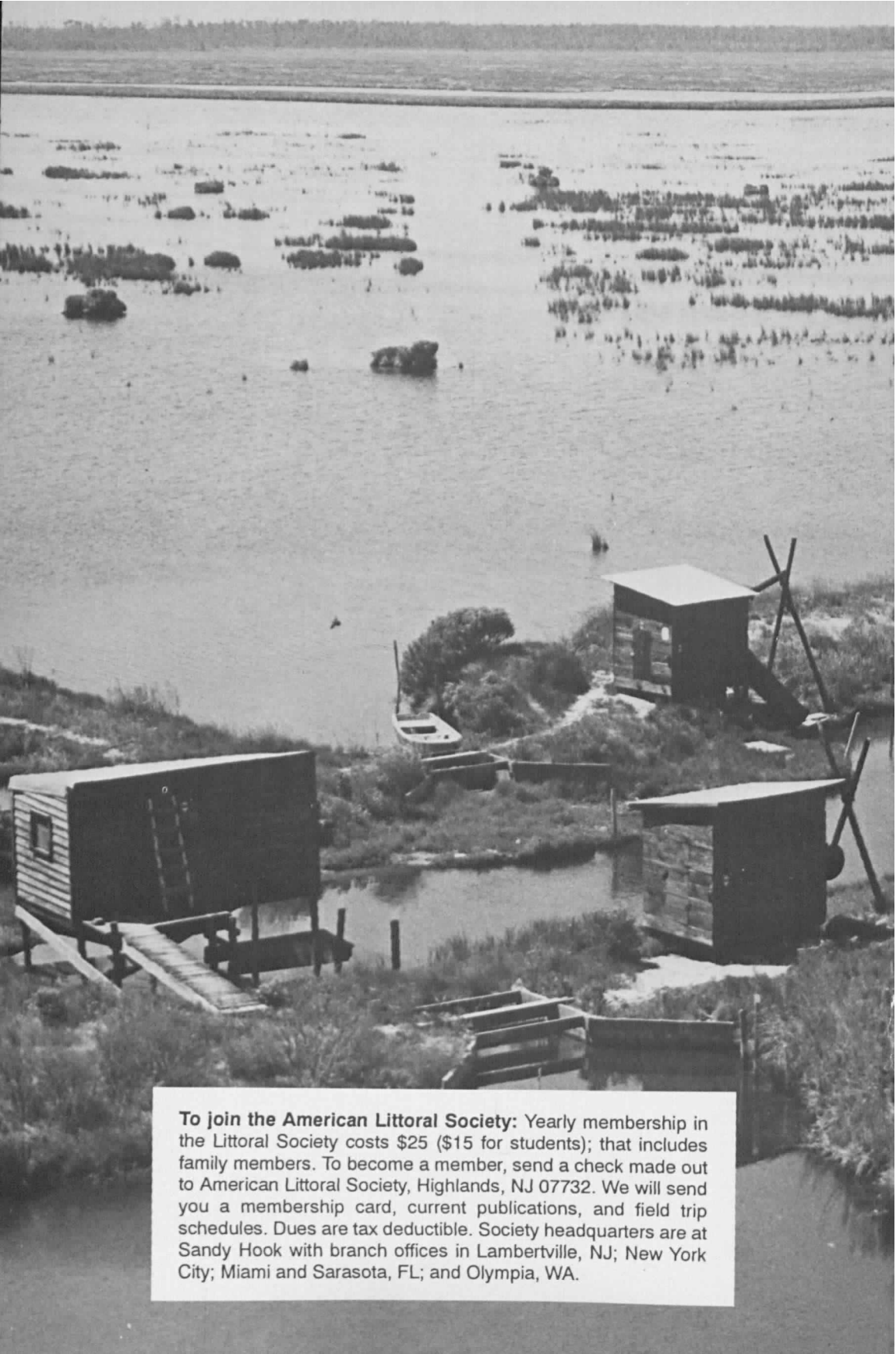


A photograph of two men in a wooden canoe on a dark river, framed by tree branches. The man in the front is shirtless and paddling, while the man in the back is wearing a white shirt and glasses. The water is dark and reflects the surrounding foliage. The scene is captured from a high angle, looking down into the canoe.

underwater naturalist

Vol. 22, No. 3



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**Bulletin of the
American
Littoral Society**

Volume 22, Number 3

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EDITORIAL STAFF	D.W. Bennett, Editor	
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To the editor

About Tagging

...I am always amazed at how many people get involved in the ALS tagging program, as evident in the tagging returns published in the last issue of the UN (Volume 22, No 2). One interesting feature of these returns, which should be highlighted for your readers, is how quickly tagged fish are recaptured. Most (95%) tagged fish appear to be recaptured within a year or two (some within days), with the exception of a few striped bass. Since most of the species tagged can live 5 - 10 years, if given a chance, this is good evidence on how intense the fishing pressure is on our coastal fish populations.

The people who participate in the ALS tagging program seem to be intuitively aware of this situation, and should be commended for their non-destructive use of this common fishery resource. The restoration of our greatly diminished fish stocks may depend on more "sportsman" (sportspeople?) or just plain "sports?", following this non-consumptive approach. Of course, we need much better conservation from our commercial fishers, as well, who are now often dependent on catching young fish as soon as they reach harvestable size.

