UNDERWATER NATURALIST

KVRN V 0 0 Years of Fish Tagging

> Winter 2015 Vol. 30 No. 2



SAVE the DATE

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A fun walk/run for all ages, followed by a clambake on the boardwalk to benefit the American Littoral Society

Saturday, April 23, 2016



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LANGOSTA LOUNGE

on the Boardwalk in Asbury Park

On the cover: Tag number 876642 will soon be mailed out to a member to tag a fish for the Littoral Society Fish Tagging Program

Correction: The last issue of the Underwater Naturalist was erroneously labelled as Fall 2015, Volume 36, No. 1. It should have been labelled Fall 2015, Volume 30, No. 1.

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Summertime Coast Camp

Sitting at a PC or reading a book can develop interest, but standing in the surf with a horseshoe crab will ignite passion. Join us for a week of educational fun that includes seining, marine life identification, surf fishing, crabbing, birding, shelling, field journaling, plankton study, coastal botany, and understanding nature through art. STEM-oriented lessons will enhance school studies. Let the American Littoral Society kindle your child's desire to learn about the coast.

Dates and Locations

Barnegat Bay Coast Camp
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For more information or to register: visit www.littoralsociety.org, click on **Programs**, then **Education**, or call 732-291-0055.

From the Executive Director

Studying fish is tough.

Fish are mobile, often far-ranging, and may act differently and change locations from season to season. Then there's the challenge of trying to see what's under the water. This is particularly difficult because 71 percent of the earth's surface is made up of deep oceans, most of which remain entirely unexplored. Additionally, historically inadequate funding hampers in-depth and long-term scientific studies.

Those difficulties were the genesis of the American Littoral Society's fish tagging program, which celebrates its 50th Anniversary this year.

This volume of the Underwater Naturalist is dedicated to this signature Littoral Society program, and to the anglers, scientists and society leaders who conceived, grew and supported the program. It is emblematic of the society's mission to promote the study and conservation of marine life and its habitats, and to empower others to do the same.

Mark and recapture studies are a well-established scientific approach. The society's innovation, 50 years ago, was to expand the participation in such work to citizen anglers – men and women who knew the ocean, knew fish, and spent lots of time with the former while searching for the latter. There was a pragmatic basis for the initiation of the program. The society aimed to expand the capacity of researchers to collect fisheries data by partnering with recreational anglers. Fifty years later, the American Littoral Society's taggers have tagged 633,462 fish, recaptured 34,216 of them, and the gathered data has been sent annually to the National Marine Fisheries Service in Woods Hole, MA, for use by fisheries managers and researchers.

The society's efforts to work with citizen scientists continues to have a promising future a half-century after the tagging program began. Fisheries managers and researchers are still constrained by limited resources, but are now attempting to understand how climate change and increased demands will affect the oceans and their inhabitants.

Because of this, studying fish remains as tough as ever. Fortunately, help is on the way. The society is developing a fish tagging smart phone app that will be released in 2016, and the involvement of anglers in collecting data, reporting observations and sharing their knowledge will continue to be at the heart of the process, as it has for the last 50 years.



Tim Dillingham



Among the fishing enthusiasts of that time was Graham Macmillan, an executive with the Prudential Insurance Company.

One morning Macmillan left Avalon, NJ, aboard his 26-foot sport fisherman, Gaybell, and turned her bow towards Delaware Bay for a day of shark fishing. Macmillan was not intent on fishing for food. Instead, his goal was to hook up, fight, and release his quarry.

Hundreds of miles to the northeast, John Clark, a National Marine Fisheries Service biologist, boarded a dory schooner out of Gloucester, MA, to catch, tag, and release cod and haddock on George's Bank. Clark's intent was to learn more about how these fishes grew and where they traveled.



Years later, the paths of these two men would cross, and their shared interest in fish would lead to the establishment of The American Littoral Society, and eventually to the creation of the society's Fish Tagging Program.

In the early 1960s, one of the society's first "citizen science" programs was its "Fish Count Program." This program asked American Littoral Society members to document the presence of marine flora and fauna at varying coastal sites via the use of seine nets, scuba gear, and keen observation skills. At the inception of the program, John Clark, the society's first president, stated that "this project has long term objectives, and results will come forth after many years of repetition."

From the beginning, several principles were established to make the society's fish tagging program accurate and workable: taggers had to be society members so the Society could keep the tagging program in the hands of really interested anglers; tag kits would be sold and not be given away for free so the taggers would feel invested; and

Previous Page: A striped bass is retrieved from Chesapeake Bay. Photo by Chespeake Bay Program
This Page: Former Littoral Society
Executive Director Dery Bennett and former Fish Tagging Program Director
Graham Macmillan (left) prepare to award the Macmillan Prize, a hand-made

spinning rod, in the 1980's.

there would be no financial rewards for tags returned. Instead, the society would provide both the tagger and the recapturing angler the history of "their" fish, and cloth fish patches for their jackets.

The society announced the establishment of the fish tagging program in the Spring 1964 Underwater Naturalist (UN). In the same issue an article by John Watson, titled, "A Tag for Young Herring" was the first to mention a "dorsal loop" style tag. With assistance from National Marine Fisheries Science shark biologist, Jack Casey, an appropriate tag was designed for use on sharks and large pelagic fishes, and with encouragement to tag striped bass from the Hudson River Fishermen's Association President, Bob Boyle, The American Littoral Society's Fish Tagging Program was born. Graham Macmillan was soon installed as the program's first steward and director.

In late 1964, Graham reported the program's first tag recapture. An 8 lb. striped bass with tag #242 had been released on October 8, 1964, at Great Point, Nantucket, MA, by tagger Stanley Maselbas. It was recaptured 30 days later, 170 miles away, at Fire Island Bar, NY.

Graham was also interested in oceanography. On August 14, 1964, during a Delaware Bay shark tagging trip off Townsends Inlet, NJ, he dropped three drift bottles overboard. In each bottle he placed a note asking for the finder to send him the date and exact location of the recovery. On October 10, 1964 one of the bottles was found three miles north of Kitty Hawk, NC. The bottle had traveled 220 miles, or 4 miles per day. Tagging fish is very similar to putting a note in a bottle and tossing it into the ocean, it's just a lot more exciting.

In a later issue of the UN Graham reported that: "not all of the tagged fishes are caught on rod and reel, nor by male fishermen." While diving, member Penny Wityk encountered a 12-inch tautog at Deal, NJ, on September 19, 1965. Special comments on the tag card read: "Found fish on wreck with two hooks in its mouth, wrapped in monofilament. Very tired but otherwise seemed ok. Tagged and released, and swam away quickly. Temp: 70 degrees F, Depth: 30 feet."

In 1966, the tagging program received a boost from prominent articles in both the New York Times and Sports Illustrated magazine. Membership subsequently increased. Later that year, the society's tagging program released its first recapture reward patch, "Porpoise with a Purpose." In 1968, the "Goldfish patch" replaced it and to this day it serves as the program's recapture reward patch. These patches continue to be sent to recapturing anglers and to society taggers who have one of their tags returned.

In 1970 a tag return created a stir when Norwegian fisheries agents reported the recapture of a salmon with an American Littoral Society tag in Norway's Hansen River. There was much discussion among society taggers and NMFS biologists over this apparent trans-Atlantic salmon tag recapture. The mystery was solved when the tardily received tag card showed that Silvano Prestini had tagged a salmon while away on vacation in Norway. Macmillan bemoaned the fact that taggers did not always send their tag cards into the office in a timely fashion. Apparently some things never change, as every tagging director since Graham, including the current one, has complained of this same difficulty.

Some familiar fisherman names appeared in the 1974 tagging report. Newark Star-Ledger outdoor writer Al "Fish-story" Ristori, tagged an amberjack off the Galapagos Islands. His note in the special comments of the tag card read: "Fish threatened by Sea Lions!" Famous saltwater fly fisherman and host of the fishing show "Walker's Cay Chronicles" Flip Pallot tagged tarpon in Miami and the Marquesas Islands. And J.W. Kimebrew of New Orleans, one of the society's earliest fish taggers, tagged a 36 inch red drum. The tag card noted, "He and I are both tired."

In 1976, due to the everincreasing expansion of the program

and workload, Macmillan turned the helm of the tagging program over to society staff. In 1979 Mary Ann Griesbach (MAG) became the second steward of the program. With help from the society's then Executive Director, Dery Bennett, the program continued to grow and soon reached over 1000 taggers and over 20,000 tags per year. However, in 1979 MAG noted that the number of tag returns was down and that catching a striped bass was becoming a rare event. In the fall of 1981 she noted that for the first year since the program's inception striped bass did not rank No. 1 in the number of returned tagged fish. That year fluke (summer flounder) surpassed stripers in recaptures. This was right around the time when fisheries scientists and others began to observe a precipitous decline in coastal striped bass populations. This development made the program's tagging data that much more valuable to fisheries managers and to the striped bass fishery. From the beginning of the program the society provided its data to Marine Fisheries scientists at Woods Hole. This continues to this day.

In the spring of 1982, MAG reported the end of shark tagging for the society's tagging program. From then on shark taggers were directed to tag with the newly formed NMFS Cooperative Shark Tagging Program under the direction of shark biologist Jack Casey.

In a 1983 UN article called "How to Tag Fish," longtime tagger Tom Lake stated, "Fish tagging is not for everyone, nor are you born with the necessary skills to perform it. Tagging takes practice and skill, and above all, good sound judgment, just as not all fish are candidates to be tagged, so not all fishermen are meant to be taggers. A good fish tagger can be 10 years old, or 80 years young, but all taggers have something in common – a genuine respect for the fish they tag."

In 1985, the program celebrated its 20th anniversary and a year later Pam Carlsen became its third director. Soon after, Vicki Wojewodzki came onboard as Pam's assistant. Pam, a boater and fisherman herself, spent her evenings cutting and grinding stainless steel tubing to fashion the tagging needles and completing tag kits by matching individual tags to their numbered data cards.

In 1987, Pam announced that the society would no longer be tagging freshwater fish since most of those fish were hatchery raised and fell under the purvey of State Fish and Game Divisions. The program now turned its focus to inshore fishes of the littoral zone, with a concentration on striped bass conservation and restoration.

That same year the fish with the "shortest time at large" was reported. Tagger Jack O'Keefe, while fishing for stripers with Elaine Horton on

the Housatonic River on July 18, 1987, tagged and released a fish at the stern of his boat. Meanwhile Elaine was taking a break in the bow while her plug drifted in the water. Within 10 seconds, the fish reversed course, swam back to the boat, and crashed her plug. With no growth observed, the fish was released back into the river with its tag intact.

In 1989 the program went international when longtime tagger Fred Stunkel, aka "Mako Fred," had a 20-inch striped bass he had tagged near Stamford, CT, on October 14, 1988 recaptured on June 18, 1989 in the Upper Bay of Fundy, Nova Scotia, Canada.

When the 25th anniversary of the American Littoral Society Fish Tagging Program rolled around in 1990 there were 900 individual taggers and 35 fishing clubs. After a quarter century of tagging, 110,596 fish had been marked and 4,438 had been recaptured. That same year the program moved into the digital age when Pete Barrett of The Fisherman Magazine donated a DOS-based computer and dot-matrix printer. From then on all of the tagging data was entered into a computer. Also introduced that year was the "lockon" style tag. These tags sped up the tagging process and eliminated the need to tie a knot.

On February 28, 1991 a tag was recovered from an 80-85 lb. sandbar shark 30 miles north of Daytona Beach, FL. Society records subsequently showed that the female shark had been tagged at 36 inches and 12 lb. by program founder Graham Macmillan on August 25, 1971 in Delaware Bay off Villas, NJ. At almost 20 years, this still stands as the program record for "longest tag out."

Soon after, on April 26, 1991, Graham Macmillan passed away after a lengthy illness. To this day Graham is remembered for the vision he showed by encouraging sport fishermen to participate in tag and release, and for promoting the conservation of fishes.

In September of 1990 a tag (but not the fish) was recovered from the stomach of a giant Bluefin tuna in Cape Cod Bay, MA. The 32-inch bluefish the tag had belonged to had been marked by Mike Favale, of Orient Heights Yacht Club on August 21, 1990. The bluefish had apparently met its demise inside the tuna. This was not the only odd recapture of a tag. Tags frequently came back from Osprey nests and were found beneath Osprey killing trees and platforms. Other odd tag finds included a 14-inch striper tag from the Tuckahoe River in New Jersey, which was found in a pile of cormorant feces on top of a buoy in Newark Bay, and a 24-inch striper tag, which was recovered from the stomach of a 15-inch scup.

In 1992 Pam asked Florida taggers to discontinue tagging snook because the state of Florida wished to exclusively manage all tagging of that species. This was partly due to the high water temps in-situ and an increased chance for mishandling or infection.

On August 30, 1992, Tom Hahn of North Brunswick, NJ, put the 300,000th American Littoral Society fish tag on a 23-inch, 5 lb. fluke in Raritan Bay, off Atlantic Highlands, NJ. Tom reported "because we usually return fluke larger than 20 inches this would be a good fish for this special tag." It was a good fish. It was never reported to be recaptured.

In 1998 society taggers were sent two memos. The first alerted taggers to report any fish that might be infected with a bacterial condition called Mycobacteriosis. To this day the society asks taggers to be on the lookout for this condition because it continues to be a threat to striped bass stocks, especially in the warming waters of Chesapeake Bay. The second memo was a conservation measure and asked fishermen to use circle hooks to decrease "gut hooks" and increase "lip hooks" when bait fishing.

On November 26, 1999, while on a "Friends of Fishes" tagging trip, Tom Lake put society tag #500,000 on a 23-inch striped bass at Robbins Reef in New York Harbor.

On June 30, 1999, the society's tagging program went presidential. That's when none other than former President George Herbert Walker Bush recaptured a society-tagged

striped bass near Kennebunkport, ME. The recapture was reported by one of Bush's secret service agents. Charlie Kennedy had tagged the 24-inch striped bass on April 11, 1999, at Prissywick Shoal, off Cape May, NJ. For a few months, Charlie and President Bush traded letters.

Education has always been one of the key components of the American Littoral Society's Fish Tagging Program. On February 1, 2000, the society released a tagged striped bass into the tanks at Jenkinson's Aquarium in Point Pleasant Beach, NJ. This fish was part of a larger effort to educate visitors about fish tagging. The aquarium staff named the striper "Buddy."

Education continues to be a part of the program's outreach efforts. Each year, utilizing tackle donated by retired society taggers, the society takes hundreds of children and adults fishing and literally puts them in the littoral zone. All the kids in our afterschool marine science education classes and those in the summer camps are offered the opportunity to fish, and hopefully tag a fish. (You can learn more about camps, surf fishing clinics, and the annual fluke tagging trip at littoralsociety.org).

This page: the Fish Tagging Program's third Director, Pam Carlsen (left), with her assistant, Vicki Wojewodzki outside Littoral Society headquarters at Sandy Hook.

Records are meant to be broken, but how a record is broken matters to some. On November 25, 1990, Hudson River Fishermen's Association member Tony Evangelista caught, tagged, and released a 13-inch striped bass in New York City's East River. This fish was recaptured on August 7, 2002 at Fisher's Island, NY, by angler Michael Letavic at 45 inches. Tony's "striped bass at sea" record held for 6 years until it was bested by a mere 18 days by a striper tagged by longtime Long Island tagger, Art Schweithelm. On November 8, 1996, Art tagged a 16 1/2 inch striped bass at Northport, NY. On August 8, 2008, 11 years and nine months after it was



tagged, spear fisherman Jephry Boisvert recaptured it at Point Judith, RI. Boisvert discovered the tag while filleting the fish for dinner. With some humor, Tony Evangelista still likes to say that this more recent record should not stand because the fish was not recaptured via rod and reel.

In 1998, tagging director, Pam Carlsen attended the first meeting of the Atlantic States Marine Fisheries Commission's (ASMFC) Cooperative Angler-based Working Group. This led to a certification process for tagging programs and on February 2, 2008, the society received official program certification from the ASMFC Interstate Tagging Committee.

Three months later, after 25 years as director and faithful steward of the tagging program, Pam Carlsen retired. Much of the success of today's tagging program can be attributed to Pam's dedication and hard work. Quoting the Walrus from a favorite childhood Lewis Carroll poem, Pam said: "The time has come, to think of other things..."

Using a pen with a character named Peanut on the cap, she swore me in as the fourth and current steward and director of the program.

Despite weathering a prolonged economic recession and superstorm Sandy, the tagging program has continued to flourish. With the help of Gail Abrams, the program's original database programmer from 1990, the tagging database software was recently upgraded.

In 2016 the program will go hi-tech with the development of a tagging smart phone application, and an interactive tagging website. The smart phone application will enable taggers to instantaneously upload tagging release data, and also enable recapturing anglers to upload tag recapture data directly to the database for review. The website will enable the public and taggers alike to graphically display tag and recapture data in a "Google Earth-like" map that is linked to the tagging dataset.

With these developments, the tagging program is ready for another 50 years. However, the true reason for the continued success of the society's tagging program are the taggers themselves. Without dedicated volunteers, there would not be an American Littoral Society Fish Tagging Program.

Jeff Dement is the Director of The American Littoral Society's Fish Tagging Program. He holds a degree in Ecology/ Professional Natural Resource Management from Cook College and has a professional certificate in Environmental Geomatics (GIS).

As the fourth steward of the tagging program he manages 1,000 volunteer anglers from Maine to Florida.

Fish Tagging By The Numbers

1 – Littoral Society tagged fish caught by a United States President. It was a striped bass caught by President George H. W. Bush. The tag was returned to the society by one of his secret service agents.

4 - American Littoral Society Fish Tagging Program Directors in the 50-year history of the program.

5.4 – Percent of fish with a society tag are recaptured.

10 – Seconds between the tagging of a fish and its recapture, which is the fastest recapture on record. The striped bass was released at the stern of the boat and recaptured at the bow.

19 – Years is the longest period for a fish between its tagging and its recapture. It was a sandshark tagged by the program's first director in 1971 in Delaware Bay and recaptured in 1991 near Daytona Beach, Florida.

986 – Active taggers as of December 11, 2015.

2016 – Year the society will be releasing a fishtagging smart phone app.

2800 – Longest known distance traveled in nautical miles by a society fish between tagging and recapture. It was a Bluefin tuna tagged off Nantucket and recaptured in 2015 by a commercial fisherman 100 miles off the coast of France.

3,934 – Atlantic cod were tagged and released between 1990 and 2014.

29,815 – Fish were tagged in 2006, which was the most fish in one year to date.

34,216 – Fish were recaptured in the history of the program.

110,596 – Fish were tagged in the first 25 years of the program from 1965 to 1989.

522,896 – Fish were tagged in the last 25 years of the program from 1990 to 2015.

633,462 – Tagged fish have been logged in at headquarters as of Dec. 11, 2015. Sometimes fish are tagged, but their data cards are not returned to Littoral Society headquarters.

878,039 – Latest tag number returned to Society headquarters.



Double-crested Cormorants, *Phalacorcorax auritis*, have seen repeated declines over the centuries, but since the early 1980s they have become numerous in North America. They are now present in 40 US states and in all 10 Canadian Provinces. Their recovery however has not come without controversy.

While environmentalists and birdwatchers view the Cormorant's recovery as a triumph of their efforts to reduce contaminants in the water while also protecting natural habitat, others believe that Cormorants eat too many fish, damage habitat and hurt other bird populations.

In the 1800s and early 1900s Cormorants were not abundant, mainly because they competed with humans for fish. Hunters would shoot and kill them and eat both the birds and their eggs. Back then, Cormorants commonly were referred to as shags, a term borrowed from England and Ireland where the name is still used today.

By 1929, there were fewer than 40,000 Cormorants, but in the 1940s their populations began to increase quickly. By then they numbered in the hundreds of thousands in the Mississippi River area alone.

Facing page: A Double-crested Cormorant swims with a freshly caught catfish. Photo by R. Cammaugh, NPS Photo

Then, from the 1950s through the 1960s, due to the widespread use of the pesticide DDT, their numbers declined again. DDT would break down to DDE, which would then wash into waters where it accumulated in fish tissues and was passed on to the bodies of Cormorants and other fish-eating birds. When birds laid their eggs, the shells were so thin they would crack which would result in the death of the fetuses. Consequently, all fisheating bird populations, including Cormorants, declined sharply.

After DDT was banned and the Migratory Bird Treaty Act of 1972 was enacted, which made it unlawful for anyone to kill any migratory birds and destroy their nests, Cormorant numbers began to swell again.

Today, Double-crested Cormorant populations are considered to be healthy, but some people and agencies believe they are overabundant, especially because their robust appetites are detrimental to fish populations.

Cormorants focus their feeding on waters that have high densities of fish and where the fish are easiest to catch. In salt and fresh waters, they feed within a few miles of their breeding colony, thereby depleting the fish supply. They prey on bottom-dwelling or schooling bottom fish. Feeding dives last 20 to 30 seconds each. A Cormorant

consumes from 0.5 to 1.0 pounds of fish per day. Most of their prey is made up of small fish, generally less than 6 inches long. However, they can eat large fish, including fullygrown eels. When they do eat large prey, their necks expand around the shape of the fish. They shake their heads to force the fish into their stomachs.

