish. Follmer received two rod-and-reel combinations plus a plaque; his name will be engraved on the Governor's Cup on permanent display at the park. New Jersey Lieutenant Governor Kim Guadagno was on hand to greet tournament participants and help present the awards after spending a day on the beach fishing with family and friends.

In addition to the Governor's Cup winner, twenty anglers received rod and reel combinations for their prize-winning fish in the striped bass and bluefish categories. Overall fish length determined the grand prize winner, as well as first, second or third place in each of the species categories. There were categories for children, teen and adult anglers, including subcategories for male and female anglers.

The Governor's Surf Fishing Tournament is a great

Thank you!

New Jersey Division of Fish and Wildlife, along with our co-sponsors—the NJ State Park Service, NJ State Federation of Sportsmen's Clubs, Jersey Coast Anglers Association and NJ Beach Buggy Association—would like to thank the following organizations for contributing to the success of the 23rd Annual Governor's Surf Fishing Tournament in 2014:

- Sportsman's Center
- Chestnut Neck Boat Yard Skunkbunker
- Eagle Claw Fishing Tackle Stanley Jigs
- L&H Wood and Water
- Legal Limits Company
- Manns Bait Company
- Silver Horde
- · Canyon Gear
- Tica USA

In memoriam: We remember and thank Ken Jelnicki, Jr. who, for the past five years, donated a Surf Rocket, one of his customdesigned surf casters, as an early registration prize. Mr. Jelnicki passed away in January 2014 but will be remembered as being passionate about surf fishing and as someone always willing to help other anglers.

way for anglers of all ages and experience to enjoy a great day of fishing, and help kick off the start of the summer season at the Jersey shore. For more information about the Tournament, or to receive a registration form, visit NJFishandWildlife.com/gsft.htm or call (609) 748-4347.