Finny, the not-so-younger
(Name withheld to avoid
the wrath of not being PC)

Wild Ponies

...I visited Chincoteague recently and was appalled to learn that the pony round-up still goes on. I am a graduate of the Misty of Chincoteague school, and remember how distressed I was to read about the foals being taken away from their mothers at a seemingly early age and in questionable safety. Have the round-ups improved any? Are they conducted for population control? If so, is there a better way?

Sarah Miller

Editor's Note: From what we understand, yes, the round-up continues. It is conducted by the Fire Company which keeps the profit from the sale of the foals. That's why the foals are rounded-up and sold.

We understand conditions have improved slightly for purchased animals; however, groups like the Humane Society of the U.S. are still distressed about how ponies are

transported and the ability of purchasers to properly care for the ponies.

It isn't clear whether the round-up is touted as an effort to control pony numbers, but the Assateague side of the island controls pony reproduction without round ups. Apparently, the National Park Service, which has jurisdiction over Assateague National Seashore, has had excellent success using a fertility control method called immunocontraception which allows them to check reproduction without any harmful physical or behavioral side effects. Visitors are still able to visit Assateague and enjoy the ponies, the habitat has not been trampled by an overpopulation of ponies, and the cruelty and controversy possible in the round up and auction is eliminated.

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The Reefs of Bermuda

PART I – THE ISLAND AND ITS REEFS

by DAVID K. BULLOCH

Bermuda is an oasis of marine life lying just east of the Gulf Stream and northwest of the Sargasso Sea, well north of the West Indies from which its marine fauna and flora have been carried by currents.

The Bermuda Islands lie at latitude 32 degrees 18 minutes North, about that of Savannah, Georgia and 600 miles ESE of Cape Hatteras. It is an archipelago of 120 islands and islets that sit atop an ancient volcanic seamount capped with limestone that rises from an oceanic floor over 12,000 feet deep.

The islands are strung along the southern rim of the seamount, consisting of low hills that are former sand dunes. The highest point in Bermuda is a mere 170 feet; most of the land is less than half that height.

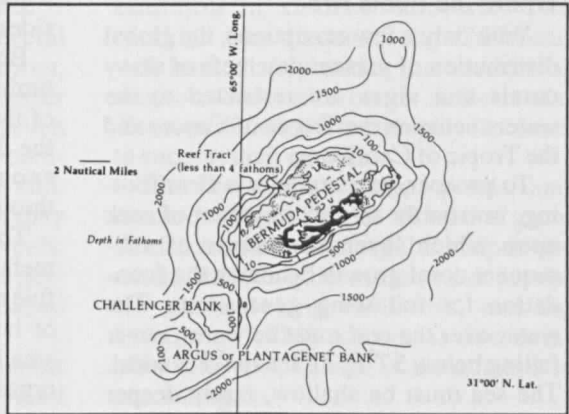
Given its latitude, Bermuda is atypically warm, the consequence of the northerly reach of the Gulf Stream and the gentle return flow of the North Atlantic gyre.

Origin of the Islands

Bermuda has no volcanic rock exposed at the surface. A limestone cap of biogenic origin extends down nearly 300 feet and, at the edges of the seamount, nearly 600 feet. The surface soils of the islands are a mixture of limy particles and the fallout of thousands of years of atmospheric dust.

Both Darwin and Agassiz noted the Island's resemblance to an atoll but the land is more a consequence of volcanic activity than of subsidence, of erosion and dune building, as well as reef building.

A past president of the Society and frequent contributor to this bulletin, Bulloch's latest book, THE WHALE-WATCHER'S HANDBOOK, was published by Lyons & Burford in 1993



The Bermuda Rise

The Living Builders

The limestone that makes up the surface rocks and the foundation of the surrounding reefs have all been formed by organisms that secrete calcium carbonate. Encrusting red algae, calcareous green algae, foraminiferans, corals, mollusks and tube-building worms, have all contributed building materials to these structures. The skeletons of a present day red foram, *Homotrema rubrum*, are so numerous that they impart to Bermuda sands their distinctive pink color.

Stony corals are the most important builders. They encircle most of the Bermuda platform and fill its lagoons. Over 1500 patch reefs lie scattered inside the enclosing rim.

The reef ecosystem is comparable to a tropical rainforest in its high diversity of animal life. In spite of the low productivity of the surrounding sub-tropical oceanic waters, the reef biomass is enormous. And it is efficient, retaining and recycling nutrients, and maintaining a number of productive communities in which its members continuously create useful places for themselves and other members.

Stony corals, milliporan corals, and coralline algae are at the heart of the system as are the symbiotic zooxanthellae which increase the rate of coral growth.

Where the Reefs Are

With only a few exceptions, the global distribution of present day reefs of stony corals and algae are restricted to the waters between the Tropic of Cancer and the Tropic of Capricorn.