Cormorants eat commercially important fish, including; winter flounder, salmon, and menhaden, but also; anchovies, herring, sticklebacks, sea robins and cunners.

In fresh water they consume; yellow perch and walleye, minnows, suckers, shiners and carp, as well as many types of forage fish.

As one study showed, their appetites can be legendary. In 1997 in Oneida Lake, NY, Cormorants consumed; 49% of age-1, 26% of age-2, and 13% of age-3 and older yellow perch. As it turned out, Cormorant predation of sub-adult yellow perch was a larger source of mortality than fishermen's harvests.

Cormorants can also cause substantial negative effects at release sites when juvenile sport fish are stocked into lakes and rivers.

At East Sand Island, an area near the mouth of the Columbia River in Oregon, the Cormorant has been locally termed, the "salmon killer", because it eats large numbers of juvenile salmon.

This area supported a substantial fishery for Chinook salmon. In 1989



About Cormorants

Both male and female Double-crested Cormorants have black plumage tinted with green on their heads, necks and undersides. The adults have a body length of 29 to 36 inches, a wingspan of about 54 inches, and a weight of 4 to 6 pounds. Their feathers hold water to reduce buoyancy when they are diving. When they emerge from the water, they fly low to their roost, where they digest the fish and rest. They stretch their wings to dry their feathers, which also cools their bodies in hot summer weather.

there had only been 100 pairs of Double-crested Cormorants at East Sand Island. By 2013, however the island had 14,900 nesting pairs or about 40% of the entire western population of Cormorants. That same year it was estimated that Cormorants ate an estimated 25 million salmon per year. This constituted roughly one in every seven salmon that had survived following hatching. Most of the salmon that the Cormorants ate had been reared in hatcheries.

Since then a controversial federal program has been instituted using wildlife agents to cull the Oregon Cormorant population. Even though Cormorants are protected under the U.S. Migratory Bird Treaty Act, salmon get priority because they are listed on the Federally Endangered Species Act. The goal of the culling program is to reduce the local population to 5,600 by 2018, much to the chagrin of the Audubon Society of Portland.

As seen in Oregon, Cormorants are opportunistic eaters, which has also become a problem for the aquaculture industry, in particular in the Southeastern US. While overwintering, one Cormorant can eat 10 catfish fingerlings out of a farm pond to the tune of 1 to 1.5 pounds per day. In 170 days, one group of 30 Cormorants can consume half of the fingerlings in a 20-acre pond. Similarly, Cormorants have been known to raid shrimp farm ponds in Central America where shrimp farmers found that each Cormorant could eat 80 or more shrimp per day.

Besides their large appetites for fish, Cormorants are responsible for degradation of the habitats where they nest, sometimes to the detriment of other bird species.

Beginning in April, adults construct nests on the ground, on shrubs, or on tree branches. The nests consist of twigs, branches, and other plant material that both sexes have gathered. During nest building, Cormorants damage trees by stripping leaves and breaking branches.

Both adults incubate their eggs. Usually there are about four eggs and they hatch after about 25 days. Each nest produces an average of two offspring. Parents nourish the chicks with food that they regurgitate from their stomachs into the throats. of the young. While the young are growing, the parents increase their catch of fish. During egg-laying and chick-rearing, Cormorants often forage early in the morning, rest, and then forage later in the day. The chicks can fly when six weeks old, but are not yet able to gather fish and are dependent on their parents who continue to feed them for 63-70 days. Afterwards they begin to seek fish with their parents and add to the assault on their prey. Cormorants become mature and breed at age 3 and can live for at least 6 years.

Throughout the breeding season, Cormorants deposit vast amounts of guano. Cormorant guano is acidic and contains large concentrations of phosphates and nitrates which accumulate around nest sites. The guano affects water quality and kills ground vegetation at the bases of trees. Trees can die within three to 10 years.

Cormorants have a tendency to use the nesting sites of other bird colonies. They can occupy the sites of Gulls, Terns, Egrets, Herons, and some waterfowl. In Spring, Cormorants return to their breeding grounds before Common Terns do, thereby robbing the Terns of their nesting spaces.

Because of their abundance and because of their fish devouring qualities, Double-crested Cormorants now find themselves under scrutiny.

As in Oregon, other exceptions have been made to the Federal Government ruling that Cormorants cannot be killed or their nests disturbed.

In 1986, the U. S. Fish and Wildlife Service began issuing depredation permits to Southeastern catfish farmers, which allowed them to shoot Cormorants around their ponds. Then in 1998, USFWS allowed catfish farmers in 13 states to shoot Cormorants without a permit. The farmers were also allowed to destroy Cormorant nests. This resulted in a 70-90% reduction in Cormorant populations around catfish ponds.

On the north shore of Lake Ontario, Canadian wildlife biologists have reduced Cormorant populations to protect native trees, Egrets, Night Herons, and migrating monarch butterflies. One control method is to oil Cormorant eggs in their nests. The biologists sprayed vegetable oil over the eggs. The chick fetuses suffocate because they lose the ability to exchange oxygen and carbon dioxide through the shells. The eggs need to be oiled repeatedly for this method to be effective. Another control method is to shake the eggs vigorously. This way the parents are

unaware that their eggs will not hatch and remain on them for several more weeks, with that pair not producing offspring that year. Attempts to reduce the Cormorant population by only removing eggs from nests is ineffective because the Cormorants will lay additional eggs.

It could be that the lower numbers of Cormorants coincides with the colder winters in the past few years. Cormorant numbers rose when winters were warmer in the 1980s and 1990s, but since then winters have turned colder. It could also be related to the amount of food available. One study suggests that more juvenile fish survive during warmer winters. If juvenile numbers are down during cold winters, less food will be available to the Cormorants thus lowering their numbers. Yet another possibility may be that Cormorants have eaten too many fish and existing prey fish populations cannot sustain the current Cormorant populations.

Among all this uncertainty, one thing is certain, the Double-crested Cormorant will remain a controversial creature among policymakers, biologists and bird-lovers alike.

Clyde L. MacKenzie is a Research Fisheries Biologist at the James J. Howard Marine Research Laboratory Northeast Fisheries Science Center at Sandy Hook, NJ. Peerreviewed citations for this article are available by request.

Facing page: A Double-crested Cormorant shows off its impressive, gaping maw at Everglades National Park. Photo by Matthew Paulson





With a biology background and having been an active fish-tagger for nearly four decades, I knew the scientific community had published numerous striped bass studies, but I found little about overwintering fish. Also, no investigations had ever been published on their presence in New England estuaries.

Realizing this was a unique opportunity I decided to examine the unreported overwinter behavior of this popular game fish by means of catch, tag, release, and recapture.

Since the 1930s, tagging studies have played a major role in profiling the movements of striped bass along the Atlantic coast. Studies have continued in the present decade dealing primarily with Chesapeake and Hudson River stocks. Two scientists (John Boreman and R. Rhaett Lewis, 1987) used tagging records of the American Littoral Society to better profile the migratory habits of over 27,000 tagged striped bass along the Atlantic seaboard.

Why not do the same? The only difference being I would be tagging a contingent of overwinter stripers.

My active tagging for the Littoral Society began in 1967, and 30 years later I had marked well over 12,000 coastal and estuarine habitat stripers. In 1997, when I learned about this

Previous Page: Captain Al Anderson (right) and American Littoral Society Fish Tagging Program Director Jeff Dement tag a striped bass near Rhode Island in 2011. Photo by Bette Gannon. unique situation, it seemed logical to use society tags. Electronic tags that record environmental data such as water temperature, depths and location were costly. Littoral Society tags, known as archival tags, are point-to-point vinyl-spaghetti tags. Even though they only produce "discrete" data, they were far more cost effective.

Early on, initial trips resulted in only 20 to 40 tagged fish, which would require years of effort to generate statistically significant numbers, should I wish to publish a meaningful study. As this wasn't good enough, I needed to develop a tool to increase my catch success. To achieve this I developed a mini-umbrella rig with multiple barb-less hooks to minimize catch, tag and release injury, while enjoying the potential for marking several fish at one time. I also purchased a small outboardpowered skiff along with a trailer and four-wheel drive truck for wintertime travel.

I realized that using my charter business to generate help in marking these fish could prove productive. I also created a library of slides for what became a popular regional Overwinter Striper Seminar Series. And the release of several fishing TV shows about my exploits further elevated regional angling awareness of the importance of tagging fish.

However, I soon realized there were a few problems with my idea. Not everyone who caught a tagged

fish reported it, or if they did, the information provided would frequently be incomplete. On top of that, the Littoral Society did not offer any incentive or reward as a way to increase recapture reporting. Sadly, it appeared that upwards of 40% of the recaptures were going unreported.

On the flip side, from mid-November through March, there was a concentrated body of fish in several easy-to-reach northeast coastal rivers. An additional benefit was that low winter water temperatures kept catch stress levels to a minimum. During this tag study, time out-of-water per fish averaged only about 20 seconds.

On average, a six-hour trip resulted in 64 marked fish, either by spin casting, trolling or fly-fishing. Generally the best fishing occurred from late November to late December, with fly-fishing as the top producer during the late winter.

Over the span of 10 years I ran 232 wintertime river ventures, which resulted in 15,379 striped bass being marked for science. During that decade I recaptured more than 25 of my own tags and other anglers recaptured hundreds more. Whether it was days, weeks, months or years later, the recapture was usually at or near the spot where I, or other anglers, had initially tagged them.

Once summer arrived, this overwinter contingent of Hudson Riverorigin fish would simply vanish, and wherever they went, each fish appeared genetically programmed to do so.

Some of Captain Al Anderson's Overwinter Striper Findings:

1) Norwich basin is a unique overwintering area

The Thames River is but one of nine southern New England coastal rivers that act as over-winter sanctuaries for both sub-adult and adult Hudson River-origin stripers. The fish are there because of (1) reduced competition (2) historically high spring and fall abundance of forage species-herring (3) genetic memory, (4) estuarine depths that allow for a semi-diurnal saltwater wedge, and (5) access to the nearby coastal zone.

2) Thames tag recapture evidence says these fish are mainly of Hudson River origin

Tag recapture evidence supports the contention that the bulk of the Thames River striped bass have a Hudson River origin, with the majority being female, primarily ages two through five, with only nominal mixing in by Delaware and Chesapeake Bay origin fish. As in other regional estuaries, occasionally over-winter stripers up to 50 pounds were caught.

3) These fish are primarily female

Female striped bass historically migrate to prime foraging areas, areas that contribute to copious egg production. Studies now show male stripers are less likely to undertake these coastal migrations, with evidence of some Hudson River males never leaving that river.

4) The Thames River contingent is the largest of the Hudson River overwinter contingent of stripers.

The term contingent is used to describe a group of fish that engage in a common pattern of seasonal migrations between feeding areas, wintering areas, and spawning areas. The largest overwinter contingent outside the Hudson appears, at the time of the study period (1997-2007) to be hosted by the Thames.

5) Overwinter stripers move seasonally

Thames River fish with Littoral Society tags were recaptured in 43 different summertime Northeast river systems, as well as numerous coastal areas. The Merrimack River and adjacent coastal environs ranked as the primary summertime recapture zone for the Thames River contingent.

6) Stripers are true game fish

Thames River overwinter striped bass are adapted to cease feeding by mid-to-late November, and resume feeding once spring water temperatures elevate. This was confirmed by observing little or no gastric elimination during the catch, tag and release event. Work done on YOY (young-of-the-year) striped bass (Hurst and Conover, 2001) indicated that (1) many temperate fish species lose energy throughout the winter, relying on stored lipid reserves to fuel metabolism, (2) low environmental temperatures drastically reduce digestive enzymatic activity, and (3) overwinter feeding activity could increase when energy reserves

become depleted, as gut fullness was negatively related to lipid energy reserves.

7) Thames stripers travel as far as Nova Scotia

Sub-adult stripers make treks that boggle the mind. Tagged Hudson River striped bass have been reported to migrate as far north as Newfoundland's summer-time estuaries and Nova Scotia's Annapolis Basin.

8) Catching other angler's tagged stripers

While fishing the Thames with clients and friends, I recaptured 34 tagged striped bass. Of those, 15 were Littoral Society (six of which were my own), 10 were Hudson River Foundation (HRF), eight were US Fish & Wildlife Service (USFWS), and one was from the Berkeley Striper Club (BSC).

9) Most overwintering stripers are subadults or "school-sized"

Most Littoral Society tagged stripers are sub-adults or "school-size" fish. During their maturation, juvenile fish seek out estuarine environments such as salt ponds, rivers, and bays, thereby offering anglers relatively easy access with an increased chance for recapture. Once mature, most adults overwinter in the coastal zone off the Virginia and North Carolina capes, returning to their respective rivers-of-origin in the spring to spawn.

A previous version of this article ran in the IGFA magazine.

About Captain Al Anderson and the Anderson Fund.

Captain Al Anderson is a long-time, Rhode Island based charter boat captain and trained biologist. Since the 1960s he has tagged more than 60,000 fish for the American Littoral Society's Fish Tagging program. Of those, 42,000 were striped bass. He is the most prolific tagger in the history of the program.

When asked why he tags so many fish, Captain Anderson said: "I feel the need to give something back to those fisheries resources that have given me so much. So much so that as a charter boat captain I've been able to make a living and support a family. It's also allowed me to provide tremendous enjoyment to clients and friends. I view fish tagging as an opportunity to conduct conservation in the name of science. I wish other industry members would follow my lead, as many fisheries resources today are threatened. Who besides charter skippers are most familiar with the health of popular game fish species? There's no better time than now to get busy."

In 2015 Captain Anderson donated \$25,000 to the Littoral Society as the core for the Anderson Fish Tagging Work-Study Fund to support graduate level fisheries or marine science students with a focus on mark-recapture studies.

Because of Captain Anderson's donation, Chris Dougherty, a Rutgers University graduate student, has been developing a fish tagging app that will allow fish taggers to use smart phones to upload tagging data to a dedicated Littoral Society fish tagging website

that will allow for further scientific analysis of the society's database. The society's fish tagging database now numbers more than 600,000 tagged fish from over the past 50 years and its data has been used by NOAA and other organizations.

For more information about fish tagging, or to donate to the fund, go to www.littoralsociety.org and click on fish tagging. Checks can be mailed to:

American Littoral Society c/o Anderson Fund 18 Hartshorne Drive, Suite 1 Highlands, NJ 07753

Since Captain Anderson's donation, the following people and organizations have generously contributed to the Al Anderson Fish Tagging Work-Study Fund:

Richard Bianchi **Barney Allen Stuart Beringer** William Brett Rvan Brown Robert Busch Stephen Cook Albert D'Amato Matt Dimatteo Marie Drouin **Stuart Fries HSBC** Michael Hudak Bob and Dorothea McFarland Albert Messina **David and Laurie Nass** Dick Omrod **Robert Pearson** William Perlman Victor Plumbo Lad Price Salt Water Anglers of Bergen County Arthur Schweithelm Tim Shaheen Bill Shillingford Harold Smith

Love of Littoral Society Spurs a Generous Bequest

Elizabeth "Beth" McCullough believed in environmental preservation and protection. She was born and raised in New Monmouth, New Jersey, and graduated from Douglass College. She attended Yale Law School where she met M. Earle "Mac" McCullough, who was attending Yale Divinity School. They married in 1943 and they raised their children, Elizabeth and Robert. Along the way she and Mac lived in four different states and various towns in New Jersey. They then retired to Rumson, NJ, where they were active in Old First Church in Middletown.

Along the way Beth and Mac showed generous support for the American Littoral Society. After Mac passed away, Beth would occasionally speak to Littoral Society Executive Director Tim Dillingham by phone and get updates on the organization's activities.

So when she died on September 2, 2015, at age 97, the American

Littoral Society and the environment lost a staunch and longtime advocate.

However, that was not the last the Society would hear of her. Her family, including her children, grandchildren and great-grandson held a memorial service at First Congregational Church of Stamford, Connecticut, and in lieu of flowers they requested gifts be made to the American Littoral Society.

But Mrs. McCullough was not done.

In October, the Society received word from the Yale Office of Planned Giving that she had bestowed \$53,000 through the M. Earle and Elizabeth C. McCullough 2000 Charitable Remainder Unitrust.

The bequest will be used to continue to preserve the environment she and Mac wanted to protect.

For more information about including the Littoral Society in your planned giving, please call Laurie Bratone at the Development office at (732) 291-0055.

You Can Be a Tagger, Too Join the American Littoral Society

However, membership isn't only for those who want to tag fish. Join us if you want to help care for the coast and its creatures. Mail in this membership form or go to our website:

http://www.littoralsociety.org/index.php/take-action/join-the-society

As a Society member you will receive a subscription to our bi-annual publications — the Underwater Naturalist magazine and the "Littorally Speaking" printed newsletter — as well as our monthly e-newsletter. Membership also entitles you to receive discounts on select field trips and events, and a ticket to the Society's Members Day and Annual Meeting in June.

And for more information about Fish Tagging, go to: http://www.littoralsociety.org/index.php/programs/fish-tagging/you-cantag-too I WANT TO HELP CARE FOR THE COAST I enclosed my check in the amount of \$______ for the membership category checked below. ☐ My company will match my membership contribution and I have enclosed a matching gift form. ☐ My contact information has changed ☐ \$30 - Senior/Student ☐ \$40 - Individual/Family ☐ \$50 - Sustaining ☐ \$100 - Supporting ☐ \$250 - Advocate Apt. No./Floor: _____ ☐ \$500 - Littoral Leader State: Or more \$ _ Please make check payable to American Littoral Society. For a credit card payment, please fill out the reverse. All contributions are tax deductible. Thank you for your support. Name as it Appears on Card: Billing Address: □ VISA \square MC Discover ☐ Amex The American Littoral Society promotes the Expiration Date: ___ study and conservation of marine life and habitat, protects the coast from harm, and Security Code: ___ empowers others to do the same. Caring for the coast since 1961.

Amount of Charge:



By Captain Alek Modjeski

To most, an army is defined as an organized military force. To fishermen and biologists, however, an army is defined as a school of herring.

In the case of Wreck Pond, the army was a school of alewife, *Alosa pseudoharengus*, and blueback herring, *Alosa aestivalis*. This army, collectively known as river herring, once frequented Wreck Pond en masse during their spring spawning run.





There are no historic studies of herring populations in Wreck Pond, but stories abound of fishermen who would drive up to Wreck Pond in their pick-up trucks in the mid-20th century, and gather them for bait by the shovelful.

Those days are gone, and research conducted by the American Littoral Society over the past 10 years shows that already low herring numbers

What the Society is doing

- Constructing a 5.5 foot x 8 foot x 600 foot fish passage
- Installing an elevated berm and 6000' of living shorelines
- Dredging 37,000 cubic yards from the main pond
- Fish monitoring

continue to decline. Since 2006 the Wreck Pond herring population has been reduced to a small squad of about 100 determined spawners.

Currently the society is undertaking restoration work aimed at improving fish passage so Wreck Pond's army of herring can return to its former glory.

The Wreck Pond Brook watershed is approximately 12.8 square miles (8,172 acres) in area and consists of three major tributaries, including Hannabrand Brook, Wreck Pond Brook, and Black Creek. These tributaries consist of a network of freshwater ponds interwoven with various manmade structures used to control water levels in these ponds. Unfortuately, these structures can impede fish movement.

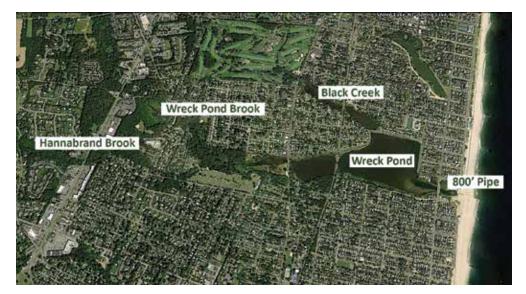
Wreck Pond is a 73-acre coastal lake between the boroughs of Sea Girt and Spring Lake in Monmouth County, New Jersey. Wreck Pond is considered a shallow, body of water with depths ranging between one to 1.5 feet deep under normal water level conditions. The water condition is compromised to the point where it is unfit for swimming and wildlife. Wreck Pond is connected directly to the Atlantic Ocean by an 84inch diameter, 800-foot long pipe. This pipe is the only passageway for herring to enter and swim upstream to spawning areas. The pipe is unlit and because herring are photosensitive this also impairs passage. In an attempt to restore spawning populations in Wreck Pond and rebuild the army of herring, the

society was awarded a 2014 grant by the US Fish and Wildlife Service. This coastal resiliency grant will improve aquatic connectivity through the construction of a secondary fish passage with strategically placed light portals. This passage will be located parallel to the existing pipe between

What you can do

- Attend a Wreck Pond Brook Watershed public meeting at the Wall Twp. Municipal Building.
- Become a Citizen Scientist of Wreck Pond by downloading iNaturalist on your smart phone
- Assist our scientists with fish monitoring.

More info at wreckpond.org



Wreck Pond and the Atlantic Ocean. This project is the first fish passage project in Monmouth County post-Hurricane Sandy and has been designed to improve fish passage and improve coastal resiliency. The restoration involves scientific monitoring of the herring run in spring and fall and the collection of pre- and post-construction fish presence and absence data.