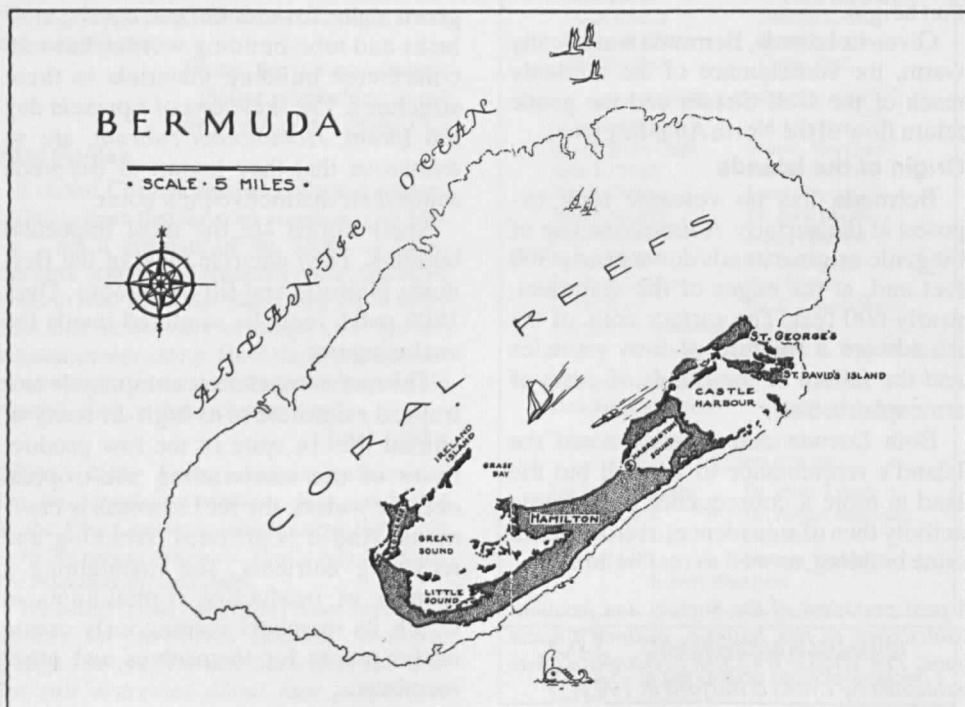
To prosper, reefs require a firm footing, invariably an underlayment of rock upon which layer after layer of subsequent coral growth becomes the foundation for following generations. The water over the reef must be warm, never falling below 57°F; 77°F to 84°F is ideal. The sea must be shallow, rarely deeper than 300 feet, and clear so that the symbiotic partners of the coral, the zooxanthellae, can get the light they need for photosynthesis. Water salinity must lie between 27 and 40 parts per thousand and there must be enough wave action to promote constant oxygenation, bring in food and carry off particulate matter that

otherwise might choke the coral polyps. There must also be a source of phosphorus and trace elements. Because of these requirements and the prevailing patterns of oceanic currents, living coral reefs are mainly found on the western sides of ocean basins.

Bermuda lies north of the normal limits for coral reef growth but the eddies of the Gulf Stream and some flow from the North Equatorial Current supply enough warmth to support reef life through the winter months.

The cap of limestone upon which the reefs of Bermuda grow were formed by five main processes (1) the steady growth of large stony corals, (2) the growth of smaller encrusting species, (3) the boring organisms that carve out voids, (4) the production of fine sediments which deposit in the nooks and crannies of the reef, and (5) the cementing of the sediments that eventually bury the dead portion of the reef and consolidate into stone. These processes and periodic changes in sea level create the limestone base.

There are two main reef building com-



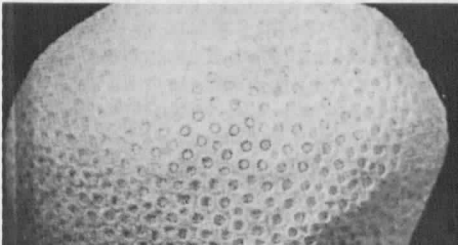
munities in Bermuda. The platform and lagoonal reefs of the north shore are mainly built by stony coral. The cup reefs, or "boilers" as they are called locally, of the southern shore are built by calcareous algae and vermetid worms.

The major stony corals are several species of star corals, genus *Montastrea*, brain corals, *Diploria*, and to a lesser extent, finger corals, *Porites*. Only seven or eight species of stony corals are commonly found along the outershore rim. Inshore as many as twelve species may occur on shallow, lagoonal patch reefs. Interspersed with the hard corals are gorgonians or soft corals, commonly called sea whips, sea fans, and sea rods.

The boilers of the south shore consist mainly of the remains of very small forms; calcareous algae, worm-like gastropods, and forams. The tops of the cup reefs are a virtual forest of these encrusting forms but are not easy to see because of their small size and the powerful surges of seawater that swirl around them.

Inshore, the largest body of shallow water, Castle Harbor, still suffers the effects of a dredge and fill operation in 1941-2 when an airport was built. Its construction drastically altered the pattern of circulation in the Harbor which has remained silty ever since. Only a few corals grow there now, mainly ivory bush and ivory tree corals which are able to shed the choking sediments in the turbid water.

Harrington Sound, another large body of water almost completely surrounded by land, has a silty bottom and supports almost no coral growth at all.



Boulder coral, *Montastrea annularis*

Hard Corals

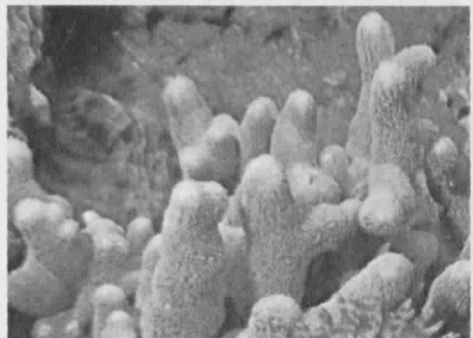
Of the seventy or so species of hard corals that grow in the Caribbean, about thirty-four species have been found in Bermuda. Only half that number are common in shallow habitats. The snorkler who frequents the Caribbean will immediately notice the absence of staghorn and antler corals in Bermuda. The water is not warm enough year round to support their growth.

The brain corals, finger corals, and numerous small species all tend to grow in characteristic and regular shapes but others, including the massive star corals, the shade-seeking hat corals, and the hydrozoan widely known as fire coral often take on the shape of the object it is encrusting.

Coral colors can vary, a reflection of the particular zooxanthellae that inhabit them. None of the Bermuda hard corals feed during the day and their polyps remain closed. Only at night do the tentacles become visible.



Depressed brain coral, *Diploria* sp.



Thick finger coral, *Porites porites*

False Corals

Taking a form much like a hard coral but lacking a skeleton, a number of colonial anemones form large clusters and mats. The most prevalent of these in Bermuda reefs have no common name; *Palythoa* is a light brown to cream color and *Zoanthus*, is a bluish or yellowish green with light green tentacles. The polyps of these are open during daylight hours.

Anemones

Anemones have a tubular body whose oral opening is lined with tentacles. Seventeen species have been found in Bermuda waters of which the most conspicuous and common is the Purple-Tipped or Caribbean Reef Anemone. It has a tentacle spread of up to a foot in diameter and about 150 long, tapering, light colored tentacles usually tipped in red (but occasionally green).

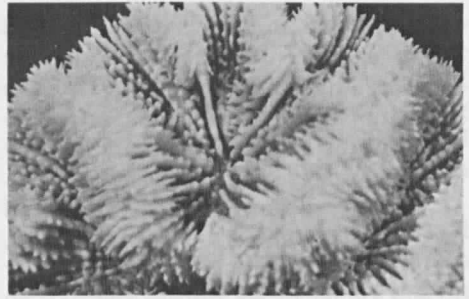
Soft Corals

Twenty-three species of gorgonians can be found on Bermuda reefs. These sea whips and sea fans are covered with openings from which polyps with eight tentacles each can be extended (hence the alternate name, octocorals). These bush-like structures rise 3-4 feet above their holdfasts; their main branches are remarkably tough. Although variable in color, most are brownish or purple.

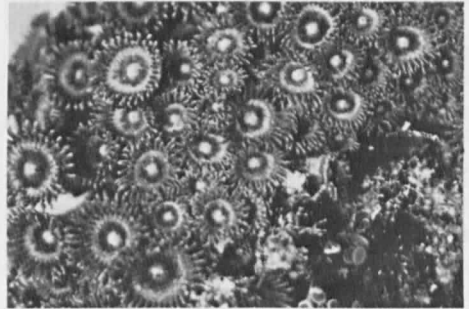
Sea fans are among the hardiest of these forms and grow where a strong surge constantly flows past them. They grow in such a way as to align themselves facing the wave action broadside on. They are found only on the outer reefs where the open ocean keeps them in constant motion.

Other Sedentary Invertebrates

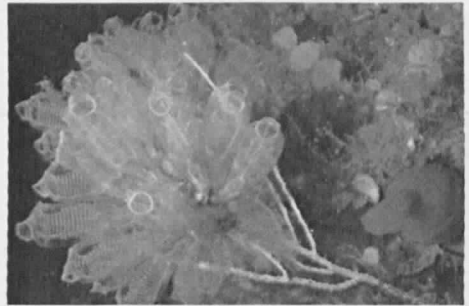
Of the large number of other invertebrates that dwell on the reefs the sedentary forms are the most obvious. Sponges abound in forms of vases, clusters, and clumps of various sizes and colors. Almost all have conspicuous openings through which water taken in via small pores is finally exited. Few have com-



Palythoa



Zoanthus



Clavelina

mon names nor is their identification particularly simple.

Bearing some superficial resemblance to the sponges, some smaller lumps and mats are not sponges at all but are sea-squirts. Their surfaces are often figured with pretty rosette patterns in colors distinctly different from their bodies. Of the colonial tubular forms, the bluish, transparent clusters of zooids whose openings are lipped in purple, the tunicate *Clavelina picta* is among the prettiest sights on the reef.

Affixed in a single hole, usually in coral, yet hardly sedentary are tubed

sabellid worms which are marine annelids. All you see of them is their bright flower-like array of gills extending out into the water which can be withdrawn in a wink. They are commonly called fan worms or feather-dusters.

Active Invertebrates

Hidden away in crevices sea urchins stay put until dark. The most common is the all black West Indies Urchin but occasionally you will spot the Slate Pencil Urchin or a Rock Urchin jammed in a crevice.

Where overhangs and large holes prevail you may see the antennae of a Spiny Lobster protruding. Occasionally large numbers can be seen lined up under a ledge. Although they don't have nipping claws they are more than a handful if you pick one up. Aside from their heavy spines they have sharp triangular tail segments which act like two rows of slashing scissors when they flex their tails in a violent attempt to escape your grip.

For all the mollusks, crabs, shrimps, brittle stars and others that abound in Bermuda waters, few show themselves



Octopus

openly and require prodding, poking, and time to uncover.

One reward for repeated visits to the reef is an octopus sighting. Wary and quick to flush from one color to the next, you are more likely to see the Common Octopus than the White-Spotted Octopus. A sure sign of its presence are clean shells of large conchs lying near a reef with large cavities. It's a good bet one is holed up in one of them.

GUIDELINES FOR SUBMISSIONS

UNDERWATER NATURALIST is the Society's journal. We encourage members to submit articles, pictures, observations, comments, compliments or criticisms. Please follow these guidelines.