Opening Spread: Wreck Pond as seen from Spring Lake at sunrise. Photo by Jenna Krug, American Littoral Society Previous spread: American Littoral Society scientists and volunteers seine for fish in Wreck Pond by the NJ Transit railroad trestle. Photo by Zack Royle, American Littoral Society Facing page: A Littoral Society scientist holds up an alewife caught during one of the Spring fish monitoring sessions. Photo by Jenna Krug, American Littoral Society

To better monitor presence and abundance of an anadromous species like river herring (a species that lives in the ocean but spawns in freshwater), it is important to have some background on its regional behavior and life history. Currently, herring in Wreck Pond migrate through the existing outfall pipe to reach spawning grounds upstream. Alewife initiate spawning runs when water temperatures are between 5-to-10 degrees celsius. Blueback spawning begins in water temperatures between 10-to-15 degrees celcius.

In Wreck Pond, alewife begin spawning in late April or early May and peak mid-May with alewife runs about a month ahead of blueback herring runs. Unfortunately, blueback herring runs have not been identified or documented in the society's Wreck Pond fish surveys since 2006. Both species use similar hard ground habitats (gravel, packed sand, stones



and sticks) along with relatively swift currents to spawn. However when overlap occurs, herring will spawn in the main current flow of a river while the alewife will favor deeper pools and eddies along the shore bank. When eggs are deposited they remain sticky for the next 24 hours and have the ability to adhere to hard substrate. Once the eggs harden they lose their stickiness and are then dispersed by the current.

Monitoring performed by the American Littoral Society in 2014 and 2015 replicated initial studies started in 2006. This involved using a fyke net in the spring during full moon cycles from late April through late June. Seining studies started in 2008, using a 75-foot seine from September through November.

Overall survey results indicated a decline of 50% in numbers of alewife since 2006 and the absence of blueback herring. This may be partially due to the old access pipe, which was extended by 300 feet in 2006. That extension may have

impeded the herrings' willingness to enter the longer, darker pipe into Wreck Pond from the Atlantic Ocean. Recently hatched alewife were collected in the 2014 fall seine survey, providing proof that suitable spawning habitat did exist further upstream. Knowing that spawning has been successful in Wreck Pond and that spawning habitat exists is half the battle.

The new fish passage design should provide improved access and light penetration, which will hopefully allow the remaining squad of spawners to recruit more herring and rebuild the once prolific Wreck Pond army.

The Society will be there to monitor this resurgence.

Captain Alek Modjeski is the Habitat Restoration Program Director for the American Littoral Society. He is a Professional Ecologist, Fisheries Biologist and a licensed USCG Operator of Uninspected Passenger Vessels. In 2005, he designed and implemented the current fish sampling methodology being used in Wreck Pond.

Confessions of a Tagger



Why they tag:

I tag fish because it's fun, it's interesting, it's catch-and-release, and it contributes to the scientific knowledge of the species. It also makes checking the mailbox more exciting 365 days a year. *Bob Kyker*

I consider myself a self-appointed ambassador of the Tagging Program and the Society, in general, and talk about it with little provocation to young people, fishermen and others whenever I can get people to listen. I try to explain catch and release methods, fisheries management, and environmental stewardship to all interested parties. My work with the Littoral Society fits into my overall goal of living lightly on this planet and leaving it as intact as possible for those who come after me.

It may take years to get a return or maybe just a few days, but it is

Dr. Andrew Soiefer

very rewarding. My longest at large fish was about 5 years and the fish was recaptured in Virginia. It's like a "note in a bottle" to me. *Captain Bill Russo*.

When tagging is exciting

My longest fish at sea was a striped bass tagged on November 8, 1996 in Northport, NY. That fish met its fate on August 8, 2008 off the breakwater at Point Judith, RI, at the hands of a spear fisherman. I believe the striper's 11 years and nine months at sea is still the Littoral Society record. *Art Schweithelm*

When tagging isn't so exciting

Tagging "pet peeves." 1) It would be great if we didn't have to clean our tagging needles! What a stench! 2) Leaving my cloth ruler on the beach in the dark! Must have done this at least 10 times over the years. 3) Chasing a tagging card down the beach in a 30 knot blow! *Art Schweithelm*

When the fish brings its own rod

While drifting eels, I hooked a fishing pole at the Cape May Rips. The exposed tip of my hook caught an eye of a very small fishing pole, which had apparently gone overboard when the fish hit. I got the pole in the boat and was hand lining the rest of the line up when I felt something on the other end. It was a 33-inch striped bass and it had worn a big hole in its lip around the hook. It looked to be in pretty good shape considering its ordeal, so I tagged and released it figuring it deserved a second life. Never heard from it again. *Al D'Amato*

When the fish is as big as a whale

We were a mile north of the ammo pier in Raritan Bay, no more than a few minutes into our first. drift in 25 feet of water. A whale surfaced about 100 yards north of the boat. Bunker all over. It surfaced several times, each time a bit closer. It surfaced again. This time it was turned toward the boat, black body fin on center about 50 yards away when it submerged. Then a big swirl appeared five yards off to the side. The Hummingbird lit up like a Christmas tree. Three reels started peeling line like we had never seen. Just like wicked tuna. The power and speed was unbelievable. We broke off the three lines, upped the rest of the lines, and headed for the Knoll. Angelo Lenetti

When fish fly

One of my favorite tagging stories involves a sea bass of 10 inches, which literally fell out of the sky! A group of us were fishing

on the Shinnecock Star on June 27, 2009, with the Good Captain John Capuano at the helm. We picked up a few keeper sea bass and I managed to tag a couple of shorts. Captain John gave me some grief about two of the tagged fish that were plucked out of the water by sea gulls as the fish were getting their bearings. I felt badly and noted in my field notes which of the fish got the airlift. To my surprise, later that summer, I received a recapture letter from the society that one of those hijacked sea bass had been recaptured. The very lucky flying sea bass had been caught on July 19 by John Wojcik at the Shinnecock Reef.

Art Schweithelm

When you assume, you make an ...

I was busy tagging undersized fluke near Greenport, NY. An interested passenger was watching me and asked me a few questions. I explained about the writing on the Littoral Society tag, which stated: "Return Littoral Society, Highlands NJ, 07732". And then he asked me: "What's the best way to pack the fish before mailing it to the Society?" I guess one should never assume anything. *Captain Bill Russo*



Mesh Monster Sparkle Bug Crease Fly Squid Banger Richie King's Popper 7. Ka Boom-Boom

Bangers and Ka-Boom-Booms

How One Jersey Guy Blew Up Salt Water Fly Fishing

By Captain Mike Corblies

On an overcast October evening in 1969 a man left his home on Broadway in Seaside Park, New Jersey, and walked east along 10th Avenue. He crossed over the sand dunes and gazed at the incoming tide of the Atlantic Ocean.

Earlier that afternoon he had been in his shop selling bait and wooden plugs to a happy parade of fishermen who were heading to the beach, intent on catching their share of a large school of marauding bluefish. The blues were within easy casting distance, as they were focused on destroying the local mullet population. The baitfish were hugging the beach, trying in vain to avoid the life ending jaws of the big hungry bluefish.

The man carried a fiberglass rod made by the Fenwick Company. It was nine feet long and its design had never before seen on the Seaside beach. Also unusual was the Pfleuger Medalist reel, a simple mechanism

that had never been used in this particular fishing arena. The reel was spooled at its core with 300 feet of Cortland Line, made of Dacron, and named for the upstate New York town where it was manufactured. He had attached an additional 100 feet of a heavier and thicker plasticcovered line, called 333, which could float on water, and also came from the upstate New York factory. To this he had carefully tied a nine-foot piece of another newly developed invisible line called monofilament. Finally, at the end of this trio of lines he had used a fisherman's knot to attach his own creation.

He picked a spot along the beach that would afford him a bit more space, away from the other anglers, who were busy in combat, or hauling their vanquished prizes from the sea. He began to cast his rod rhythmically, allowing some of the bright colored plastic line to slip back behind him. With each back

and forth motion he would release a bit more line while still aiming toward the surf. When he felt the line had reached its most effective length, he let go of the extra line in his opposite hand and with a quick forward motion, and an abrupt stop, sent his little balsa wood and hook invention out beyond the first set of breaking waves. The little bug landed in a trough amongst the chaos of a school of fleeing baitfish and danced on the surface of the churning waves.

The man lowered the tip of his rod and began to pull the little lure back across the water towards the beach. He would pull it quickly, with a short strip of line that he gathered up in his hand, than repeat the process. Each time the line was drawn, the little lure sent seawater shooting ahead with a little puff of salty spray.

Beneath the waves, a hungry, yellow-eyed bluefish mistook the fleeing little lure for an injured mullet. Like a torpedo, the bluefish attacked with full fury. The fish felt the steel of the Mustad hook and in that split second, as the man pulled back to set the hook deeper into the fish's jaw, it knew something was wrong. The fight was on and the man had to relinquish the line in his hand to the powerful fish as it sped back through the waves to deeper water in an effort to rid itself of the strange object in its mouth.

A back and forth contest between the man and the fish continued for a few more minutes until the man gained the upper hand and finally beached the wildly flopping fish on the sand. The fisherman's knots had held and the little lure had done its job. It brought a smile to the mans face, for it was the first time such a little floating lure had been to sea with the aid of fly fishing tackle and techniques. In that moment, a new chapter of saltwater flyfishing had been written.

The man was Elwood "Cap" Colvin of Seaside Park, New Jersey. He had invented the floating lure in his little shop, called Cap Colvin's Bait & Tackle. Called a Ka-Boom-Boom popper, it was designed for taking schoolie bass from Barnegat Bay. Since its debut in ocean flyrodding, the same ritual, often with new variations of that fly, has been replicated thousands of times around the world.

A few years later, Bob
Popovics, another Jersey flyrodder
who started out in the sport from
Cap Colvin's shop, would fashion
his own creation called, the
Banger. It made tying saltwater
poppers much easier, because
-- unlike a Ka-Boom-Boom -- it
did not require any whittling. The
Banger would go on to become
even more widely used then Cap's
Ka-Boom-Booms.

It was Cap Colvin's son Butch who devised most of the refinement and

improvements to his father's original design, which was first crafted from white perch floats. Butch went on to create ever-larger versions of Ka-Boom-Booms. He added craft glitter to the paint jobs and used articulated stinger hooks. He would also create whole new patterns, including realistic squids that combined Ka-Boom-Boom bodies with squid heads.

Richard "Richie" King of Toms River, another regular from Cap's Shop, had an extreme passion for anything that involved fishing. Soon after the fly rod craze for catching stripers in the bay had started, Richie bought his first fly rod and found his favorite way to fish for the rest of his life. Because bluefish would destroy the balsa with their teeth, he decided to make the Ka-Boom-Booms longer lasting by artfully wrapping them with heavy mono line. Later he would make them even tougher by using narrow vinyl tubing and gluing the tubing to the bodies. He also changed the face of the popper a bit to suit his own taste. Most of the time they were painted black, because Richie became the master of the marsh at night. He often caught the most bass and the largest specimens of any of the guys at the shop while fishing the backwaters of Barnegat Bay.

The trio of Butch, Richie and Bobby spent many happy days and nights as kids fishing on Island Beach State Park with their fly rods; perfecting skills that they would use their entire lives. After getting my captain's license and moving to the Shore I would spend time fishing and learning from the three of them, but mostly with Butch and Richie.

As the years passed, other notable popper designs came along, such as the Crease Fly tied by Joe Blados of Long Island. Butch and I had the pleasure of fishing with him numerous times, and also discussing fly designs.

My own experience, as well as observations of my clients during guided trips, brought me to prefer a popper called the Sea Foam, which was developed by the now defunct Mystic Bay Flies of Massachusetts. The Sea Foam was constructed of durable EVA foam. Mystic refined it into the Sparkle Bug, by adding a heat-shrink, pearl-finished sock over it that sported an integrated saltwater flashaboo-type tail. In the blue and pearl finish, the popper had no equal for attracting the attention of bluefish, jacks, and several other aggressive species. It has also taken many stripers and red drum. Knockoff versions of the Sparkle Bug are now being made in Asia.

When sea conditions require a popper that can stand out in a heavy surf situation, the Sparkle Bug will ring the dinner bell for gamefish. Yet on calm waters, when stripers are either lethargic from cold water temps or are just being finicky, it's still best to tease them with a Ka-Boom-Boom or a Crease Fly instead of a big water thrower like a Sea Foam.

As for Bob's Bangers, his use of Mylar tapes on the popper bodies has been the best feature I have found with this type of popper. They have long been my favorite for taking dolphin (mahi-mahi) in southern waters, when the fish are looking for anchovies or sardines. The Banger tape, colored with fish scale patterns will offer the perfect solution in clear tropical waters for fooling a lot of fly rod species.

Last, but hopefully not least, I have recently created a brand new popper to add to the offerings. I call it the Mesh Monster and it's built by using Body Parts materials, which are mesh tubes that were historically used for cardiovascular repair. The body parts are used as a sock and a wide-mouth popper face is glued over shaped EVA foam cylinders to make up the body of the fly. The three sizes of tubing allow for the creation of poppers with sizes to suit panfish to billfish.

Field-testing of the new designs is under way, with good results to date. More time on the water and some tinkering will determine if it will join the ranks of its successful predecessors, which stretch back to Cap Colvin's first Ka- Boom-Boom.

A footnote from Captain Mike Corblies: I certainly do not have the time, skill or patience to sit and whittle Ka-Boom-Boom poppers.

Though Butch and I explored the idea of having some factory make them for us, we never did. We both thought they needed to be handcrafted, but neither of us wanted the Ka-Boom-Boom and its legacy to disappear. Luckily I recently met a striper plug artist from North Carolina who I'm collaborating with to build a new line of the Ka-Boom-Boom. They will be made one at a time and I plan to introduce them to the flyrodding community some time in 2016. As they say in the media: Stay tuned for further developments.

Captain Mike Corblies is the International Director of American Fly Fishing Schools, an organization of casting instructors, flyfishing guides and member lodges throughout North America and the Caribbean.

Mike works with several sporting goods manufacturers as a consultant in product development, testing and sales. He also conducts classes and offers guide services from his fly shops in Island Heights, New Jersey and Palm Bay, Florida. He is currently working on a book about saltwater flyfishing. This article was edited from one of its chapters.

You can learn more at www. americanflyfishingschools.com

DATA DIVING:

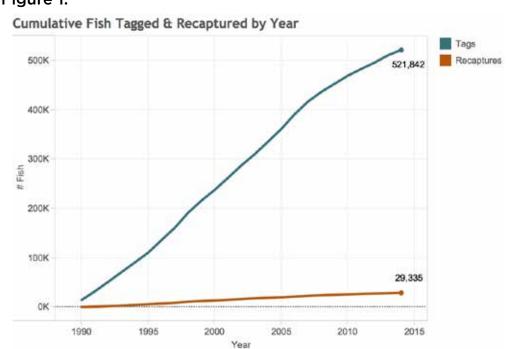
A Closer Look at the Littoral Society's Fish Tagging Data

By John Mogielnicki and Peter Mogielnicki

Editor's note: More than 633,000 fish have been tagged since the American Littoral Society's fishtagging program began in 1965. This year, Fish Tagging Program Director Jeff Dement supplied the computerized part of the dataset (1990-2014) to Peter Mogielmicki and his son John, both active fishtaggers, and they did a little data mining of their own. Their analysis reveals lots of interesting facts, but also raises questions about the secret lives of fish.

Who would have guessed, when the American Littoral Society began its fish tagging program in 1965, that between 1990 and 2014 over 9,000 participating taggers would catch and release more than half a million fish, each one sporting a delicate, yellow, numbered bit of rubber tubing behind a dorsal fin? And who would have guessed that five percent or more than 30,000 of those fish would eventually be recaptured and their tagging information returned to the society to become part of what is now a huge and valuable scientific database? (Figure 1)

Figure 1.



Between 1990 and 2014, 169 different species were tagged.

The ten most frequently tagged species are shown in Table 1.

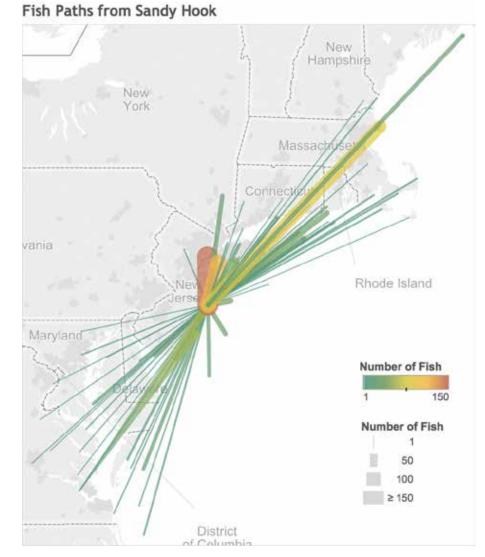
Table 1.
Ten Most Frequently Tagged Species
(Data from 1990 - 2014)

Species	Min. Length	Median Length	Max. Length	Number Caught
Striped Bass	4	21	53	357,077
Fluke	5	14	38	84,921
Blue Fish	5	21	39	28,669
Tautog	5	14	36	16,580
Back Sea Bass	4	10	26	7,325
Weakfish	7	14	34	6,402
Atlantic Cod	8	19	41	3,926
Winter Flounder	3	11	22	2,218
Scup	3	9	18	1,980

Tagging has occurred at 7,566 different locations along the East Coast. The majority of the fish (48,611) were tagged between Raritan Bay and Cape May, NJ, which makes sense since the American Littoral Society has its home base at Sandy Hook. Figure 2 represents the path of all fish that were originally tagged in Sandy Hook (the area

of highest tagging activity). Each path shows where these fish were subsequently recaptured. The width and color of each path represents the volume of fish that moved between each location. It becomes clear that the fish that are caught in any given area roam widely up and down the east coast.

Figure 2.



Extracting information from a database of this size and complexity can be challenging – especially when you consider that the entry for each tagged fish involves a unique tag identification number, tagger name and address, species, date tagged, size at time of tagging, and general location of the catch. The same information must be reentered for

each tagged fish that is recaptured; in addition to recording the name of the recapturer, date recaptured, and location recaptured. Simply tabulating all this data yields a spreadsheet of millions of data points – over half a million rows and dozens of columns. Making sense of all this can be a challenge.

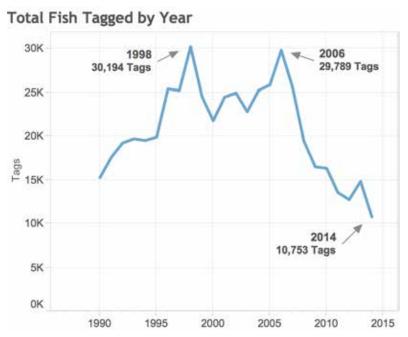
Back when the program was started, individuals manually recorded the information from the incoming tagging postcards and subsequent recapture data, eyeballed it, and calculated relationships like growth rate and distance travelled, and plotted these relationships out by hand. This is a feasible task when one is dealing with numbers in the hundreds, but numbers in the hundreds of thousands can be quite a different story. Fortunately, in the half century during which this data was accumulating, the digital age matured and along with it came tools to handle what has come to be known as Big Data.

What follows is the result of applying one of these tools to the American Littoral Society's tagging data base. In the spirit of full disclosure we admit that neither of us is a fisheries scientist. Both of us are, however, devoted fishermen and one (John) is a professional data analyst. The Littoral Society was kind enough to share their tagging database with us and we processed it using the Tableau data-processing program. The resulting figures are a true visual representation of the data collected since 1990 (data prior to that date have not yet been fully entered into digitized form). The

conclusions we draw from them in the text are another matter and represent our interpretation of what the figures say. Though information on multiple species is represented in the society's database, most of the following discussion and associated figures relate only to striped bass.

Figure 3 shows the number of striped bass tagged each year. This number remained relatively stable between 1998, when it peaked at 30,194, and 2006, when 29,789 fish were tagged. Since 2006 there has been a dramatic decline in number of fish tagged with the total reaching only a third of the program's peak years. Some of this may be attributable to the economic downturn of the late 2000's. This caused a decline in the number of people fishing; time spent by each on the water; and hiring of charters (captains of charter boats have traditionally been among some of the most prolific taggers). However, the decline in fish tagged appears to have begun a bit before the full brunt of the economic downturn occurred. It has persisted unabated until the present, despite a gradually improving economic picture. This suggests another possible contributing factor: fewer fish.

Figure 3.



It is instructive to take a closer look at the ups and downs of the fish tagged per year in Figure 3, keeping in mind the Chesapeake Bay young of the year (YOY) reports available on the state of Maryland Department of Natural Resources website (http://dnr2.maryland.gov/ fisheries/Pages/juvenile-index/ abundance.aspx). Upward bumps in the number of bass tagged lag three to four years behind the peak Chesapeake YOY reports. This coincides nicely with the number of years it takes a newly hatched striped bass to reach the 16-to-19 inch size of a typical schoolie.

Figure 4 separates the number of bass tagged each year into those

above and below the typical keeper size of 28 inches. It is no surprise that the majority of fish tagged are below the legal keeper size. There are certainly more smaller fish to be caught than larger ones. It's also safe to say that the percentage of legal-size fish that are caught and released is going to be smaller than the percentage of sub-legal size fish being released. It is not an easy decision for many fishermen to forgo a fine striped bass dinner! One subtle feature of Figure 4 begs an explanation: Why during the very years when more sub-legal sized bass are being tagged, fewer bass over 28 inches are being caught, tagged and released? Suggestions are welcome!

Figure 4. Striped Bass Tagged by Year - Over or Under 28"

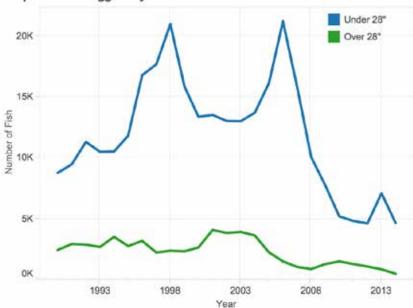


Figure 5 shows the dramatically different average growth rates of the major species tagged. Atlantic cod grow on average nearly a foot in three

years between tagging and recapture, while tautog show only one quarter of that growth.

Figure 5.

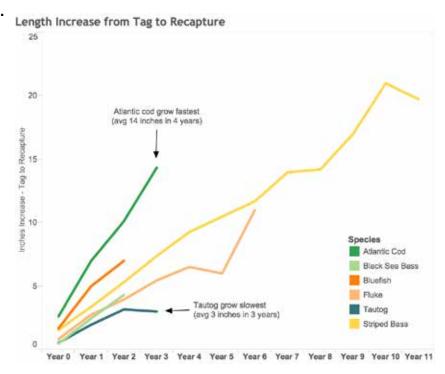
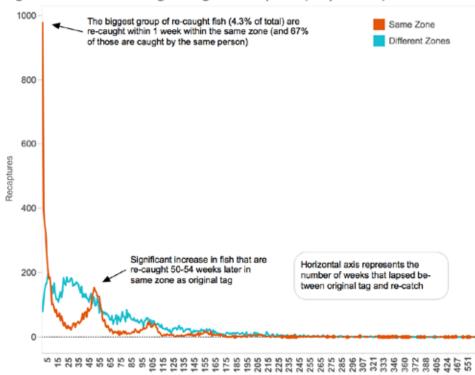


Figure 6 is a plot of when and where tagged bass are recaptured. It demonstrates clearly that if a

tagged fish is to be recaptured, it is most likely to be recaptured in the same area and in the same season that it was first tagged.

Figure 6.

Lag in weeks between original tag and recapture (Striped Bass)

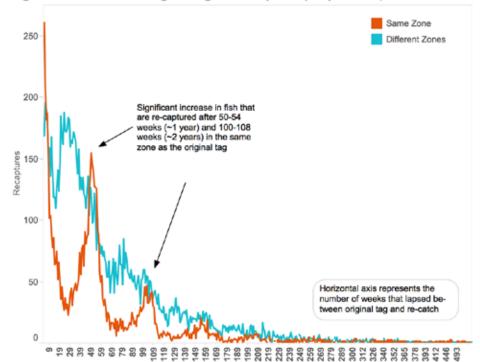


To more clearly show what happens during the years following tagging, figure 7 replots this lag data,

but ignores the events occurring in the first few weeks when most fish are recaptured. This suggests that though many fish follow a similar migratory pattern from year to year, many others seem to take a different route. The steep decline over time in the number of fish recaptured may represent a combination of bass mortality, bass becoming wiser, fewer fishermen, and bass moving to areas of lower fishing pressure.

Figure 7.





The conclusions we have drawn from the Littoral Society's tagging datasets are subject to a number of cautionary notes. Neither of us are professional oceanographers, ichthyologists or fisheries scientists. The size data is not uniform. The legal keeper limit of 28 inches certainly means that a far greater proportion of fish under 28 inches are tagged and released than those over 28 inches. Taggers are not systematically distributed geographically. And finally, the number of taggers and the total number of fishermen has changed, over time. This confounds what can be concluded about the bass population based on number of fish tagged or tags returned. In spite of these factors, there is no doubt considerable truth hidden in the data, and reinterpretation of the figures by others is invited.

A full picture of the biology and behavior of striped bass and so many other species remains largely unknown. Efforts like the American Littoral Society Tagging Program have contributed many pieces to the puzzle, but many challenges persist. Fortunately, new tools continue to appear. The near universal use of smartphones with their ability to provide GPS coordinates offers promising opportunities for a

much more refined picture of fish movements, (Editor's note: the society is currently developing such a smartphone app). A new generation of fish tags with affordable embedded microchips may someday also allow for more detailed fish tracking.

Combining tools like these with populations of dedicated "citizen scientists" willing to share the precise GPS coordinates of their catch will clarify migration patterns. A willingness on the part of those anglers to tag and release more prize bass, rather than taking them home for dinner, will inevitably improve our understanding of how to increase the numbers of these valuable fish.

Finally, the ability to crunch these many bits of information using efficient data visualizing tools will make it easier for all of us to see the big picture. Hopefully this will help explain the whys and wheres of one small part of the natural world, and our place in it.

Peter and John Mogielnicki are a father and son who have been fishing off the Rhode Island coast for a combined total of over 90 years. Peter is a retired physician. John is a data analyst with Pinterest. They can be reached at mogsaway@yahoo.com and jmogielnicki@gmail.com.

Tagging Report 2014-2015

By Jeff Dement

You only turn 50 once.

In the 50 years of the tagging program's history, 633,462 fish were tagged. Out of that number 34,216 fish were recaptured.

In 2014 a total of 10,811 fish were tagged. Of those, 5,158 were striped bass; 4,074 were fluke (summer flounder); 536 were tautog; 437 were bluefish; 254 were black sea bass; and 352 were "other" species.

We've gone trans-Atlantic! One of the most exciting tag returns in the 50-year history of the program came across the tagging desk this year. On August 4, 2012, society tagger Dan Gault, a mate on a charter fishing boat sailing out of Nantucket Island, MA, tagged a 41-inch, 45 lb. Bluefin tuna.

This July we received an email from the Gendarmerie Maritime (Marine Police) of La Rochelle, France, that Gault's fish had been recaptured. A French commercial fisherman had recaptured it 100 nautical miles west of Les Sables d'Olonne, France. When it was landed in port, the fish weighed 156.5 lbs.

It is more than 2,800 NM from point of tagging to point of recapture.

Bluefin tuna is not one of the program's target species, so it is rare for one to get recaptured and reported to the society. For one to be recaptured on the other side of the pond is beyond rare. Fishermen who would like to tag Bluefin tuna should contact National Marine Fisheries Service.

Other Notable Tag Recaptures: Tagger to Tagger:

Sag Harbor, NY tagger, Dennis Kelly reached a milestone this past year with a 17-inch striper that he had tagged in his hometown on May 8, 2013. On April 26, 2014, society tagger Tim Shaheen gave Dennis the gift of his 750th return when he recaptured the now 24-inch fish in the Shrewsbury River, near Sea Bright, NJ. We may hear back from this fish again, because Tim re-tagged it and set it free.

Tagger to Himself:

While surf fishing in Holgate, NJ, tagger Tom Valerio had an experience that few taggers ever get to have. On September 7, 2013, Tom tagged and released a 14-inch striped bass. Almost a year to the day, on September 1, 2014, and in the same spot, Tom recaptured his own tagged fish, now grown to 17 ½ inches.

Years at Sea:

On October 7, 2014, Eric Kreymborg caught a striped bass of 32 inches at Southampton, NY. It had been tagged on January 1, 2006, by Rhode Island Saltwater Anglers Association member Leonard Duffy Jr. at 12 inches, in the Thames River at Norwich, CT. That's almost nine years at sea for this tag.

On November 23, 2007, Capt. Al Anderson tagged a 17-inch bass in the Thames River, CT. Recaptured by Tyler Gorczyca on April 28, 2014, in Raritan Bay, NJ at 34 inches and 22 lbs., it was "out" for over 7 years.

Recapture number 291 for tagger Ray Leja came from a 20-inch striped bass that he caught and tagged on May 1, 2008 at Bridgeport, CT. Recaptured by Dan Huggard on August 14, 2014, at Fisher's Island, NY, it had reached 35 inches and weighed in at 14 lbs.

Amazing Striper Journeys:

On July 26, 2013, Bronx, NY tagger Angel Venegas ventured out to Montauk, NY, where he caught and tagged a 26-inch striped bass. On June 7, 2014, his now 29-inch fish was recaptured in the fresh water of the Connecticut River at West Holyoke, MA. That's over 60 miles upriver.

While fishing at Norwalk, CT, on May 14, 2014, tagger Kevin Kyker tagged a 19-inch striped bass. A little over a month later on June 22, 2014, Kevin's fish was recaptured at Kennebunkport, ME by angler Dennis Kane.

On October 24, 2013, George Horvath of Trenton NJ, tagged a 26-inch striped bass while fishing at Barnegat Inlet, NJ. That following winter, on February 24, 2014, angler Bob Rorabaugh caught George's fish at Kent Island, MD in the Chesapeake Bay.

Fabulous Fluke Stories:

On June 21, 2010, longtime tagger Al D'Amato tagged and released a 13-inch fluke while fishing in Cape May Harbor, NJ. On August 16, 2014, angler Thomas Herrera recaptured Al's fish at Block Island, RI. This fish was now reported to be 21 inches in length and weighed in at 3 lbs.

That same summer Steve Sylvester tagged a 13-inch fluke on July 21 while fishing in the back-bay area of Avalon, NJ. On June 30, 2014, a NMFS observer, aboard a commercial

trawling vessel, fishing 6.5 nautical miles WNW of Block Island, RI, recovered Steve's now 20.5-inch fish. Did Al and Steve's fish travel together?

On June 9, 2010 while fishing behind Strathmere, NJ, Bill Shillingford ("Bucktail Willie"), caught and tagged another 13-inch fluke. This fish was recaptured on June 24, 2014, by angler Khalid Williams fishing off Manasquan, NJ. This fish grew to 20.75 inches in its four years at sea.

A tale of two interns

We were blessed this year to have two great interns working with the tagging program. Toniann Keiling, a marine biology student at Monmouth University, assisted us this summer in the day to day operations of the program, and became a seasoned fluke tagger on our annual fluke tagging trip. She is now working on her graduate degree studying and tagging bonefish in the Bahamas.

Chris Dougherty of Rutgers University is working on a special project for the tagging program. It is funded by a scholarship from longtime tagger and program supporter Capt. Al Anderson, and supplemented by other generous society members and taggers. Chris is a software engineer and computer programmer who is working on a smartphone application that will streamline the mechanics of the tagging program. It will include an interactive mapping website that taggers and the public will have access to, enabling them to graphically view and sort the society's tagging dataset.

The American Littoral Society and the fish tagging program lost a longtime member and fish tagger. Fred Waltzinger III had been an active supporter of the program since the early 1970s. Fred predominately tagged

fluke, and he tagged hundreds of them per year. Fred's recapture total was approaching the honored 500 mark. Presently Fred has 484 recaps under his belt. With many of his tagged fluke swimming the ocean, the odds are great that Fred will eventually get his 500th tag return. He will be missed.

Tagger Thank You

As I close the 2014 Tagging Report and the overview of our first 50 years, I would like to deeply thank all the American Littoral Society fish taggers who have made this program possible. Without dedicated anglers, there would be no program. Here's to the next 50 years.

ALS 2014 Tag Recapture Data

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Species	Tag Lengtl (FL)	1 Tagger	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date
Atlantic Cod	24	C Watkins	17 Fathom Bank, NJ	12/8/2013	P Haertel	35 NM E Barnegat Inlet, NJ	29	7/10/2014
Atlantic Cod	16.5	C Maxon	Offshore, Stellwagen Bank, MA	8/25/2013	P Ostrowski	30 NM E Gloucester, MA	20	8/24/2014
Black Sea Ba		L Bleiler	Mud Buoy, Sea Bright, NJ	9/14/2012	L Sonefeld	Off Block Island, RI		1/15/2014
Black Sea Ba		B Young	8 NM NE Barnegat Inlet, NJ	9/15/2013	P Fishhouse	Offshore; Cape May, NJ	13	1/24/2014
Black Sea Bas		S Tombs	Green Hill Beach, RI	7/4/2013	R Smith	Nebraska Shoals, RI	12	5/26/2014
Black Sea Bas		L Bleiler	FG Buoy, NJ	9/28/2013	L Galea	3 NM S Jones Beach St. Park, NY		6/16/2014
Black Sea Bas		S Tombs	Point Judith, RI	6/8/2014	D Richards	1/2 NM S of Point Judith, RI	14	6/19/2014
Black Sea Bas		S Tombs	Point Judith, RI	6/28/2014	T Baker	1.5 NM S Point Judith, RI	12	7/10/2014
Black Sea Bas		A Anderson	Block Island, RI	9/27/2013	A Stone	West Ledge, Block Island, RI	13.5	8/4/2014
Black Sea Bas		A Schweithelm	Off Eatons Neck, NY	7/26/2014	E Shami	Off Eatons Neck, NY	13.5	8/6/2014
Black Sea Bas		S Tombs	Point Judith, RI	6/28/2014	G Tatro Jr.	Point Judith, RI	14	8/8/2014
Black Sea Bas		A Anderson	Block Island, RI	9/27/2013	J Nigro	3.5 NM SSW Montauk Pt., NY	12	8/19/2014
Black Sea Bas		A Anderson	Block Island, RI	9/27/2013	A Stone	West Ledge, Block Island, RI	13	8/21/2014
Black Sea Bas	s 11	S Tombs	Point Judith, RI	8/16/2014	B Praileau	Point Judith, RI		8/25/2014
Black Sea Bas		M Friedrich	Little Egg Reef, NJ	7/22/2014	D Molnar	Little Egg Reef, NJ		9/2/2014
Black Sea Bas		B Young	Barnegat Light Reef, NJ	8/10/2013	M Dipasquale	Barnegat Light Reef, NJ	11	9/14/2014
Black Sea Bas		A Anderson	Block Island, RI	9/27/2013	R Swanson	Point Judith, RI	12	9/23/2014
Black Sea Bas		S Tombs	Green Hill Beach, RI	7/4/2013	I Barrios	Orient Point, NY	16	9/27/2014
Black Sea Bas		L Bleiler	Mud Buoy, NJ	10/4/2013	H Guang Huang	Off Long Branch, NJ		10/10/2014
Black Sea Bas		S Tombs	Matunuck, RI	6/14/2014	N Pazin Sr	Block Island, RI		10/15/2014
Black Sea Bas		A D'Amato	Spicer's Creek, Cape May, NJ	10/16/2014	M Williams	Cape Island Creek, Cape May, NJ	8	10/19/2014
Black Sea Bas		S Clark	Cape May Reef, NJ	10/21/2014	E Burcaw	Cape May Reef, NJ	11.5	10/21/2014
Black Sea Bas		B Young	Garden State Reef North, NJ	9/21/2014	S Cappel	SE of Barnegat Light, NJ	13	10/21/2014
Black Sea Bas	s 10.5	L Bleiler	The Rattlesnake, NJ	7/27/2013	R Gianni	Shrewsbury Rocks, NJ	13.5	10/25/2014
Black Sea Bas		S Tombs	Point Judith, RI	8/16/2014	T Baker	1.5 NM S Point Judith, RI	12	11/3/2014
Black Sea Bas		S Tombs	Point Judith, RI	8/16/2014	T Baker	1.5 NM S Point Judith, RI	12	11/6/2014
Black Sea Bas		S Tombs	Point Judith, RI	8/16/2014	T Baker	1.5 NM S Point Judith, RI	11	11/6/2014
Black Sea Ba	iss 10	L Bleiler	FG Buoy, NJ	9/28/2013	I Grant	Block Island, RI	13	11/7/2014
Black Sea Bas	s 12.2	S Clark	Cape May Reef, NJ	10/21/2014	E Burcaw	Cape May Reef, NJ	13	12/6/2014
Bluefish	20	S Tombs	Matunuck, RI	9/14/2013	T Long	Barnegat Light, NJ	25	5/12/2014
Bluefish	20	A Anderson	Point Judith, RI	10/13/2013	I O'Neil	Smithtown, NY	23	6/22/2014
Bluefish	18	A Anderson	Point Judith, RI	7/31/2014	P Shea	Charlestown Breachway, RI		8/24/2014
Bluefish	16	A Anderson	Matunuck, RI	8/16/2014	T Thompson	Narrow River, Narragansett, RI	16	9/5/2014
Bluefish	21	G Horvath	Manasquan Inlet, NJ	6/2/2014	E Vaisberg	Rockaway Reef, NY	28	9/12/2014
Bluefish	13	B Shillingford	ICW Ocean City, NJ	9/17/2014	K Payne	Townsends Inlet, NJ	13	10/29/2014
Fluke	15	M Sullivan Jr	Montauk, NY	6/9/2012	D Oneal	Veach Canyon, MA	16	1/7/2014
Fluke	16	B Young	Barnegat Reef, NJ	8/20/2013	F/V Miss Amanda	Offshore; Cape May Rocks, NJ	16.14	1/13/2014
Fluke	17	K Robishaw	North Rip, Block Island, RI	8/21/2013	P Fishhouse	Offshore: Cape May, NJ	17	1/24/2014
Fluke	14	R Anderson Jr	Fire Island Inlet, NY	9/7/2013	Etheridge Seafood	Offshore; Nantucket, MA	14	1/26/2014
Fluke	14	S Kellner	Hortons point, NY	6/10/2013	Etheridge Seafood	Offshore; Nantucket, MA	14	1/26/2014
Fluke	17.5	S Rudolph	Rockaway Inlet, NY	8/8/2013	F/V Susan Marie	Hudson Canyon, NJ		1/28/2014
Fluke	21.25	H Leemann	Breezy Point, NY	7/6/2013	F/V Evening Star	Hudson Canyon, NJ		2/3/2014
Fluke	17.5	S Fries	Rockaway Reef, NY	7/21/2013	F/V Miss Amanda	Offshore; Cape May Rocks, NJ	17.5	2/6/2014
Fluke	14	A Schweithelm	Matland, Montauk, NY	7/10/2013	Etheridge Seafood	Hudson Canyon, NJ		2/7/2014
Fluke	17	A Anderson	Point Judith, RI	7/6/2013	D Booth 56 NM SSE	Montauk, NY	17.5	3/10/2014
Fluke	11	F Waltzinger III	Great Bay, NJ	6/1/2007	C Samorajczyh	Hudson Canyon, NJ	22	3/21/2014
Fluke	17.5	S Kellner	Mattituck, NY	6/15/2013	C Jobes	Peconic Bay, Southold, NY	18	5/10/2014
Fluke	13	B Shillingford	Ludlam Bay, NJ	8/31/2013	R Sullivan	Reynolds Ch., Long Beach, NY	15	5/12/2014
Fluke	17	F Waltzinger III	Upper Manasquan River, NJ	6/15/2011	H Bowman III	Montauk, NY	19	5/22/2014
Fluke	15	B Shillingford	Ludlam Bay, NJ	5/21/2014	R Budd	Ludlam Bay, NJ	15	5/23/2014
Fluke	18.5	C Gould Jr	North Wildwood, NJ	5/8/2014	L Jaconski	North Wildwood, NJ	18.5	5/24/2014
Fluke	12	A D'Amato	Cape May Harbor, NJ	7/6/2012	B Martin	Wildwood, NJ	13.5	5/24/2014