SUBJECT MATTER: Feature articles run 1,500-3,500 words (4-10 double-spaced, typed pages); please refer to back issues for guidance. For **Field Notes** and **Coast Issues**, submit no more than three pages of direct observations of interesting natural history found while walking, diving, or fishing in a coastal area. Topics can be of current interest, such as red tide in the Carolinas, whale deaths in New England, or mangrove preservation in the south; you can also submit a number of short observations or notes regarding a particular area. **Letters to the Editor** expressing thoughts on the magazine and its contents or general food for thought are especially appreciated.

ARTWORK: For illustrations, black and white prints are preferred, but clear color slides or color prints with good contrast, drawings, maps and charts will also be considered. For **Cover Photos**, we need clear, sharp 35mm color slides or color prints, either horizontal or vertical, of

littoral subjects above or below the water. Horizontals can wrap around from front to back. Action is not necessary. (Note: Unless otherwise requested, we keep all accepted art work until it is published).

HOW TO SUBMIT: Typed, double-spaced manuscripts, please. It would help, if you have access to a computer, to receive your manuscript saved as ASCII on a 3 1/2" double-sided, high-density disk. Use common, not Latin, species names. We do not carry footnotes; incorporate sources in your article. We edit for clarity using Strunk and White's Elements of Style as our guide and favor clear wording over specialized terminology. Send your work with a stamped, self-addressed envelope; we will acknowledge its receipt.

We do not pay for articles or illustrations, but we do send five authors' copies when published. Thank you for your interest. We look forward to receiving your submission.

Bizarre Beach Bird Behavior

by DAVE GRANT

Birds are attractive because, like humans, they are visual, vocal and exhibit lots of intriguing behaviors. Even the most common birds can be entertaining for much of their daily routine, and sometimes their behavior seems downright bizarre.

These avicular activities are more often noted at the shore because views are generally unobstructed, and the birds are often busy searching for food and easier to approach.

Birds are constantly interacting with their own kind and other bird and animal species, including humans, although we are not always alert enough to grasp the significance of the exchanges. Sometimes the interaction benefits only one participant, other times both seem to profit from the encounter. People, if they are sharp enough, are always rewarded in their encounters with birds. Here are examples of a few of my favorite episodes...

Piscatorial Pirates

Whenever I'm in Florida, I regularly see laughing gulls robbing pelicans of their catch. Since the gull is too small to bully the much larger pelican, it uses its agility to sneak fishes from the pelican's enormous pouch when it is so filled with water the bird can't lift off.

To accomplish this, a single gull shadows the pelican while it hunts. When it plunges into the water to gulp down a school of fish, the gull hovers for a moment, alights on the pelican's back or even its head, and as the pelican dips its head and opens its mouth to expel water and rearrange the catch, the gull snatches

Grant, the Society's chief naturalist, is an avid year-round beachcomber and directs Brookdale Community College's Ocean Institute at Sandy Hook, NJ. He provided the illustrations for this article.

a fish or two. Ornithologists have given this behavior a wonderful label — kleptoparasitism. Occasionally, the pelican tries to shake off the gull or when bothered by several gulls, it simply hunts elsewhere. For the most part, the placid pelicans tolerate the indignity and go about their business warily.



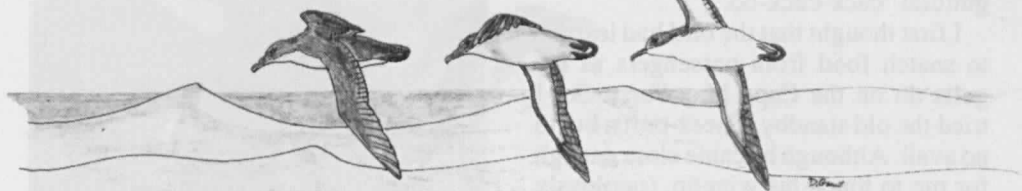
Fish Buddies

Other Florida birds seem to collaborate with each other in the pursuit of fish, and when things go right, they all benefit. I've seen a group of white pelicans form a feeding line to crowd fishes into a small area then simultaneously dip their bills to gulp up a meal.

The anhinga, or snakebird, has the sharpest bill of all the waterbirds. It swims underwater through a school of minnows and impales prey on the tip of its upper mandible, then surfaces to extract its bill from the fish, sometimes by tossing the victim in the air and catching it head-first to swallow. Some birds, perhaps youngsters or bored adults, practice this neat little trick with twigs as they roost in the mangroves after feeding.

Bent, in his classic work *LIFE HISTORIES OF NORTH AMERICAN BIRDS*, said of the anhinga, "I have never noticed

Views of Mad Max



anything worthy of comment in their behavior toward other species." He must not have seen the birds at the Ding Darling Refuge on Sanibel Island. A subtle relationship seems to exist between wading birds and anhingas.

Although quick when it has to be, the anhinga moves fairly leisurely in its underwater pursuit of fishes, relying on stealth to move close to a school and using the shoreline, the presence of other birds, and sometimes even people to help concentrate the fish. Little blue herons and snowy egrets, two of the most active wading birds, will oftentimes pace the anhinga along the shoreline, further crowding the fish and making them an

easier target for both birds. The events that I've seen seem to be initiated by the feeding activities of the anhingas, with the waders merely taking advantage of the situation and unwittingly improving the fishing luck for both of them. Then again, it may be that both birds have learned that some cooperation is beneficial.

On one memorable day in the company of a number of astonished witnesses, I followed one particularly tame bird for 15 minutes. It climbed out of the water, skewered killifish-in-bill, and waddled right up to me. Apparently, it was ready to reward me by sharing lunch. Awkwardly, I declined, but I did have the nerve to reach out and touch the rapier-like tip of its bill. An unforgettable encounter for me and apparently all in a day's work for the unflappable anhinga, which calmly swallowed its catch and returned to the water.

Mad Max

On an ALS whale-watch off Provincetown, MA, our vessel was buzzed repeatedly by a highly agitated Manx shearwater — "Mad Max" to the crew — who said this was the third year they had witnessed this unusual behavior.

The Manx shearwater gets its name from the Isle of Man, where it once was extremely abundant. In Europe, it has acquired several local names ("crew," "cockathodon" and "cuckle") because of its call, which it typically repeats three times. Max glided up behind us, low over



Anhinga

the boat's wake, using our draft to sail along the wave crests. Overtaking us at high speed, he buzzed the passengers at the stern, and with each pass emitted a guttural "cuck-cuck-oo."

I first thought that the bird had learned to snatch food from passengers as the gulls do on the Cape May Ferry. So, I tried the old standby, Cheez-puffs, but to no avail. Although he came close enough for me to touch his wingtip, (perilously close I decided, after getting a closeup view of his hooked bill), Max seemed concerned only about driving us out of his patch of ocean. In *THE ISLAND*, Ronald Lockley's classic and endearing account of the life and times of "cocklollies," the shearwater is depicted as a fairly placid creature. Mad Max certainly was an exception.

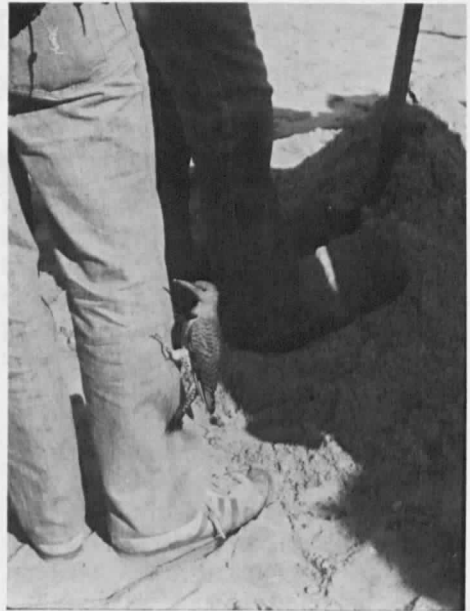
Waterfront Woodpeckers

Woodpeckers are not the first bird to come to mind when you mention beach birds, but the flicker is an exception. Doomed if they land in the water, they nonetheless risk crossing bays and stretches of open water to shorten their migration routes.

Since flickers regularly migrate over water and are a conspicuous bird, they are frequently spotted at the beach. In fact, they are one of the more noticeable harbingers of the changing seasons since they often appear en masse in the spring and fall at Sandy Hook and other coastal staging areas for migrating birds.

Unfortunately for flickers, they also attract the attention of migrating hawks, and sad clues that their migration is in full swing are piles of plucked yellow and black feathers — all that remain of birds that were eaten by hawks. It has been said by cynical hawkwatchers that, during migration there are only two types of birds — "hawks, and hawk food." You don't need to convince seagoing flickers of that.

An occasional sight along the beach, especially in the fall, is a hapless flicker racing in from the sea with a hawk in hot pursuit, usually a peregrine falcon.

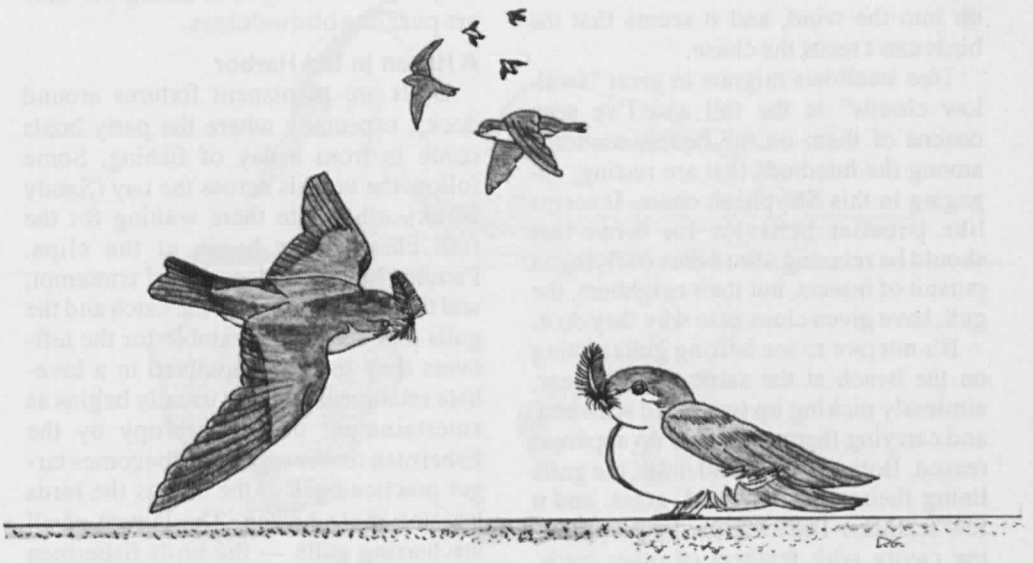


Peregrines are comfortable flying long distance over water, and because of their size and speed, they can dispatch flickers easily.