Species	Tag Length (FL)	Tagger	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date
Fluke	17	B Shillingford	Ludlam Bay, NJ	5/18/2014	P Mahal	Ludlam Bay, NJ	18	5/25/2014
Fluke		F Waltzinger III		8/7/2013	I Connig	Great Bay, NJ	17	5/25/2014
Fluke		F Rich	Upper Manasquan River, NJ Margate City, NJ	5/8/2014	F Akers	Risley Ch., Margate City, NJ	20	5/25/2014
Fluke		S Fries	Marine Parkway Bridge, NY	7/6/2012	M Dannucci	Raritan Bay, Keansburg, NJ	16	5/25/2014
Fluke		B Russo	East Marion, NY	6/5/2012	M Lloyd	Hampton Bays, NY	18.5	5/30/2014
Fluke		S Sylvester	Avalon, NJ	7/21/2010	NMFS Observer	6.5 NM WNW Block Island, RI	20.5	5/30/2014
Fluke		B Shillingford	Strathmere, NJ	5/30/2011	F Boninu	Margate, NJ	18.75	6/2/2014
Fluke		B Shillingford	Ludlam Bay, NJ	9/1/2013	B McMurray	ICW Ocean City, NJ	15.5	6/3/2014
Fluke		C Miller	Sea Isle City, NJ	6/1/2013	G Linton	Stone Harbor, NJ	18.5	6/4/2014
Fluke		D Crann	Great Bay, NJ	5/31/2014	W Emmell IV	Great Bay, NJ	17.5	6/4/2014
Fluke		S Fries	Coney Island, Brooklyn, NY	7/5/2013	T Daniels	Sheepshead Bay, Brooklyn, NY	17.5	6/6/2014
Fluke		A D'Amato	Cape May Harbor, NJ	6/26/2013	L Brown III	Avalon, NJ	13.5	6/7/2014
Fluke		B Shillingford	Ludlam Bay, NJ	9/14/2013	W McGinn	Sea Isle City, NJ	17	6/7/2014
Fluke		B Young	Barnegat Inlet, NJ	9/22/2013	B Maginnis	Middle Grounds, Barnegat Bay, NJ	16	6/7/2014
Fluke		B Shillingford	Ludlam Bay, NJ	5/6/2014	F Bartling	Ludlam Bay, NJ	10	6/8/2014
Fluke		F Rich	Margate, NJ	4/22/2014	T Boyd	Scull Bay, NJ	13	6/8/2014
Fluke		S Kellner	Mattituck, NY	6/8/2012	R Stolz	Mattituck, NY	17.25	6/9/2014
Fluke		A Schweithelm	Block Island, RI	5/31/2013	K Young	Block Island, RI	17	6/9/2014
Fluke		F Waltzinger III	Great Bay, NJ	7/29/2013	B Strempek	Barnegat Bay, High Bar Hrbr., NJ	15	6/11/2014
Fluke		T Matraxia	Raritan Bay, NJ	8/12/2013	R Swindells	Sandy Hook, NJ	15.25	6/13/2014
Fluke		S Carlsen	Shrewsbury River, Highlands, NJ	5/27/2014	T DiAnna	Shrewsbury River, Highlands, NJ	-51-5	6/13/2014
Fluke		C Miller	Great Bay, Tuckerton, NJ	6/9/2013	M Friedrich	Great Bay, NJ	17.5	6/14/2014
Fluke		W Kotnik	Breezy Point, NY	7/5/2013	S Tartaro	Captree, NY	17	6/14/2014
Fluke		D Tholen	Barnegat Bay, NJ	6/17/2013	F Stout	Barnegat Bay, Toms River, NJ	23	6/14/2014
Fluke		H Leemann	Ambrose Channel, NY	7/29/2012	F/V Nordic Viking	Offshore, Long Island, NY	24.25	6/15/2014
Fluke		F Ruczynski	Strathmere, NI	10/27/2013	B McMurray	ICW Ocean City, NJ	>	6/16/2014
Fluke		M Friedrich	Great Bay, NJ	6/2/2014	J Walsh	Great Bay, NJ	16.5	6/16/2014
Fluke		D Crann	Great Bay, NJ	6/22/2013	M Simmons	Great Egg Harbor Bay, NJ	15.63	6/16/2014
Fluke		T Matraxia	Navesink River, NJ	6/19/2013	B Strianese	Great South Bay, Copaigue, NY	-51-0	6/16/2014
Fluke		B Shillingford	Ludlam Bay, NJ	5/8/2014	K Nastasi	Ludlam Bay, NJ	20.5	6/17/2014
Fluke		M Sullivan	Montauk Point, NY	7/21/2013	J Regan	4.75 NM NE Montauk Pt., NY	17.88	6/17/2014
Fluke		D Crann	Little Egg Inlet, NJ	8/3/2013	B Shillingford	ICW Strathmere, NJ	16	6/18/2014
Fluke		F Waltzinger III	Manasquan Ridge, NJ	9/21/2013	M Moscufo Jr	3 NM E Manasquan Inlet, NJ	19.75	6/19/2014
Fluke		B Shillingford	ICW Ocean City, NJ	6/3/2014	J Pace	ICW Ocean City, NJ	13	6/19/2014
Fluke		D Crann	Great Bay, NJ	6/14/2014	C Cassise	ICW Great Bay, NJ	17.5	6/20/2014
Fluke		S Fries	Tin Can Grounds, NY	8/16/2013	F Frumenti	Jamaica Bay, NY	17.5	6/21/2014
Fluke		T Matraxia	Raritan Bay, NJ	8/12/2013	J Panzera	Raritan Bay, NJ	18.5	6/21/2014
Fluke		B Goodman	6 NM S Jones Inlet, NY	6/22/2012	J Oppenheimer	4 NM SSW Jones Inlet, NY	19	6/21/2014
Fluke		D Carlsen	Raritan Bay, Staten Island, NY	5/14/2013	J Letlow	Raritan Bay, NJ	22	6/21/2014
Fluke		B Shillingford	Ludlam Bay, NJ	5/13/2013	J Deredita	Little Egg Harbor, NJ	16	6/21/2014
Fluke		D Brophy	Sandy Hook Bay, NJ	6/15/2014	J Edwards	Sandy Hook Bay, NJ	17.5	6/21/2014
Fluke		S Fries	Rockaway Reef, NY	7/21/2013	P Troiano	Shinnecock Bay, NY	15.75	6/21/2014
Fluke		R Musto	Smithtown Bay, NY	5/25/2014	M Langlois	Smithtown Bay, NY	16	6/22/2014
Fluke		S Rudolph	Jamaica Bay, NY	6/17/2013	R Pagano	Marine Parkway Bridge, NY	18.25	6/23/2014
Fluke		F Waltzinger III	Upper Manasquan River, NJ	5/29/2013	T Albino	Manasquan River, NJ	18	6/24/2014
Fluke		D Crann	Great Bay, NJ	6/14/2014	C Levandoski	Great Bay, Tuckerton, NJ	13	6/24/2014
Fluke	13	F Rich	Margate City, NJ	5/19/2014	J Ryley	Margate City, NJ	13	6/24/2014
Fluke		F Waltzinger III	2 NM E Bay Head, NJ	8/3/2013	H Rauer Jr	Sandy Hook, NJ	15.5	6/24/2014
Fluke		B Shillingford	Strathmere, NJ	6/9/2010	K Williams	Off Manasquan, NJ	20.75	6/24/2014
Fluke		S Fries	Brighton Beach, Brooklyn, NY	6/3/2014	Y Aboksis	Coney Island Flats, NY	17	6/25/2014
Fluke	14	S Fries	Plumb Beach, Brooklyn, NY	9/21/2013	D Ceriello	Plumb Beach, Brooklyn, NY	16	6/26/2014
Fluke	15	B Shillingford	Ludlam Bay, NJ	5/27/2014	F Clark	Strathmere, NJ		6/26/2014
Fluke		B Klimas	2 NM E Point Pleasant, NJ	8/11/2013	J Shea	Barnegat Bay, NJ	17	6/27/2014
Fluke		S Fries	Gerritsen Inlet, NY	6/21/2014	T Becker	Jamaica Bay, NY		6/27/2014
Fluke	19.5	B Shillingford	Ludlam Bay, NJ	5/4/2014	M Patrick	Ludlam Bay, NJ	19.5	6/27/2014
Fluke		L Bleiler	Raritan Bay, Flynns Knoll, NJ	5/24/2014	L Riccardi	Raritan Bay, Leonardo, NJ	15.5	6/28/2014
Fluke	17.5	B Shillingford	Ludlam Bay, NJ	5/7/2014	J Erasmus	Ludlum Bay, NJ	19.13	6/28/2014
Fluke		F Rich	Margate, NJ	5/8/2014	A Sanginiti	Margate, NJ		6/28/2014
Fluke	15.5	A Schweithelm	Sunken Meadow, Kings Park, NY	6/29/2013	J Avelli	Sunken Meadow, Kings Park, NY	17.5	6/28/2014
Fluke	15.75	F Truex	Manasquan River, NJ	6/15/2014	K Lesso	Manasquan River, NJ	16	6/28/2014
Fluke		R Bianchi	2 NM E Deal, NJ	7/6/2013	J Gallagher	Elberon, NJ	16.5	6/29/2014
Fluke		S Rudolph	Rockaway Inlet, NY	6/7/2014	G Dennis	Jamaica Bay, NY	18.5	6/29/2014
Fluke		S Tombs	East Matunuck, RI	5/19/2014	P King	Sakonnet Point, RI	15	6/29/2014
Fluke		B Shillingford	Ludlam Bay, NJ	8/30/2013	A Speck	Little Egg Harbor Bay, NJ	15	6/29/2014
Fluke		R Anderson Jr	Fire Island Inlet, NY	9/1/2012	J Vanpopering	Great South Bay, NY	19.25	6/29/2014
Fluke		M Owsik	ICW Sea Isle City, NJ	8/8/2010	J Solecki	Grassy Sound, NJ	19	6/30/2014
Fluke	17	A Schweithelm	Nissequogue R., Kings Park, NY		J Logue	Smithtown Bay, NY	17	6/30/2014
Fluke		B Shillingford	Ludlam Bay, NJ	5/5/2014	F Carbonara	Ludlam Bay, NJ	19	7/2/2014
Fluke		S Sylvester	Avalon, NJ	7/16/2010	J Milligan	Grassy Sound, NJ	20	7/3/2014
Fluke		B Shillingford	ICW Strathmere, NJ	6/18/2014	T DiBenedetto	Strathmere, NJ	16.5	7/3/2014
Fluke		C Gould Jr	North Wildwood, NJ	6/23/2013	J Leonardo	Corsons Inlet State Park, NJ		7/6/2014
Fluke		B Shillingford	Ludlam Bay, NJ	5/2/2014	D Ramos	Ocean City, NJ	21.5	7/6/2014
Fluke		A Schweithelm	Fort Salonga, NY	6/7/2014	B Zielinski	Off Huntington Bay, NY		7/6/2014
Fluke		M Sullivan	Montauk, NY	6/1/2013	D Musgrove	Block Island Sound, NY		7/6/2014
Fluke		B Klimas	Sandy Hook Channel, NJ	7/27/2013	M Skirka	Monmouth Beach, NJ	16	7/8/2014
Fluke		S Fries	Gerritsen Inlet, Brooklyn, NY	8/3/2013	J Genovese	Marine Pkwy. Bridge, NY	17	7/10/2014
Fluke		S Fries	Coney Is., Brooklyn, NY	7/3/2014	M O'Driscoll	Coney Is., Brooklyn, NY		7/10/2014
Fluke		S Kellner	Shinnecock, NY	7/3/2014	V Khachadurian	Shinnecock Bay, NY	16.5	7/10/2014
						<i>e</i>		

Species	Tag Length Tagger (FL)	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date	Species		Length Tagger FL)	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date
Fluke	15 S Sylvester	Avalon, NJ	6/1/2011	E Smith	North Wildwood, NJ	20.5	7/10/2014	Fluke		13 A D'Amato	Cape May Harbor, NJ	6/21/2010	T Herrera	Block Island, RI	21	8/16/2014
Fluke	16 B Shillingford	Ludlam Bay, NJ	5/21/2014	F Watton	Strathmere, NJ	16	7/11/2014	Fluke		17 S Fries	Fire Island Inlet, NY	8/21/2013	B DaCosta	Fire Island Inlet, NY	18.5	8/17/2014
Fluke	14.5 M Sullivan	Montauk Point, NY	7/20/2013	K Ferrara	1 NM N Montauk, NY		7/11/2014	Fluke		14.25 T Matraxia	Coney Island, Brooklyn, NY	6/20/2014	J DiFiore	Sheepshead Bay, Brooklyn, NY	15	8/18/2014
Fluke	16 B Shillingford	Ludlam Bay, NJ	5/19/2014	F Clark	Strathmere, NJ	17.6	7/11/2014	Fluke		12 A D'Amato	Cape May Harbor, NJ	8/6/2014	D Hildebrand	Cape May Harbor, NJ	12.5	8/19/2014
Fluke Fluke	 C Miller B Shillingford 	Great Bay, Tuckerton, NJ	6/8/2014 5/20/2014	P Laugois B Jackson	Holgate, NJ	17.5 18	7/13/2014 7/13/2014	Fluke Fluke		9.5 S Fries 17.75 S Fries	Coney Island, Brooklyn, NY Atlantic Beach Reef, NY	7/3/2014 8/17/2013	D Missel M Donohue	Coney Island, Brooklyn, NY	21	8/20/2014 8/20/2014
Fluke	19 W Striffler	Ludlam Bay, NJ Manasquan River, NJ	6/30/2014	R Main	Avalon, NJ Manasquan River, NJ	19	7/13/2014	Fluke		22 F Rich	Margate City, NI	5/22/2014	E Schlueter	Hempstead Reef, NY ICW Somers Point, NJ	23.5	8/21/2014
Fluke	15.5 R Anderson Jr	Fire Island Inlet, NY	8/23/2013	J Caputo	Shinnecock Bay, NY	16	7/14/2014	Fluke		13.5 T Matraxia	Coney Island, Brooklyn, NY	7/11/2014	A Berman	Rockaway Inlet, NY	14	8/22/2014
Fluke	15.5 R Anderson Jr	Fire Island Inlet, NY	8/23/2013	J Caputo	Shinnecock Bay, NY	16	7/14/2014	Fluke		16.75 J Keyser	Manasquan River, NJ	8/6/2014	L Vochezowicz	Manasquan Inlet, NJ	17	8/22/2014
Fluke	14.5 F Truex	Manasquan River, NJ	7/11/2014	W Hundeshagen	Manasquan River, NJ		7/15/2014	Fluke		15 S Fries	Plumb Beach, Brooklyn, NY	9/15/2013	J Kaukstein	Gerritsen Inlet, Brooklyn, NY	17	8/23/2014
Fluke	15.5 C Gould Jr	North Wildwood, NJ	5/14/2013	J Hanlon	Stone Harbor, NJ	16.25	7/17/2014	Fluke		18 S Rudolph	Rockaway Inlet, NY	7/18/2013	Sucher	Rockaway Inlet, NY	20.5	8/23/2014
Fluke	17 B Young	Barnegat Bay, NJ	6/28/2014	R Pasko	Barnegat Bay, Waretown, NJ	18.38	7/18/2014	Fluke		19 M School	Raritan Bay, NJ	5/7/2014	D Ricci	Ambrose Channel, NY	22	8/23/2014
Fluke Fluke	 R Anderson Jr B Shillingford 	Fire Island Inlet, NY Ludlam Bay, NJ	8/4/2013 5/24/2014	L Niedfeld C Barr	Fire Island Inlet, NY Avalon, NJ	18 15.5	7/18/2014 7/18/2014	Fluke Fluke		20 H Leemann 14 S Fries	Breezy Point, NY Jamaica Bay, NY	6/30/2012 8/16/2014	T Lee J Starace	Tin Can Grounds, NY Jamaica Bay, NY	22 14	8/24/2014 8/25/2014
Fluke	14 S Fries	Gerritsen Inlet, Brooklyn, NY	5/30/2014	D Ceriello	Gerritsen Inlet, Brooklyn, NY	15.5	7/18/2014	Fluke		13 B Young	Barnegat Bay, NJ	8/22/2014	C Krzywicki	Barnegat Bay, NJ	13	8/25/2014
Fluke	11 B Shillingford	Strathmere, NJ	6/28/2014	R Rowles	Strathmere, NJ		7/19/2014	Fluke		14.5 A D'Amato	Cape May Inlet, NJ	8/14/2014	T Kramer	Cape May Inlet, NJ	15	8/26/2014
Fluke	15 R Anderson Jr	Fire Island Inlet, NY	8/7/2013	L Stack	Shinnecock Bay, NY	16.5	7/19/2014	Fluke		14.13 T Matraxia	Coney Island, Brooklyn, NY	7/1/2014	I Brown	Sheepshead Bay, Brooklyn, NY	15.5	8/26/2014
Fluke	15 B Shillingford	Strathmere, NJ	5/15/2014	B Shillingford	Corson Inlet, NJ	15	7/19/2014	Fluke		14 A D'Amato	Cape May Inlet, NJ	7/31/2014	A D'amto	Cape May Inlet, NJ	14	8/27/2014
Fluke	13.75 F Waltzinger III	Great Bay, NJ	7/29/2013	T Tucker	Eagle Bay, Brigantine, NJ	17	7/20/2014	Fluke		14 R Anderson Jr	Fire Island Inlet, NY	6/15/2014	J Rothfeld	Robert Moses Bridge, NY	14.5	8/28/2014
Fluke Fluke	17 S Kellner 18 T McFarland	Shinnecock, NY Hampton Bays, NY	7/7/2014 7/23/2013	T Kleister R Doyle	Shinnecock, NY Shinnecock Bay, NY	17 19	7/22/2014 7/22/2014	Fluke Fluke		11.5 S Fries 16.5 A Schweithelm	Rockaway Reef, NY North Rips, Montauk, NY	7/26/2014 7/18/2014	S Miller I Sessa	Rockaway Reef, NY Montauk, NY	12 16.5	8/29/2014 8/29/2014
Fluke	13.5 S Clark	Cape May Reef, NJ	7/12/2014	J Grady	Cape May Reef, NJ	14.5	7/22/2014	Fluke		17 H Bowman III	Wantagh, NY	7/12/2014	C Fisher	Great South Bay, NY	10.)	8/29/2014
Fluke	16 M McCann	Raritan Bay, NJ	6/28/2014	E Malhame	Raritan Bay, Leonardo, NJ	16	7/23/2014	Fluke		17.5 S Kellner	Shinnecock, NY	6/24/2014	N Arena	Shinnecock Bay, NY		8/29/2014
Fluke	13 B Shillingford	Corson Inlet, NJ	7/5/2014	J Petyan	Strathmere, NJ		7/23/2014	Fluke		14 B Young	Barnegat Bay, NJ	8/22/2014	J Brannick	Barnegat Bay, NJ	14	8/29/2014
Fluke	14 S Kellner	Shinnecock, NY	6/23/2014	J Anthony	Shinnecock Inlet, NY	14	7/24/2014	Fluke		16 A Schweithelm	Montauk, NY	7/18/2014	J Giordano	Montauk Point, NY	16	8/29/2014
Fluke	12 B Young	Barnegat Bay, NJ	6/29/2014	C Lanzerotti	Barnegat Bay, NJ	13	7/25/2014	Fluke		20 H Leemann	Ambrose Channel, NY	7/28/2012	J Helmick Ambrose	Channel, NY	25	8/30/2014
Fluke	16 R Wolfskeil	Manasquan River, NJ	6/16/2014	K Leso	Manasquan River, NJ	16	7/25/2014	Fluke		22 H Leemann 20,75 H Leemann	Breezy Point, NY	8/13/2012	P Donnelly	Monmouth Beach, NJ	25.5	8/30/2014
Fluke Fluke	20.75 H Leemann 14 B Shillingford	Verranzano Bridge, Brooklyn, NY Ludlam Bay, NJ	7/19/2012 5/17/2013	J Plantz J Schmader	Raritan Bay, West Bank Lt., NY Townsends Inlet, NJ	23.5 17	7/25/2014 7/26/2014	Fluke Fluke		20./5 H Leemann 12.75 T Matraxia	Norton Point, NY Matawan Creek, Keyport, NJ	7/12/2014 6/20/2014	J Olejnik Ambrose D Levitt	Channel, NY Matawan Creek, Keyport, NJ	15.5	8/30/2014 8/31/2014
Fluke	18 S Kellner	Shinnecock Bay, NY	8/20/2013	J Stack	Shinnecock Bay, NY	19.5	7/26/2014	Fluke		14 T Valerio	Holgate, NJ	9/7/2013	T Valerio	Holgate, NJ	17.5	9/1/2014
Fluke	17 S Tombs	Matunuck, RI	6/14/2014	D Querfeld	Point Judith, RI	18	7/26/2014	Fluke		15 S Foster	Sea Girt Reef, NJ	8/10/2014	P Pelligra	Sea Girt Reef, NJ	15	9/1/2014
Fluke	16 C Miller	Great Bay, NJ	6/8/2014	K Sawyer	Great Bay, NJ	16	7/26/2014	Fluke		23 H Leemann	Ambrose Channel, NY	6/14/2014	S Fries Ambrose	Channel, NY		9/1/2014
Fluke	13 H Bowman III	Massapequa, NY	7/15/2014	M Gramse	Massapequa, NY	13	7/28/2014	Fluke		15.25 T Matraxia	Sandy Hook Channel, NJ	8/20/2014	T DeAngelis	Sandy Hook Channel, NJ	15.25	9/2/2014
Fluke Fluke	13 S Fries	Manhattan Beach, Brooklyn, NY		I Brown	Coney Island Flats, NY	17.75	7/29/2014	Fluke Fluke		18 S Kellner	Shinnecock Bay, NY	8/20/2013	S Volpe	Moriches Inlet, NY	21	9/2/2014
Fluke	 F Waltzinger III F Waltzinger III 	2 NM E Sea Girt, NJ Mantoloking, NJ	8/19/2012 8/3/2013	J Wigert J Hickey Jr Axel	1.5 NM E Mantoloking, NJ Carlson Reef, NJ	17.75 14.5	7/30/2014 7/30/2014	Fluke Fluke		 R McClelland F Waltzinger III 	Raritan Bay, NJ 3 NM E Mantoloking, NJ	6/28/2014 8/26/2014	R Collins T Hahula	Sandy Hook Channel, NJ 3 NM E Mantoloking, NJ	15.5 15	9/2/2014 9/3/2014
Fluke	11.5 A D'Amato	Cape May Inlet, NJ	7/17/2014	A D'Amato	Cape May Inlet, NJ	11.5	7/31/2014	Fluke		13 B Shillingford	Ludlam Bay, NJ	8/31/2013	M Swiacki	Corson Sound, NJ	16.25	9/4/2014
Fluke	11.5 A D'Amato	Cape May Inlet, NJ	7/17/2014	A D'Amato	Cape May Inlet, NJ	11.5	7/31/2014	Fluke		23.5 H Leemann	Norton Point, NY	6/28/2014	R Charles	Ambrose Channel, NY	24	9/4/2014
Fluke	13.5 S Fries	Gerritsen Inlet, Brooklyn, NY	8/25/2013	R Angotti	South Beach, Staten Is., NY	14.88	7/31/2014	Fluke		16.5 J Sandler	Raritan Bay, NJ	6/28/2014	S Paciello	Coney Island, NY	18	9/5/2014
Fluke	15 S Kellner	Mattituck, NY	6/12/2014	A Kretschmer	Mattituck, NY	15	7/31/2014	Fluke		14 R Anderson Jr	Fire Island Inlet, NY	8/27/2014	S Pepi	Fire Island Inlet, NY		9/5/2014
Fluke	21.5 H Leemann	Norton Point, NY	7/19/2014	H Leemann	Norton Point, NY	21.5	7/31/2014	Fluke		17.5 M Friedrich	Garden State South Reef, NJ	8/16/2014	J Kitz	Garden State South Reef, NJ	17.5	9/5/2014
Fluke Fluke	15 B Shillingford13 D Omrod	Strathmere, NJ Corson's Inlet, NJ	5/31/2014 7/21/2014	B Yamashita B Shaffer	Corson's Inlet, NJ Corson's Inlet, NJ	15.5 13	8/1/2014 8/1/2014	Fluke Fluke		12 R Budd 15 D Crann	Ludlam Bay, NJ Garden State South Reef, NJ	7/23/2013 8/9/2014	R DiVerniero D Bush	Great Egg Reef, NJ Garden State South Reef, NJ	16 15.5	9/6/2014 9/6/2014
Fluke	15.5 S Kellner	Shinnecock Bay, NY	7/22/2013	A Ginsberg	Great South Bay, NY	13	8/1/2014	Fluke		17 T Matraxia	Raritan Bay, NJ	8/11/2014	J Reyes	Sandy Hook, NJ	17.5	9/6/2014
Fluke	17 B Shillingford	Ludlam Bay, NJ	5/28/2014	M Walsh	Absecon Inlet, NJ	18	8/1/2014	Fluke		16.5 J Explore	2000 School Raritan Bay, NJ	5/14/2013	J Kearney	4 NM S East Rockaway, NY	18.5	9/6/2014
Fluke	14.5 J Explore	2000 School Raritan Bay, Staten Island, NY	5/14/2013	J McLaughlin	Raritan Reach, Raritan Bay, NJ	17.5	8/3/2014	Fluke		22 G Buono	Oakwood, Raritan Bay, NY	7/21/2013	J Farley	Raritan Bay, Sandy Hook, NJ	26.75	9/7/2014
Fluke	13 S Fries	Rockaway Reef, NY	7/26/2014	R Rommel	Rockaway, NY	16.5	8/3/2014	Fluke		23 H Leemann	Norton Point, Brooklyn, NY	8/13/2011	J Jurewicz	Raritan Bay, Chapel Hill Ch., NJ	29.5	9/7/2014
Fluke	16 B Goodman	Democrat Point, NY	6/8/2014	B Panacciulli	Fire Island Inlet, NY	16	8/3/2014	Fluke		15.5 L Bleiler	Raritan Bay, Port Monmouth, N		B Wiegmann	Sandy Hook Channel, NJ	15.5	9/8/2014
Fluke Fluke	16.75 T Matraxia 14.5 C Santoro	Tin Can Grounds, NY Raritan Bay, NJ	7/18/2014 6/28/2014	S Vasey J Sternberg	Atlantic Beach Reef, NY Raritan Bay Reach, NJ	16.75 16.5	8/4/2014 8/4/2014	Fluke Fluke		13.5 R Anderson Jr13.5 S Fries	Fire Island Inlet, NY Sheepshead Bay, Brooklyn, NY	8/30/2014 6/1/2014	D Candelora M Starace	Fire Island Inlet, NY Jamaica Bay, NY	13.5 15	9/10/2014 9/10/2014
Fluke	17.5 T Matraxia	Coney Island, Brooklyn, NY	6/20/2014	R Maloney	Coney Island, Brooklyn, NY	18.5	8/4/2014	Fluke		19.75 F Truex	Manasquan River, NJ	8/5/2014	R Corrao	Manasquan Inlet, NI	21	9/10/2014
Fluke	19 C Gould Jr	North Wildwood, NJ	5/14/2013	J Pryor	Grassy Sound, NJ	22	8/5/2014	Fluke		16 S Fries	Ambrose Channel, NY	9/1/2014	A DiModegno	Ambrose Channel, NY	16	9/11/2014
Fluke	17 F Waltzinger III	Sea Girt Reef, NJ	8/4/2010	S Jacobs	Point Pleasant Beach, NJ	18.5	8/6/2014	Fluke		16 M Friedrich	Little Egg Reef, NJ	7/26/2014	N Borg	Little Egg Reef, NJ	16	9/14/2014
Fluke	11 B Shillingford	ICW Ocean City, NJ	7/22/2014	R Boss	Corson's Inlet, NJ	12	8/6/2014	Fluke		12 A D'Amato	Cape May Inlet, NJ	9/4/2014	Unknown Angler	Cape May Harbor, NJ		9/15/2014
Fluke	15 B Shillingford	ICW Strathmere, NJ	5/31/2014	B Yamashita	Whale Creek, Strathmere, NJ	16	8/7/2014	Fluke		14 S Fries	Rockaway Inlet, NY	8/17/2014	E Vaisberg	Rockaway Inlet, NY	14	9/17/2014
Fluke Fluke	16.5 S Kellner 13 F Waltzinger III	Shinnecock, NY Mantoloking, NJ	7/1/2014 7/5/2014	R Gentile MD S Jarvie	Shinnecock Bay, NY Manasaquan Inlet, NJ	13	8/8/2014 8/8/2014	Fluke Fluke		12 B Young 15 B Shillingford	Barnegat Bay, NJ Strathmere, NJ	8/22/2014 9/5/2014	J Vangas B Shillingford	Barnegat Light, Barnegat Bay, NJ Strathmere, NJ	12.5 15	9/17/2014 9/17/2014
Fluke	13 F Waltzinger III	3 NM E Manasquan, NJ	8/6/2011	R Blair	Belmar, NJ	13	8/8/2014	Fluke		16 R Kelley III	Sandy Hook, NJ	9/6/2014	M Provenzano	Sandy Hook Channel, NJ	16.25	9/18/2014
Fluke	15.5 L Bleiler	Raritan Bay, Port Monmouth, N		J Williams	Raritan Bay, NJ	15.5	8/8/2014	Fluke		15 K Driscoll	Stone Harbor, NJ	7/27/2014	R Ferro	North Wildwood, NJ	15	9/18/2014
Fluke	14.5 S Fries	Fire Island Inlet, NY	8/21/2013	N Midili	Fire Island Inlet, NY	16.25	8/8/2014	Fluke		17 T Valerio	Holgate, NJ	9/18/2013	W Montrey	Holgate, NJ		9/19/2014
Fluke	14.5 S Fries	Plumb Beach, Brooklyn, NY	6/21/2014	M Belfor	Jamaica Bay, NY	14.5	8/9/2014	Fluke		14 S Fries	Gerritsen Inlet, NY	8/23/2014	G Kalkstein	Gerritsen Inlet, NY	14.5	9/20/2014
Fluke	20.25 H Leemann	Norton Point, NY	5/17/2014	W Fisher	Ambrose Channel, NY	20.25	8/9/2014	Fluke		15 S Fries	Shinnecock Inlet, NY	8/25/2014	S Grskovich	Shinnecock Inlet, NY	16	9/20/2014
Fluke	17 S Kellner	Shinnecock, NY	7/22/2014	D Reister	Shinnecock Bay, NY Fire Island Inlet, NY	17	8/9/2014	Fluke		15 T Matraxia	Raritan Bay, Swash Ch., NJ	9/3/2014	J Reyes	Sandy Hook, NJ	15	9/21/2014
Fluke Fluke	13 R Anderson Jr 13.5 R Budd	Fire Island Inlet, NY Ludlam Bay, NJ	8/31/2013 7/5/2014	M Tauroff R Budd	Corson's Inlet, NJ	13.5	8/9/2014 8/9/2014	Fluke Fluke		14 T Valerio 12 A D'Amato	Holgate, NJ Cape May Inlet, NJ	9/5/2014 9/4/2014	P Phillips Forsythe A D'Amato	NWR, Holgate, NJ Cape May Inlet, NJ	16 12	9/22/2014 9/23/2014
Fluke	13.25 R Budd	Corson's Inlet, NJ	8/9/2014	S Pastone	Corson's Inlet, NJ	13.25	8/9/2014	Fluke		17.25 F Waltzinger III	Great Bay, NJ	7/25/2014	K Simek	Little Egg Inlet, Holgate, NJ	17.25	9/25/2014
Fluke	12 B Shillingford	Corson's Inlet, NJ	7/17/2014	J Leonardo	Corson's Inlet, NJ	13	8/9/2014	Fluke		13 K Driscoll	Avalon, NJ	7/13/2012	S Bennett	Grassy Sound, NJ	18.5	9/27/2014
Fluke	16 D Townsend	ICW Strathmere, NJ	6/16/2012	E Jazdzewski	Cape May Harbor, NJ		8/11/2014	Fluke		14.5 R Anderson Jr	Fire Island Inlet, NY	9/6/2013	J Mingalone	Montauk, NY	17.5	9/30/2014
Fluke	13.5 R Anderson Jr	Fire Island Inlet, NY	6/7/2014	C Spotts	Robert Moses Bridge, NY		8/11/2014	Fluke		15 B Shillingford	Strathmere, NJ	9/8/2014	F/V Jessica Heather	50 NM ENE Barnegat Inlet, NJ	15	11/10/2014
Fluke	13 M Voss	Raritan Bay, NJ	5/29/2014	L Kasoff	Raritan Bay, Leonardo, NJ	14	8/11/2014	Fluke		17 T Matraxia	Raritan Bay, NJ	8/12/2013	F/V Jessica Heather	50 NM ENE Barnegat Inlet, NJ	24	11/10/2014
Fluke Fluke	17 K Zushma 10.5 R Schnyderite	Raritan Bay, Keansburg, NJ Navesink River, NJ	6/24/2014 6/6/2014	J Petro D Nalepa	Ambrose Channel, NJ Navesink River, Rumson, NJ	12.75	8/11/2014 8/12/2014	Fluke Fluke		 24 M School 21 B Shillingford 	Raritan Bay, Terminal Chnl., NJ Ludlam Bay, NJ	9/15/2014 5/4/2014	NMFS Observer M Hill	9 NM E Long Branch, NJ 36 NM ENE Barnegat Inlet, NJ	24 24	11/11/2014 12/4/2014
Fluke	14 F Waltzinger III	Axel Carlson Reef, NJ	7/18/2010	C Pfeiffer	1.5 NM E Asbury Park, NJ	17.5	8/14/2014	Fluke		15 F Waltzinger III	Sea Girt Reef, NJ	6/20/2012	F/V Frank & Maria Hudson		15.55	12/4/2014
Fluke	16 K Pero Jr	ICW Ocean City, NJ	6/26/2013	T Ogorzalek	Seaside Heights, NJ	18	8/15/2014	Red Group		16.5 B Russo	Rodriguez Key, FL	2/14/2013	L Russo	Rodriguez Key, FL	16.5	2/17/2014
Fluke	13 B Young	Barnegat Bay, NJ	6/28/2014	F Pannick	Barnegat Bay, NJ	14	8/15/2014	Red Group		16.5 L Russo	Rodriguez Key, FL	2/17/2013	M Russo Rodriguez	Key, FL	16.5	2/25/2014
Fluke	16 S Kellner	Mattituck, NY	6/16/2013	A Kretschmer	Mattituck, NY		8/15/2014	Scup		10 A Schweithelm	Eatons Neck, NY	9/10/2014	A Garcia	Oyster Bay, NY		9/23/2014
Fluke	23.5 H Leemann	South Beach, Staten Is., NY	5/25/2014	F Boo	Ambrose Channel, NY	23.5	8/15/2014	Striped Ba		21 A Anderson	Point Judith, RI	7/16/2013	A Esmeraldo	Housatonic River, Shelton, CT		1/13/2014
Fluke Fluke	14.25 L Bleiler 13 B Shillingford	FG Buoy, Sandy Hook, NJ Corsons Inlet, NJ	7/12/2014 8/2/2013	T Dach F Hannum	Ambrose Ridge, NY Absecon Inlet, NJ	14.25 15.5	8/15/2014 8/16/2014	Striped Ba Striped Ba		26 A Tursi 26 G Horvath	Sea Isle City, NJ Barnegat Inlet, NJ	6/16/2013 10/24/2013	J Fortier B Rorabaugh	Burlington Chnl., Ches. Bay, MD Chesapeake Bay, Kent Island, MD	26	2/12/2014 2/24/2014
Fluke	14 B Young	Barnegat Bay, NJ	5/24/2014	R Olivio	Long Beach Island, NJ	15.5	8/16/2014	этреа ва	ass	20 G HOIVAUI	Darnegat mict, Mj	1012712013	D IXOIADAUGII	Circoapeare Day, Reili Isialiu, MD	20	212712017
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Species	Ta	g Lengtl (FL)	n Tagger	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date	Species	Ta	ng Length (FL)	Tagger	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date
Striped E			T Shaheen	Navesink River, Rumson, NJ	5/4/2013	B Soto	Hackensack River, NJ	26	3/4/2014	Striped Ba			R Leja	Bridgeport, CT	7/17/2012	S Rudolph	1 NM NE Montauk Point, NY	28	6/5/2014
Striped E			R Leja	Bridgeport, CT	4/15/2013	S Barham	Housatonic River, CT	30	3/11/2014	Striped Ba			A Papadopoulos	Barnegat Bay, NJ	9/16/2013	L Erwin	Barnegat Bay, NJ	21	6/6/2014
Striped E		14.5	K Kyker J Sharp	Norwalk, CT Thames River, Groton, CT	10/19/2013 9/21/2013	J Mulligan T Fernandez	Hudson River, Alpine, NJ Housatonic River, Milford, CT	18 18	4/3/2014 4/5/2014	Striped Ba Striped Ba			R Labrozzi P Gallagher	Orient Point, NY Housatonic River, CT	7/3/2012 3/21/2014	K Grabowski P Lorrain	Plum Gut, Orient Point, NY Buttermilk Bay, Bourne, MA	38 17	6/7/2014 6/7/2014
Striped E Striped E			D Kelly	Sag Harbor, NY	6/14/2013	D Kelly	Sag Harbor, NY	14	4/6/2014	Striped Ba			A Venegas	Montauk, NY	7/26/2013	S Jernigan	Connecticut R., W. Holyoke, MA	29	6/7/2014
Striped E		15	K Kyker	Norwalk, CT	10/22/2013	P Bowler	Hudson River, Scarborough, NY	16	4/6/2014	Striped Ba			D Brodeur	Housatonic River, Milford, CT	4/7/2014	A Shershevovich	Eatons Neck, NY	21	6/8/2014
Striped F	Bass	13	D Kelly	Sag Harbor, NY	5/18/2013	R Labrozzi	Sag Harbor, NY	16	4/8/2014	Striped Ba	ass		Fusaro Jr	Cold Spring Harbor, NY	5/4/2012	R Dietrich	Oyster Bay, NY	34	6/9/2014
Striped F		15	R Labrozzi	Sag Harbor, NY	5/14/2013	D Kelly	Sag Harbor, NY	17	4/8/2014	Striped Ba			Γ Matraxia	Raritan Bay, NJ	11/21/2013	N Johns	Marthas Vineyard, MA	25	6/10/2014
Striped I Striped I		17	G Ottavio F Casey	Cape May, NJ Boston Harbor, MA	10/17/2012 5/25/2010	J Wolansky E Caveng	Delaware Bay, Fortescue, NJ Delaware River, Hope Creek, NJ	37.25	4/10/2014 4/12/2014	Striped Ba			G Kerkhan A Anderson	Raritan Bay, Cliffwood Beach, NJ	4/25/2014 12/20/2012	J Morales S Pine	Mattapoisett, MA Fort Adams, Newport, RI	29 23	6/10/2014 6/11/2014
Striped I		31 22	G Ottavio	Cape May, NJ	10/12/2012	G O'Driscoll	Delaware River, Pennsgrove, NJ	22.5	4/13/2014	Striped Ba Striped B a			K Zushma	Narrow River, Narragansett, RI Sandy Hook, NJ	11/16/2013	D Piragis	Merrimack R., Salisbury, MA	26	6/14/2014
Striped E		17	T Shaheen	Navesink River, Rumson, NJ	5/19/2013	J Feeny	Navesink River, Jones Pt., NJ	20	4/19/2014	Striped Ba			A Messina MD	Cold Spring Harbor, NY	10/28/2013	M Longfellow	South Pine Creek, Fairfield, CT		6/14/2014
Striped F	Bass	14	A Messina MD	Cold Spring Harbor, NY	5/7/2013	L Laracco	East River, Greenpoint, NY	17	4/21/2014	Striped Ba	ass	22 I	D Kelly	Chesapeake Bay Bridge & Tun., VA	1/26/2012	B Sweitzer	Ches. Bay, Love point, MD	26	6/15/2014
Striped F			D Kelly	Sag Harbor, NY	4/9/2012	E Taylor	Raritan Bay, Cliffwood, NJ	21	4/22/2014	Striped Ba			D Kelly	Ches. Bay, Bloodsworth Is., MD		J Rice III	Ches. Bay, Bloodsworth Is., MD	17	6/15/2014
Striped I Striped I		22 33	T Shaheen M Sullivan	Navesink River, Rumson, NJ Montauk Point, NY	5/14/2013 7/5/2013	M White T Williams	Navesink River, Red Bank, NJ Chesapeake Bay, Kent Island, MD	26	4/22/2014 4/22/2014	Striped Ba Striped B a			R Labrozzi S Tombs	Sag Harbor, NY Matunuck, RI	5/14/2014 10/14/2013	D Kelly C Engalichev	Sag Harbor, NY Piscataqua River, Portsmouth, NH	17 24	6/18/2014 6/19/2014
Striped F			R Kyker	Westport, CT	8/13/2012	R Swanson	Raritan Bay, Keyport Harbor, NJ	36	4/25/2014	Striped Ba			G Ottavio	Cape May, NJ	9/1/2009	J Markowitz	Cape May Harbor, NJ	30	6/21/2014
Striped F			D Kelly	Sag Harbor, NY	6/15/2009	A Ferrigno	Bellport Bay, NY	27	4/26/2014	Striped Ba			S Beringer	Rye, NY	6/16/2013	S Beringer	Rye, NY	32	6/22/2014
Striped F			D Kelly	Sag Harbor, NY	5/8/2012	T Shaheen	Shrewsbury River, Sea Bright, NJ	24	4/26/2014	Striped Ba			S Beringer	Rye, NY	6/9/2013	S Beringer	Rye, NY	37	6/22/2014
Striped 1			T Lowe	Moriches, NY	5/12/2013	F Foraci	Potomac River, Newburg, MD		4/26/2014	Striped Ba			G Ottavio	Cape May, NJ	7/25/2012	R Szulczewski	Jarvis Sound, NJ	21	6/22/2014
Striped I Striped I			D Kelly L Quinn		10/15/2013 9/3/2012	S Estep R Leja	Ches. Bay, Sandy Pt. State Park, ME Stratford, CT	23	4/27/2014 4/28/2014	Striped Ba Striped Ba			K Kyker A Anderson	Norwalk, CT Block Island, RI	5/14/2014 7/22/2013	D Kane J Reidy	Kennebunkport, ME Block Island, RI	19 26	6/22/2014 6/23/2014
Striped E		19	R Muller Jr	Coneyls., Brooklyn, NY	11/9/2013	M Evans	Hudson River, Croton, NY	19	4/28/2014	Striped Ba			Γ Shaheen	Shrewsbury River, Sea Bright, NJ	6/5/2014	P Johnson	Matunuck Beach, RI	23	6/26/2014
Striped 1		38	F Chayes	Sandy Hook, NJ	11/14/2013	D Gormsen	Chesapeake Bay, Kent Island, MD	38.5	5/1/2014	Striped Ba		33 I	K Robishaw	SW Ledge, Block Island, RI	6/25/2013	K Landry	Rumstick Pt., Barrington, RI	34	6/26/2014
Striped F			A Messina MD		11/7/2011	A Perez	East River NYC, NY	17	5/2/2014	Striped Ba			D Kelly	Ches. Bay, Hoopers Is., MD	10/22/2013	T Lawrence	St. Peter's Creek, MD	17	6/27/2014
Striped I			R Leja	Bridgeport, CT	7/8/2009 11/5/2013	R Schaefer B Rinaldi	Thomas Point Light, MD Short Beach, Stratford, CT	38	5/2/2014 5/3/2014	Striped Ba			Γ Valerio Γ Valerio	Long Beach Island, NJ	4/18/2013 4/10/2014	P Capaldi T Everitt	Narrow R., Narragansett, RI	22 15	6/27/2014 6/28/2014
Striped F Striped F			A Messina MD M Sullivan	Cold Spring Harbor, NY Montauk, NY	9/22/2012	R Lobaito MD	Raritan Bay, Old Orchard Lt., NY	36	5/4/2014	Striped Ba Striped Ba			F Casey	Graveling Point, NJ Boston Harbor, MA	7/2/2013	W Vincent	Mullica River, NJ Boston Harbor, MA	1)	6/29/2014
Striped E			A Anderson	Point Judith, RI	6/27/2013	A Flax	East Hampton, NY	21	5/4/2014	Striped Ba			Γ Shaheen	Shrewsbury River, Sea Bright, NJ	7/6/2013	T Saheen S	hrewsbury River, Sea Bright, NJ	20	6/29/2014
Striped 1	Bass	12	Z Visconti	Delaware R., Comm. Barry Br., NJ	4/3/2014	J Dales III	Delaware R., Cornwells Hts., PA	13	5/5/2014	Striped Ba	ass	30 I	F Casey	Boston Harbor, MA	7/27/2012	B Lindsay	Boston Harbor, MA	33	6/30/2014
Striped F		19	D Kelly	Sag Harbor, NY	5/2/2013	J Trembly	Morris Cove, Sag Harbor, NY		5/6/2014	Striped Ba			D Jurgens	Fire Island, NY	11/7/2013	C Vetter	Piscataqua River, NH	27	7/1/2014
Striped E		28 15	P Johnson A Messina MD	Charlestown, RI Cold Spring Harbor, NY	8/4/2013 10/23/2013	D Dolozel J Colameo	Raritan Bay, NY Broad Channel Br., Jamaica Bay, NY	29.5 15	5/7/2014 5/9/2014	Striped Ba			A Anderson D Kelly	Point Judith, RI Sag Harbor, NY	7/16/2013 11/17/2013	E Vultao D Kelly	Taunton River, Fall River, MA Sag Harbor, NY	24 19	7/1/2014 7/1/2014
Striped E Striped E			R Labrozzi	Sag Harbor, NY	11/20/2013	D Kelly	Sag Harbor, NY	18	5/10/2014	Striped Ba Striped Ba			A Anderson	Block Island, RI	6/26/2013	J Downs	Shinnecock, NY	40	7/1/2014
Striped E			D Holland	Point Judith, RI	8/11/2013	S Pazzas	Raritan Bay, Staten Is., NY	32	5/11/2014	Striped Ba			S Clark	Spring Lake, NJ	12/16/2012	D Withstandley	Spring Lake, NJ	27	7/1/2014
Striped 1	Bass	16	T Valerio	Graveling Point, NJ	4/21/2014	L Pettersen	Deal, NJ	16	5/11/2014	Striped Ba	ass		A Anderson	Point Judith, RI	10/4/2013	C Gregory	Warrens Pt., Little Compton, RI		7/2/2014
Striped E		16	R Labrozzi	Sag Harbor, NY	11/21/2013	R Epstein	Sag Harbor Creek, NY	18	5/12/2014	Striped Ba			K Kyker	Norwalk, CT	9/23/2013	W Eleck Sr.	Norwalk Islands, Norwalk, CT	10	7/3/2014
Striped F		16 19	R Labrozzi A Anderson	Sag Harbor, NY Point Judith Pond, RI	5/8/2014 5/20/2013	R Epstein N Barber	Sag Harbor Creek, NY Hudson River, Barrytown, NY	18 22	5/12/2014 5/13/2014	Striped Ba Striped Ba			G Ottavio A Anderson	Cape May, NJ Point Judith Pond, RI	6/5/2014 5/13/2013	K Pedrick M Noonan	Cape May Harbor, NJ Boston Harbor, MA	18 21	7/5/2014 7/5/2014
Striped E Striped E			R Kyker	Norwalk Harbor, CT	11/10/2011	K Kyker	Norwalk, CT	21	5/14/2014	Striped Ba			R Conklin	Charles Island, Milford, CT	6/24/2014	B Adams	Milford, CT	27	7/5/2014
Striped 1			T Valerio	Long Beach Island, NJ	5/9/2013	P Dinice	Bass River, West Dennis, MA	24	5/15/2014	Striped Ba			Newsom	Merrimack River, MA	6/16/2014	L Yantosca	Mouth of Merrimack River, MA	34	7/6/2014
Striped 1			R Labrozzi	Sag Harbor, NY	5/16/2013	C Brown	Assateague, VA	28	5/15/2014	Striped Ba			Francesconi	Hudson River, Piermont, NY	10/15/2013	B Hackshaw	Throgs Neck Bridge, Bronx, NY		7/8/2014
Striped F		14	D Kelly	Sag Harbor, NY	5/28/2013	P Kelly	Hudson River, West Point, NY	2/	5/15/2014	Striped Ba			V Cottone	Fire Island Inlet, NY	6/15/2011	K Danielson	Montauk Point, NY	26	7/9/2014
Striped E Striped E		23 20	F Ruczynski A Anderson	Strathmere, NJ Point Judith, RI	10/27/2013 6/16/2013	K Scheel G Ottavio	Avalon, NJ Cape May, NJ	24 22	5/15/2014 5/16/2014	Striped Ba Striped Ba			S Tombs D Kelly	Point Judith Pond, RI Sag Harbor, NY	5/12/2013 6/8/2012	D Hamilton W Ashmore	Galilee, RI Block Island, RI	18 32	7/9/2014 7/10/2014
Striped 1			A Anderson	North Rip, Block Island, RI	6/30/2011	A Revty	Patuxent River, Solomons, MD	38	5/17/2014	Striped Ba			F Chayes	Sea Bright, NJ	6/20/2014	D Dieterle	Block Island, RI	43	7/10/2014
Striped F			S Sylvester	Avalon, NJ	10/4/2011	V Fiorentino	Cape May Harbor, NJ	22	5/17/2014	Striped Ba			A Anderson	Point Judith, RI	6/6/2013	J Savasta	Westport River, Westport, MA	29.5	7/11/2014
Striped 1		20	A Fox	Avalon, NJ	5/23/2012	G Krieger	Chesapeake Bay, MD	24	5/18/2014	Striped Ba			G Ottavio	Cape May, NJ	10/17/2013	K Pedrick	Cape May Harbor, NJ	16.5	7/11/2014
Striped 1		28	B Klimas	Island Beach State Park, NJ	11/27/2011 4/27/2014	A Allen D Smith	Peconic River, Riverhead, NY Connecticut R., Old Saybrook, Cl	г ээ	5/18/2014 5/18/2014	Striped Ba			R Busch	Merrimack River, MA	5/25/2011 9/16/2008	L Fortier S Griffin	Hampton River, Hampton, NH Westbrook, CT	27	7/11/2014 7/11/2014
Striped I Striped I			T Valerio A Schweithelm	Brant Beach, NJ Eatons Neck, NY	9/12/2013	R Neuner	Hudson River, Esopus, NY	19	5/19/2014	Striped Ba Striped B a			R Labrozzi G Ottavio	Orient Point, NY Cape May, NJ	4/20/2013	G Marves	Barnstable Harbor, MA	31.5	7/11/2014
Striped 1			T Shaheen		6/26/2012	C Buchta	Navesink River, NJ	32	5/19/2014	Striped Ba			Beck	Cape May Harbor, NJ	5/27/2014	Z Charsha	2 Mile Bridge, Cape May, NJ	19	7/12/2014
Striped F	lass		A Anderson	Point Judith Pond, RI	5/3/2013	S Tombs	Point Judith Pond, RI	19.5	5/21/2014	Striped Ba	ass	17 I	D Kelly	Ches. Bay, Calvert Cliffs, MD	4/1/2014	S Ambrose	Ches. Bay, St Michaels, MD	18	7/12/2014
Striped E			L Duffy Jr	Point Judith, RI	5/8/2012	J McGuigan	Sea Bright, NJ	22	5/21/2014	Striped Ba			R Labrozzi	Orient Point, NY	7/5/2012	M Nozman	Orient Point, NY	39	7/13/2014
Striped E Striped E		25 19	B Albano DPM J Francesconi	Scarborough Beach, RI Hudson River, Piermont, NY	9/30/2011 3/7/2011	D Whiting S Ogozaly	Little Compton, RI Hudson River, Newburgh, NY	33 21	5/22/2014 5/23/2014	Striped Ba Striped B :			A Schweithelm B Martin	Eatons Neck, NY Beverly, NJ	5/6/2012 4/9/2008	A Kretschmer J Sessa	Mattituck, NY Montauk, NY	24.5 37	7/15/2014 7/15/2014
Striped E		18	R Wolfskeil	Bayhead, NI	12/3/2013	T Sheehy	Merrimack River, Salisbury, MA	21	5/23/2014	Striped Ba			B Shillingford	I.C.W., Ocean City, NJ	9/24/2007	R Bellavance	Block Island, RI	3/	7/15/2014
Striped 1			B Shillingford	ICW Strathmere, NJ	7/12/2013	S Pliszak	Moriches Inlet, NY	29	5/24/2014	Striped Ba			M Strober	East River, NY	8/25/2011	R Bellavance	Block Island, RI		7/15/2014
Striped F			B Shillingford	Strathmere, NJ	10/11/2012	B Shillingford	Main Channel, Strathmere, NJ	17	5/24/2014	Striped Ba			R Busch	Merrimack River, MA	7/4/2013	J True	Merrimack River, Newburyport, MA	26.5	7/17/2014
Striped F			D Kelly		4/1/2014	S Stone	Manokin River, MD	15	5/25/2014	Striped Ba			Ragusa Sr		10/24/2013	W Mach	"Plum Gut", Orient Point, NY	27	7/17/2014
Striped F Striped F			S Tombs B Shillingford	Point Judith, RI ICW Strathmere, NJ	8/25/2013 7/9/2013	E Bogdan F Pane	Point Judith Pond, RI ICW Strathmere, NJ	26	5/25/2014 5/25/2014	Striped Ba Striped Ba			G Karr L Dellacagna	Barnegat Inlet, NJ Greenwich Harbor, CT	11/9/2010 7/6/2013	S Swanson J Demarte	Jerry's Point, Block Island, RI Greenwich, CT	37 24	7/18/2014 7/18/2014
Striped E			R Kyker	Westport, CT	7/15/2012	P Fusco	Hudson River, Highland, NY	30	5/26/2014	Striped Ba			G Ottavio	Cape May, NJ	8/20/2013	P Murphy	Barnstable, MA	30	7/19/2014
Striped F		28	G Kerkhan	Sandy Hook, NJ	5/1/2011	A Smith	Bridgeport, CT	32.5	5/26/2014	Striped Ba		24.75 I	R Kyker	Westport, CT	8/11/2011	R Reeves	Old Greenwich, CT	34	7/19/2014
Striped F		18	K Driscoll	Stone Harbor, NJ	6/16/2013	R McCabe Jr	Ocean City, MD	22	5/28/2014	Striped Ba			D Kelly	Orient Point, NY	5/23/2012	R Nickle Jr	Stratford, CT	31.5	7/19/2014
Striped 1		25 24	A Anderson T Shaheen	Point Judith, RI	6/6/2013 6/28/2012	B Middleton	Connecticut R., Hadley Dam, MA Shrewsbury River, NJ	. 28 29	5/28/2014 5/28/2014	Striped Ba			S Tombs C Carroll Jr	Matunuck, RI Shrewsbury R., Sea Bright, NJ	10/8/2013	B Gliottone	Matunuck, RI Monomoy Island, Chatham, MA	22 24	7/20/2014 7/24/2014
Striped I Striped I		22	B Shillingford	Shrewsbury River, Sea Bright, NJ ICW Ocean City, NJ	7/29/2011	B Biedinger L Kemmerer	Delaware River, Easton, PA	26	5/29/2014	Striped Ba Striped Ba			A Schweithelm	Eatons Neck, NY	7/21/2014	K Tripp T McNamara	Eatons Neck, NY	24	7/25/2014
Striped E			A Anderson	Matunuck, RI	9/29/2013	M Anderson	Black Point, CT	35	5/30/2014	Striped Ba			G Ottavio	Cape May, NJ	11/3/2012	K Pedrick	Cape May Harbor, NJ		7/25/2014
Striped F	lass	22.5	T Matraxia	Raritan Bay, Flynns Knoll, NJ	10/31/2013	J Micholas	Sandy Hook, NJ	25	5/30/2014	Striped Ba	ass	22 (C Carroll Jr	Sandy Hook, NJ	5/15/2013	A Patti	Sheepshead Bay, Brooklyn, NY	28	7/29/2014
Striped E			G Ottavio	Cape May, NJ	6/2/2012	G Loughery	ICW Cape May, NJ	28	5/31/2014	Striped Ba			A Messina MD	Cold Spring Harbor, NY	5/7/2014	D Clark	6 Mile Reef, Clinton, CT	24	7/29/2014
Striped E Striped E			A Schweithelm L Quinn	Eatons Neck, NY Cape Cod Bay, MA	8/13/2013 7/14/2013	G McGorry R Huerta	Northport Harbor, NY Breezy Point, Queens, NY	28.75	5/31/2014 6/1/2014	Striped Ba Striped Ba			R Leja G O'Driscoll	Bridgeport, CT Montauk, NY	6/3/2012 11/2/2013	R Leja G Fabiano	Bridgeport, CT Cape Cod Canal, MA	29 32	7/30/2014 7/30/2014
Striped E			A Anderson	Point Judith, RI	9/28/2013	A Anderson	Point Judith Pond, RI	20./3	6/1/2014	Striped Ba			T Matraxia	Raritan Bay, NJ	11/2/2013	A Conrad	Shinnecock, NY	24	8/2/2014
Striped E			T Valerio		4/17/2014	T Miller	Barnegat Bay, Mantoloking, NJ	18	6/1/2014	Striped Ba			A Anderson	Point Judith, RI	10/19/2013	P Cleaves	Cape Cod Canal, MA	25	8/2/2014
Striped F			R Conklin	Charles Island, Milford, CT	10/15/2013	K McGinley	Branford Reef, CT	32	6/2/2014	Striped Ba			A Anderson	Point Judith, RI	10/21/2013	M DeLuca	5.5 NM S Brenton Pt., RI	25	8/3/2014
Striped F			T Shaheen	Navesink River, Navesink, NJ	4/23/2014	J Hickman J Micinilio DVM	Shrewsbury River, Sea Bright, NJ	25 35	6/2/2014	Striped Ba			D Kelly G Ottavio	Orient Point, NY	6/21/2010	E Pinn M Dannenhaver Jr.	Orient Point, NY	19	8/3/2014 8/3/2014
Striped I Striped I			R Leja F Casey	Bridgeport, CT Boston Harbor, MA	7/11/2011 7/31/2012	S Bystrowski	Housatonic R., Shelton, CT Boston Harbor, MA	31.25	6/4/2014 6/4/2014	Striped Ba Striped Ba			G Ottavio K Kyker	Cape May, NJ Norwalk, CT	10/19/2013 10/19/2013	M Dannennaver Jr. R Leja	Cape May Harbor, NJ Bridgeport, CT	19	8/4/2014
Striped E			G O'Driscoll	Montauk, NY	11/2/2013	R Hartman	Cape Cod Bay, MA	32	6/5/2014	Striped Ba			D Omrod	Strathmere, NJ	7/2/2012	B Shillingford	Strathmere, NJ	21	8/6/2014