Both birds have distinctive flight patterns and can be identified a great distance from the beach. The flickers' undulating woodpecker flight allows it to glide and rest for about half the time it's in the air — a decided advantage for a land bird over water. Edwin Teale describes the flight pattern of flickers over the inland "ocean" of prairie grass as, "...loping in great bounds...appearing to ride long swells of the airy sea." Attacking peregrines are identified by their distinctive and legendary high-speed swoops on prey that they snatch or knock out of the air.

Sometimes during a chase, the silhouettes of the two distant birds merge over the water, signaling the demise of another flicker. I've also watched peregrines trail flickers to the beach and dive repeatedly on them like cats toying with prey, sometimes allowing them to escape, but just as frequently delivering the coup-de-grace as they reach the shoreline.

The most vivid memory I have is from



the ALS fall beachwalk at Chincoteague, VA. Like many barrier beaches, great numbers of birds are funnelled through here during migration.

Startled by a falcon bearing down on us, we were even more surprised to find the flicker it was pursuing had taken refuge on the leg of a beachcomber. Normally excitable and noisy when disturbed or handled by humans (I classify them, along with accipiter hawks, as "screamers" when they are captured), this flicker was frozen with fear and in such a state of shock that it allowed us to position it on each other's legs for photographs. To a panicky woodpecker on an open beach, anything that looks like a tree — even a human leg, will do. I'm happy that this flicker survived its encounter with hawks and people.

Birds of a Feather

Many birds rest at the beach. Some, like gulls, are expected. Others seem out of place.

Each year, just before Labor Day, I visit Plum Island, MA, to birdwatch and beachcomb. It is one of the best places on the east coast to do both.

Over the years, I've witnessed some odd bird behavior there, but the most entertaining performers are the tree swallows that migrate in great "flights" at that time of year. Here, they feed on the abundant insects and bayberries that thrive along the coast. During the dry gales of fall when the winds are strong and blowing offshore, the "wire birds," as they are sometimes called, settle on the sand at the edge of the dunes where there is a wind shadow, instead of typically resting in the trees or on phone wires.

Sitting here for a time, many swallows occupy themselves with an odd little game of catch. Flying low along the shoreline, they pick up downy white gull feathers that are blowing across the beach towards the water and carry them a short distance upwind to the gathering site near the dunes. Here, they manipulate the feathers a bit in their bills dropping them in a few minutes once they tire of them. The feathers again blow across the beach toward the water and are usually snatched up by other swallows that repeat the activity. I can entertain myself at the beach on such occasions by flick-

ing feathers I've found stuck in the sand up into the wind, and it seems that the birds can't resist the chase.

Tree swallows migrate in great "swallow clouds" in the fall and I've seen dozens of them on the beach, scattered among the hundreds that are resting, engaging in this Sisyphean chore. It seems like peculiar behavior for birds that should be relaxing after hours of flying in pursuit of insects, but their neighbors, the gull, have given clues as to why they do it.

It's not rare to see herring gulls resting on the beach at the same time of year, aimlessly picking up twigs and seaweed, and carrying them round for no apparent reason. Both species build nests, the gulls lining theirs with seaweed, grass, and a few feathers. The swallow lines its nesting cavity with feathers of other birds, notably gull down, delicately arranged so that the soft tips curl over their eggs. They apparently are quite partial to white feathers, which might reflect more light in their dark nest holes. In fact, the unofficial "feather nest" record holders are an industrious pair of tree swallows from Cape Cod that placed 147 feathers in a nesting box. Coincidentally, 99 percent of them were herring gull feathers.

M.J. Broley, in *TRUE NATURE STORIES*, appears to be the first to document feather gathering activities in tree swallows and claims to have once sacrificed an entire pillow to a flock of nest-building swallows in Canada. Some birds were so tame, that they snatched feathers from her outstretched hand, and seemed to expect such preferential treatment when they returned to nest near her cottage each spring.

Possible explanation: The daylength at the end of August is about 12 1/2 hours, the same as late April when both swallows and gulls should be getting serious about nest-building. Daylength probably stimulates hormones in the birds that confuse them for a week or two before they get the idea that fall, rather than spring, is upon them. But, they collect nesting materials anyway, not knowing

why they are doing it, or caring that they are puzzling birdwatchers.