Species	Tag Length (FL)	1 Tagger	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date
Striped Bass	22	D Brierley	Red River Beach, Harwich, MA	5/13/2014	R Busch	Merrimack River, MA	23	8/6/2014
Striped Bass		G O'Driscoll	Montauk, NY	10/21/2013	J Davenport	Westport, MA	34	8/7/2014
Striped Bass		A Anderson	Point Judith, RI	7/1/2013	A Scranton	Point Judith, RI	25	8/8/2014
Striped Bass		G Kerkhan	Sandy Hook, NJ	11/7/2013	J Fallow	Jones River, Kingston, MA	33	8/10/2014
Striped Bass		S Tombs	Point Judith Pond, RI	5/24/2014	J Kellish	Quonochontaug Pond, RI	20	8/11/2014
Striped Bass		D Kelly	Point Lookout Ridge, MD	5/8/2013	M Koellner	Patapsco, Maryland	24	8/11/2014
Striped Base		N Tomasik	Patuxent River, MD	5/2/2014	R Wilkins	Long Point, Provincetown, MA	37	8/11/2014
Striped Bass		L Duffy Jr	Point Judith, RI	5/8/2012	M Chauvin	Westport, MA	25	8/12/2014
Striped Bass		R Muller Jr	Uthant Is. East River, NY	10/26/2013	T Pasquarzello	East River, NY	19.25	8/14/2014
Striped Bass		R Leja	Bridgeport, CT	5/1/2008	D Huggard	Fishers Island, NY	35	8/14/2014
Striped Bass	18	D Kelly	Kennebec River, ME	9/6/2013	B Eischen	Kennebec River, ME	33	8/15/2014
Striped Bass		D Kelly	Orient Point, NY	8/29/2012	R Mielke	Duck Island, Clinton, CT	36	8/15/2014
Striped Bass		D Kelly	Orient Point, NY		A Takahashi	Old Saybrook, CT	37	8/17/2014
		,		6/23/2014		,		
Striped Bass		T Shaheen	Shrewsbury River, Sea Bright, NJ	6/28/2013	C Lockwood	Shrewsbury River, Rumson, NJ	23	8/17/2014
Striped Bass	21	S Fries	Kennebunk River, ME	7/29/2013	B Hofmann	Kennebunkport, ME	25.5	8/17/2014
Striped Bass	20	R Leja	Bridgeport, CT	10/23/2012	L Chechowski	Housatonic River, CT	25	8/19/2014
Striped Bass	16	D Kelly	Bloodsworth Island, MD	10/1/2013	MDDNR	Sassafras River, MD	18.6	8/21/2014
Striped Bass		J Casey	Deal, NJ	12/5/2011	L Chechoski	Housatonic River, CT	27	8/23/2014
Striped Bass	31	D Kelly	Merrimack River, MA	6/12/2014	N Leachman	Ongunquit, ME	33.5	8/23/2014
Striped Bass		T Lowe	Jamacia Bay, NY	5/5/2012	S Schultz	Gurnet Point, Plymouth, MA	24	8/24/2014
Striped Base	s 20	D Tholen	Manasquan River, NJ	10/22/2013	C Etzel	Robins Point, Abington, MD		8/25/2014
Striped Bass	26	A Anderson	Matunuck, RI	9/30/2013	T Brown	Block Island, RI	26	8/25/2014
Striped Bass	20	S Tombs	Point Judith, RI	10/26/2013	D Heath	Seabrook, NH	20	8/27/2014
Striped Bass	20	R Leja	Bridgeport, CT	10/30/2013	J Thibodeau	Westbrook, CT		8/27/2014
Striped Bass	26	T Shaheen	Shrewsbury River, Sea Bright, NJ	6/17/2013	C Grunow	Darien, CT		8/29/2014
Striped Bass	25	T Shaheen	Shrewsbury R., Sea Bright, NJ	5/25/2014	M Schardt	Off Watch Hill, RI	26	8/30/2014
Striped Bass		M Sullivan	Montauk Point, NY	9/20/2013	K Costello	Scituate, MA	31	9/1/2014
Striped Bass		A Anderson	Point Judith, RI	7/13/2013	J Raiola	Point Judith, RI	32	9/5/2014
Striped Bass		D Kelly	Kennebec River, ME	9/25/2013	G Harris	Kennebec River, Bath, ME	22	9/5/2014
Striped Bass	29	K Tucker			T Pace		36	
* .			Jamaica Bay, NY	5/11/2011		Montauk, NY		9/6/2014
Striped Bass	20	R Leja	Bridgeport, CT	4/27/2011	S Pinkowish	Fishers Island, NY	28	9/6/2014
Striped Bass	27	G O'Driscoll	Montauk, NY	10/25/2013	K Krug	Georges Is., Boston Harbor, MA	30.5	9/10/2014
Striped Bass		A Anderson	Point Judith, RI	9/29/2013	S Rudolph	1 NM NE Montauk Point, NY	28	9/10/2014
Striped Bass		J Reidy	Block Island, RI	6/23/2014	T Petrik	Block Island, RI	26	9/12/2014
Striped Bass	34	F Tellefsen	Raritan Bay, NY	9/25/2013	J Winkler	Raritan Bay, Sandy Hook, NJ		9/12/2014
Striped Bass	19	A Anderson	Point Judith, RI	7/4/2014	D Anderson DC	Point Judith, RI		9/14/2014
Striped Bass	25	T Marburger	Shinnecock Inlet, NY	6/19/2012	C DiBella	Ambrose Channel, NJ	29.75	9/15/2014
Striped Bass	15	B Shillingford	Strathmere, NJ	10/6/2009	J MacDonald	Handkerchief Shls., Monomoy, MA	30	9/16/2014
Striped Bass	15	D Kelly	Ches. Bay, Hoopers Is., MD	10/22/2013	S Georgiou	Bloodsworth Island, MD	17	9/18/2014
Striped Bass		A Anderson	Block Island, RI	6/22/2013	A Padula	Block Island, RI		9/20/2014
Striped Bass		T Valerio	Long Beach Island, NJ	4/19/2013	J Rafael Minier	Randall's Island, NY		9/25/2014
Striped Bass		S Fries	Kennebunk River, ME	7/29/2013	J Puleo	Merrimack R., Newburyport, MA	36	9/28/2014
Striped Bass		J Francesconi	Hudson River, Piermont, NY	4/1/2013	L Molar	Montauk Light, NY	25	9/29/2014
Striped Bass		K Kyker	Norwalk, CT	5/12/2014	R Stevens	Matunuck Beach, RI	21	9/30/2014
Striped Bass		J Fusaro Jr	Lloyds Point, NY	5/31/2013	T Lapinski	Niantic, CT	42	10/2/2014
Striped Bass		L Duffy	Norwich, CT	1/1/2006	E Kreymborg	Southampton, NY	32	10/7/2014
							39	10///2014
Striped Bass		B Albano DPM S Tombs	Conimicut Point, Warwick, RI	6/4/2014	J Tregarphen	Montauk, NY	39	
Striped Bass			Point Judith Pond, RI	5/12/2014	P Hooper	Potter Pond, RI		10/9/2014
Striped Bass		G Kates	Newport, RI	6/10/2014	R Osbourne	Orient Point, NY	,	10/10/2014
Striped Bass		T Shaheen	Shrewsbury River, Sea Bright, NJ	6/4/2014	D VanEverdigen	Hackensack R., Ridgefield Park, NJ		10/10/2014
Striped Bass	29	A Anderson	SW Ledge, Block Island, RI	8/9/2012	J Monza	Smiths Point, Mastic, NY	32.5	10/11/2014
Striped Bass	27	L Fantasia	Sandy Hook, NJ	10/28/2013	H Leemann	Hell Gate, East River, NY	29.25	10/12/2014
Striped Bass	24	F Ruczynski	Strathmere, NJ	10/27/2013	T Hamilton	Strathmere, NJ	28.25	10/12/2014
Striped Bass	26	T Leonardis	Stone Harbor, NJ	11/30/2010	B DiStefano	Ocean City, NJ		10/14/2014
Striped Bass	27	G Kerkhan	Morgan Creek, NJ	9/17/2014	F Flynn	Sandy Hook Rip, NJ		10/16/2014
Striped Bass	25	D Omrod	ICW Strathmere, NJ	7/6/2010	A Neall	Great Egg Harbor River, NJ	30	10/17/2014
Striped Bass	37	G Ottavio	Cape May, NJ	5/10/2012	M Razee	Watch Hill, RI	42.5	10/18/2014
Striped Bass		T Valerio	Graveling Point, NJ	4/11/2014	V Wedemeyer	Berkeley Is. County Park, NJ	19.5	10/21/2014
Striped Bass		B Shillingford	ICW Ocean City, NJ	10/30/2013	T Parker	Corsons Inlet, NJ	27.5	10/23/2014
Striped Bass		D Kelly	Sag Harbor, NY	5/24/2014	R Labrozzi	Sag Harbor, NY	17	10/24/2014
Striped Bass		J Beck	Cape May Canal, NJ		G Ottavio	Cape May, NJ	18	10/24/2014
Striped Bass				10/23/2014		Westport River, Westport, MA	10	
		R Labrozzi	Sag Harbor, NY	3/26/2010	J Eliason		22.5	10/25/2014
Striped Bass		S Tombs	Matunuck, RI	10/6/2013	A Esmeraldo	Housatonic River, Stratford, CT	22.5	10/26/2014
Striped Bass		R Chmiel	Stonington, CT	10/14/2008	E Aguilar	Housatonic River, Milford, CT	34	10/28/2014
Striped Bass		G Ottavio	Cape May, NJ	10/19/2013	J Lummis	Cape May Harbor, NJ		10/30/2014
Striped Bass		R Gardrel	Block Island, RI	7/16/2013	R Biele	Seaside Heights, NJ	38	10/31/2014
Striped Bass		B Shillingford	ICW Ocean City, NJ	11/16/2013	F Edwardis	Sea Isle City, NJ	22	10/31/2014
Striped Bass	19	A Anderson	Point Judith, RI	10/13/2013	J Graf	Wading River, NY	23	10/31/2014
Striped Bass	17	G Kerkhan	Morgan Creek, NJ	9/12/2014	M Strober	Verrazano Bridge, Brooklyn, NY	19	11/4/2014
Striped Bass		R Pearson Jr	Breezy Point, NY	11/9/2011	L Fischer	Tin Can Grounds, Rockaway, NY		11/4/2014
Striped Bass		A Messina MD	Cold Spring Harbor, NY	7/13/2013	A Messina MD	Cold Spring Harbor, NY	19	11/5/2014
Striped Bass		A Messina MD	Cold Spring Harbor, NY	9/2/2012	A David III	Kings Point, NY	23	11/5/2014
Striped Bass		A Schweithelm	Eatons Neck, NY	11/3/2013	A David III	Kings Point, NY	21	11/5/2014
Striped Bass		D Kelly	Kennebec River, ME	9/25/2013	M Honerkamp	Sandy Neck Bch., Barnstable, MA	22	11/5/2014
Striped Bass		R Labrozzi	Sag Harbor, NY	5/14/2014	D Kelly	Sag Harbor, NY	16	11/5/2014
Striped Bass		D Kelly	Sag Harbor, NY	5/21/2014	R Labrozzi	Sag Harbor, NY	15	11/7/2014
Striped Bass		D Kelly	Sag Harbor, NY	4/8/2014	R Labrozzi	Sag Harbor, NY	18	11/7/2014
Striped Bass	15	R Labrozzi	Sag Harbor, NY	4/30/2012	R Sullivan	Fire Island Inlet, NY		11/7/2014

Species	Tag Length (FL)	n Tagger	Place Tagged	Tag Date	Recapturer	Place Recaptured	Length (TL)	Recap Date
Striped Bass	25	F Jessup II	West Hampton Dunes, NY	10/6/2014	R Sullivan	Fire Island Inlet, NY		11/7/2014
Striped Bass	37	G O'Driscoll	Montauk, NY	11/2/2013	J Whiteside	Chesapeake Bay, Breezy Pt., MD	37.5	11/10/2014
Striped Bass	14	S Sylvester	Ocean City, NJ	11/7/2011	B Shillingford	Strathmere, NJ	22	11/11/2014
Striped Bass	20	T Shaheen	Shrewsbury River, Sea Bright, NJ	10/18/2014	G Fletcher	Sandy Hook, NJ	21	11/12/2014
Striped Bass	17	A Messina MD	Cold Spring Harbor, NY	9/30/2014	C Ruger	Sands Point, NY	19	11/12/2014
Striped Bass	23	A Anderson	Block Island, RI	8/5/2013	W Fippinger	Jones Inlet, NY	27.25	11/12/2014
Striped Bass	s 28	R Kyker	Westport, CT	8/15/2009	R Gatanis	Lavallette, NJ	42	11/14/2014
Striped Bass	s 30	A Anderson	North Rip, Block Island, RI	7/1/2011	B Mauger	Barnegat Light, NJ	37	11/14/2014
Striped Bass	35	R Kyker	Stamford, CT	7/13/2014	N Brittin	Barnegat Inlet, Barnegat Lt., NJ	38	11/14/2014
Striped Bass	18	D Kelly	Ches. Bay, Hoopers Is., MD	10/22/2013	E Goodrich	Patapsco River, Baltimore, MD		11/15/2014
Striped Bass	16	A Messina MD	Cold Spring Harbor, NY	6/19/2014	D Burke	Manhasset Bay, NY		11/16/2014
Striped Bass	16	T Shaheen	Shrewsbury River, Sea Bright, NJ	6/25/2014	J DeLuca	Monmouth Beach, NJ		11/18/2014
Striped Bass	18	J Fitzpatrick	Moriches Inlet, NY	6/20/2010	B Nagle	3 NM E Stone Harbor, NJ	29.5	11/22/2014
Striped Bass	19	R Rech	Longport, NJ	9/5/2014	T Reale	Great Egg Harbor Inlet, NJ	22	11/25/2014
Striped Bass	s 41	F Chayes	Sea Bright, NJ	6/4/2014	J Leiffer	York River, Chesapeake Bay, VA	43	12/1/2014
Striped Bass	s 15	J Creighton	Dennis, MA	5/10/2011	P Black	3 NM E Avalon, NJ	26.5	12/5/2014
Striped Bass	s 30	D Kelly	The Race, Fishers Island, NY	8/8/2012	D Haldeman	Dewey Beach, DE	34	12/6/2014
Striped Bass	20	R Leja	Bridgeport, CT	8/7/2013	S Wu	92nd St. Brooklyn, NY	25	12/8/2014
Striped Bass	13	A Anderson	Point Judith Pond, RI	5/6/2013	D Pickering	Providence River, Providence, RI	21	12/8/2014
Striped Bass	16	A Papadopoulos	Chesapeake Bay, Crisfield, MD	9/25/2014	L Michael	Ches. Bay, Off Dares Bch., MD	20	12/14/2014
Striped Bass	15	D Kelly	Ches. Bay, S. Marsh Is., MD	10/16/2014	B Erne	Potomac River, Scotland, MD	16.5	12/15/2014
Striped Bass	18	S Tombs	Matunuck, RI	8/16/2014	V Mucci	Housatonic River, Shelton, CT		12/19/2014
Striped Bass	18	D Kelly	Chesapeake Bay, Honga R., MD	5/2/2014	L Smallwood	Potomac R., Pt., Lookout, MD	19	12/27/2014
Striped Bass	16	D Kelly	Ches. Bay, Calvert Cliffs, MD	4/1/2014	C Melvin	Potomac River, Ragged Point, VA		12/31/2014
Tautog	16.5	M Hawkins	8 NM E Ocean City, MD	4/28/2012	M Hawkins	9 NM E Ocean City, MD	17	1/1/2014
Tautog	10.75	M Hawkins	27 NM SE Ocean City, MD	5/30/2013	M Hawkins	27 NM ESE Ocean City, MD	11.75	2/9/2014
Tautog	21.5	M Hawkins	30 NM SE Ocean City, MD	3/5/2013	M Hawkins	30 NM ESE Ocean City, MD	23	2/20/2014
Tautog		M Hawkins	23 NM E Ocean City, MD	3/30/2013	M Hawkins	23 NM E Ocean City, MD	17.75	2/23/2014
Tautog		M Hawkins	23 NM S Ocean City, MD	1/15/2014	K Bounds	22 NM S Ocean City, MD	15.6	5/4/2014
Tautog	15.5	M Hawkins	22 NM S Ocean City, MD	1/9/2014	K Bounds	22 NM S Ocean City, MD	15.6	5/4/2014
Tautog		M Hawkins	23 NM S Ocean City, MD	1/15/2014	K Bounds	22 NM S Ocean City, MD	14.6	5/4/2014
Tautog		M Hawkins	8 NM E Ocean City, MD	1/1/2014	M Hawkins	8 NM E Ocean City, MD	15.63	5/7/2014
Tautog		M Hawkins	6 NM E Ocean City, MD	1/3/2013	M Hawkins	9 NM E Ocean City, MD	15.88	5/9/2014
Tautog	14	A Schweithelm	Sheffield Is. Light, CT	11/16/2013	L McLoughlin	Stamford Light, CT	14	5/10/2014
Tautog	12	A Schweithelm	Sheffield Light, Norwalk, CT	10/20/2012	L McLoughlin	Greenwich, CT	13.5	5/21/2014
Tautog	10	A Schweithelm	Off Lloyds Neck, NY	11/2/2013	C Lobue	Off Lloyds Neck, NY	10	6/26/2014
Tautog		M Hawkins	9 NM E Ocean City, MD	1/1/2014	G Odor	Bass Grounds Reef, MD	20	8/12/2014
Tautog		J Fusaro Jr	Center Island Reef, NY	10/25/2013	H Saks	Center Island Reef, NY		9/15/2014
Tautog	14	A D'Amato	Cape May Inlet, NJ	10/22/2013	B Thorpe	Cape May Inlet, NJ		10/21/2014
Tautog	12.5	A D'Amato	Cape May Inlet, NJ	10/30/2014	B Delarso	Cape May Inlet, NJ	13.5	11/5/2014
Tautog	12	A Schweithelm	Off Lloyds Neck, NY	11/2/2013	C Lobue	Off Lloyds Neck, NY	13	11/8/2014
Tautog		S Fries	Brooklyn Yacht Club, NY	10/11/2014	J Golemi	Gerritsen Creek, Brooklyn, NY	13.5	11/10/2014
Tautog		A Schweithelm	Eatons Neck, NY	11/8/2014	R Musto	Eatons Neck, NY	12.5	11/16/2014
Tautog		S Fries	Brooklyn Yacht Club, NY	10/12/2014	J Golemi	Gerritsen Creek, Brooklyn, NY		11/19/2014
Tautog	13	S Clark	Cape May Reef, NJ	4/26/2014	Unkown Angler	Cape May Reef, NJ	13.75	11/23/2014
Weakfish	19	J Beck	Cape May Point, NJ	6/8/2014	N Cooke	Cape May Point, NJ	20.5	6/9/2014

Editor's Note: Recapture data is also available online at littoralsociety.org, then click on programs/fishtagging/tagging data

08 Underwater Natur

Mark Your Calendars

January 1 – New Year's Day Beach Walk at Sandy Hook and Ft. Tilden, NY **January 8 – 10** – Montauk Winter Weekend, Montauk, NY

February 27 – Winter Thaw Bird Walk, Jamaica Bay, NY

March 5 – Seal Walk, Sandy Hook, NJ

March 20 - Spring Equinox Walk, Sandy Hook, NJ

March 26 – Early Spring Bird Walk, Jamaica Bay, NY

March 30 - Seal Walk, Sandy Hook, NJ

April 2 – Sandy Hook Beachgrass Planting

April 15 - Holly Forest Walk, Sandy Hook, NJ

April 16 - Mother Earth Art Sale/Show - Sandy Hook, NJ

April 17 – Surf Fishing Clinic, Sandy Hook, NJ

April 23 – Lobster Trot (5k for the Coast), Asbury Park, NJ

April 29 – Arbor Day Tree Walk, Sandy Hook, NJ

May 20 - Horseshoe Crab Walk, Sandy Hook, NJ

June 3 – Horseshoe Crab Walk, Sandy Hook, NJ

June 11 - Members Day and Annual Meeting, Sandy Hook, NJ

June 20 – Summer Solstice Walk, Sandy Hook, NJ

June 24 - Pine Barrens Paddle, Chatsworth, NJ

July 11 - Sunset Seining, Sandy Hook, NJ

July 13 - Camp Fishing Clinic, Sandy Hook, NJ

July 18 - 21 – Summer Camp, Long Beach Island, NJ

July 25 - 29 – Summer Camp, Long Beach Island, NJ

August 8-12 – Summer Camp, Sandy Hook. NJ

August 20 – Annual Fluke Tagging Trip, Atlantic Highlands, NJ

September 9 – End of Summer Party, Sandy Hook, NJ

Go to littoralsociety.org for details, updated information, and additional events, or email info@littoralsociety.org

GIAATS

In Pursuit of Giants

One Man's Global Search for the Last of the Great Fish

by Matt Rigney Reviewed by Dave Grant

Matt Rigney is a New England-based fisherman with a deep appreciation of the vastness of the sea and its inhabitants, particularly the great fishes – giant marlin, swordfish and bluefin tuna – and the history of their exploitation.

In high school I was first hooked on big game fishing by pictures and tales from Cairns, Australia, of thousand-pound swordfish caught-and-released by ex-marine Butch Miller – a member of the IGFA (International Game Fish Association), who also taught me how to fish for tarpon while simultaneously fending off sharks.

Rigney's writing is a series of journeys to Cairns and many other world-renowned fishing haunts. Each a cautionary tale about the disappearance of these giants of the sea and the implications of our wanton slaughter of them.

Without protection, such accounts of great catches could soon be only legendary. It doesn't have to be all bad news for these behemoths, as demonstrated by the efforts of advocates like Rigney and the determination of the activists he meets, there is hope that these wondrous creatures can be saved. *In Pursuit of Giants* is a great way to learn about it.



White Pointer South The Tasmanian White Shark Chronicles

by Chris Black. Reviewed by Dave Grant

Marie Levine of the Shark Research Institute calls this "the best book ever on white sharks ... invaluable for any serious student of these amazing creatures ... superbly researched, elegantly written and lavishly illustrated ... and invaluable for any serious student of these amazing creatures."

White Pointer South traces public attitudes to sharks over the past century including catches of sharks, shark attacks, shark behavior, current research and much more.

Unfortunately this is rather pricy (\$70 plus shipping from Tasmania), but if you want to learn more about white sharks it is a must have!



Shark

by Dean Crawford Reviewed by Dave Grant

Both a celebration of the shark's lethal beauty and a plea for its conservation, *Shark* urges us to shed our fears and appreciate this majestic animal.

Part of an excellent series on various animals ranging from cats to crows to cockroaches, *Shark* is a lively, informative, well-illustrated, and well-written compendium about our complex relationship with these fascinating creatures. The book's format is small (5-3/8" x 7-1/2") making it a convenient traveling companion on your next trip to the coast or

coral reef. Your expertise after reading it will allow you to pontificate to friends and dive buddies on the facts and fallacies surrounding some of the ocean's most valuable and interesting species.

The author does a great job covering all aspects of shark biology, physiology, human interaction, art and literature, and he is a strong advocate of proper fisheries management.

Although there are a number of obvious editing and spell-check errors in the first edition, overall this is a worthwhile addition to your library.

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Trenton Office 204 State Street, 3rd Floor Trenton, NJ 08608 The American Littoral Society promotes the study and conservation of marine life and habitat, defends the coast from harm, and empowers others to do the same.

Caring for the Coast Since 1961

The Underwater Naturalist welcomes contributions from its members, the scientific community and readers-at-large. To submit an article, a letter to the editor, or to propose a story for publication, please contact Dave Hawkins at dave@littoralsociety.org.

www.littoralsociety.org

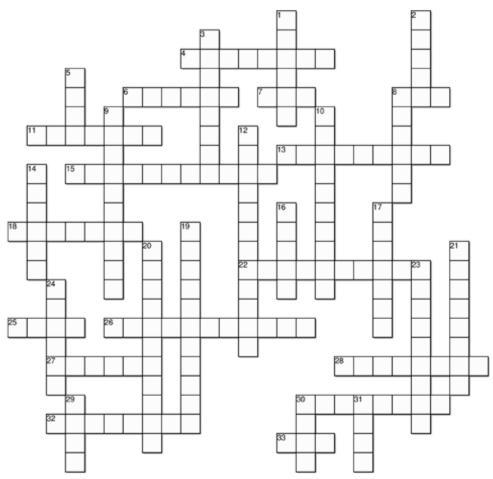






The Littoral Crossword

Complete this littoral zone themed crossword



Across

- 4. A snarl or tangle of fishing line on a reel
- 6. A surface plug that makes a splash or sound when reeled in
- 7. Where a fish may lays its eggs
- 8. Newborn fish
- 11. Marking a fish so it can be identified on recapture
- 13. The right side of a boat
- 15. Distinct layer of water where cold and warm water meet
- 18. A method of landing fish by putting your thumb in its mouth
- 22. Term for fish that live in saltwater and spawn in freshwater
- 25. Tiny protrusion on hook that retains the fish
- 26. A catadromous fish
- 27. Median fin on the back of a fish
- 28. Market name for angler fish
- 30. When water is of intermediate salinity
- 32. Towing a lure behind a boat
- 33. Metal fishing lure with one or more hooks

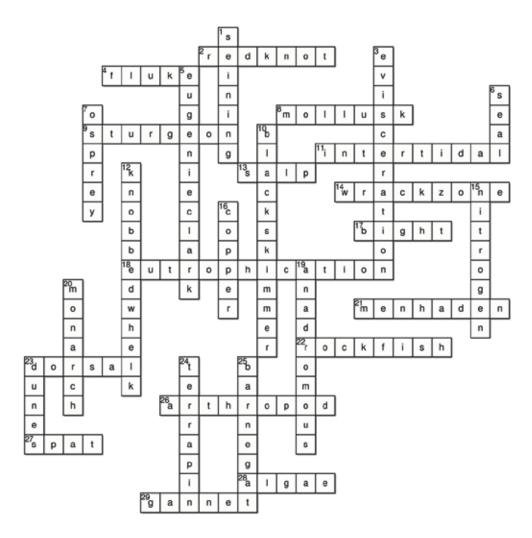
Down

- 1. Any fish worth taking home to eat
- 2. Nickname for large bluefish
- 3. A holding tank to keep fish or bait alive
- 5. When your hook gets caught on a log or rock
- 8. Small baitfish
- 9. Another name for weakfish
- 10. World's largest fish
- 12. Fishing line made up of a single strand of plastic
- 14. What they call Atlantic Menhaden north of CT
- 16. Acronym for sound navigation and ranging
- 17. When a fish has been alarmed by noise,
- movement or shadow
- 19. Type of shore fishing typically done in saltwater
- 20. Common trolling lure for striped bass
- 21. A species of fish caught for sport that fights hard when hooked
- 24. Another name for dolphin fish
- 29. The tension on a fishing reel
- 30. The wire arm on a fishing reel
- 31. Ground bait to attract fish

23. Most venomous fish in the world The solution to this crossword will appear in the next Ûnderwater Naturalist

The Littoral Crossword

Solution for Fall 2015 crossword puzzle.



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