A Heron in the Harbor

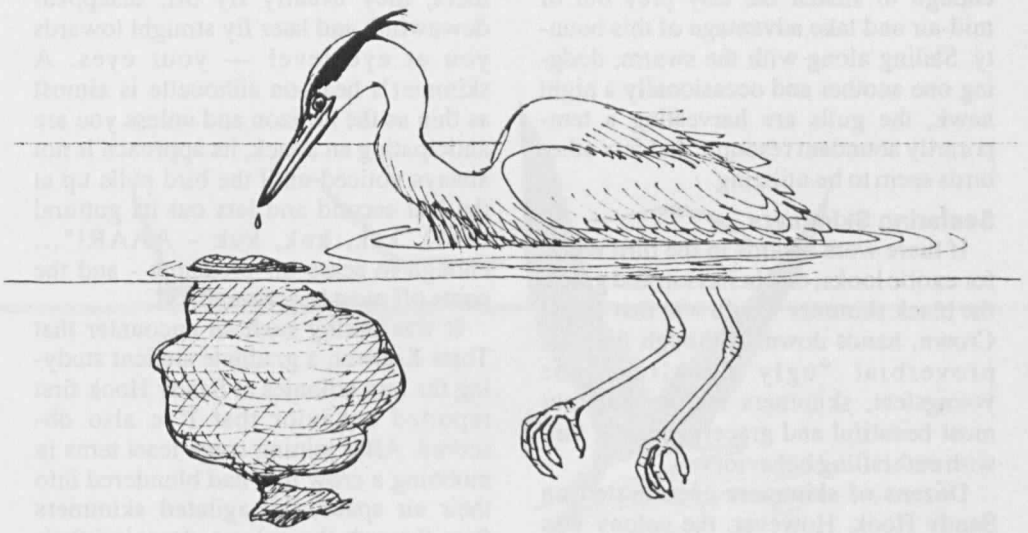
Gulls are permanent fixtures around docks, especially where the party boats come in from a day of fishing. Some follow the vessels across the bay (Sandy Hook), others are there waiting for the fish cleaning to begin at the slips. Familiarity really does breed contempt, and the mates who clean the catch and the gulls that dive and scramble for the leftovers they toss, are involved in a love-hate relationship. What usually begins as entertainment or philanthropy by the fishermen on the trip home, becomes target practice back at the slip as the birds become more brazen. The tamest of all are herring gulls — the birds fishermen love to hate.

This summer, a new freeloader took up residence at the marina, a great blue heron. The fishermen and the gulls were not quite sure what to make of it. Tame herons are much more common in Florida, where they are nick-named "welfare birds" by the locals. This heron was immature, but its large size and spear-like bill were enough to intimidate the other avian vagabonds around the waterfront.

Most of the day, the heron lurked around the pilings, away from the commotion, but when a boatload of fishermen arrived, it soared in silently on those great gray wings, scattered a few gulls, and helped himself to the largest handout available.

This past fall, we witnessed the heron in a most un-heron-like activity — swimming. Hovering for a moment over the harbor, trailing his long legs below, he gently settled down into deep water.

For a moment, we worried that he was in trouble, but it was soon apparent there was a method to all this. He began stabbing at the water and spinning around like a great big phalarope, intent on pulling something to the surface. For such a lanky creature, the heron is surprisingly



stable and buoyant in the water. Suddenly, with several deep wingbeats, he lifted straight up out of the water, and pursued by a herring gull, carried a large plastic bag to the dock where he proceeded to alarm us by attempting to swallow it.

Worried we were about to see a disaster unfolding, we slowly approached the heron, looking for the right moment to chase it away from its deadly catch. However in the time it took to explain our concerns to one of the boat captains who had taken an interest in our mission, the enterprising heron proceeded to deftly slip a smaller bag out of the larger one and then remove the contents — a nice hunk of bait.

To our delight, he then flew off to enjoy his dinner in privacy at the top of a piling, and away from the temptation of the bags. When I expressed to the captain my relief that the heron was so talented, his reply was to the point and about as complimentary as “old salts” ever get towards fellow fishermen, “I guess he didn’t get this far by being stupid.”

True. He’s a heron adapting to humans and a changing world...for better or

worse...and with luck, he’ll stay just wary enough of fishermen, fish hooks, and plastic bags, to be around for a long time.

Gull Aerobatics

Although we think of gulls as seabirds and fish-eaters, this is not always the case. Above all else, gulls are adaptable opportunists in their constant search for food.

A regular inland sight in New Jersey on warm, calm September days, is a great gathering of gulls flying awkwardly along with the wind, dipping, hovering, and turning. Their flight is so un-gull-like that it, and their numbers, will usually attract the attention of curious birds and non-birders alike, who speculate about this peculiar behavior.

The cause for these diversions: The warm temperatures and light winds encourage the dispersion of great numbers of “winged ants” — the adult kings and queens of the colonies that are making their nuptial flights before they return underground for the remainder of their life. Remarkably, the gulls—ring billed, herring, and laughing—are acrobatic

enough to snatch the tiny prey out of mid-air and take advantage of this bounty. Sailing along with the swarm, dodging one another and occasionally a night hawk, the gulls are harvesting a temporarily abundant resource that few other birds seem to be utilizing.

Seafaring Skimmers

If there were awards in the bird world for exotic looks, odd behavior, and grace, the black skimmer would win that Triple Crown, hands down. Although they are proverbial "ugly ducklings" as youngsters, skimmers mature into our most beautiful and graceful coastal bird with enthralling behaviors.

Dozens of skimmers once nested on Sandy Hook. However, the colony was repeatedly destroyed in the 1970's when, for two years running, vandals (allegedly local teenagers) killed the chicks. Since then, we have been lucky if one or two pairs join the declining tern colonies each summer. Although they are valiantly defended by their parents, these large chicks attract the attention of misguided people if their colonies are not protected.

Most skimmers seen at Sandy Hook these days are migrants, or probably visitors from Breezy Point and Jamaica Bay NWR across the entrance to New York Harbor. They are great fliers, zig-zagging close to the wave tops as they make the seven mile crossing actually "plowing the main" with their razor bills when they are "skimming" calm waters to snatch up minnows. This method of feeding is unique in the animal world and observing it and speculating about how it evolved is reason enough to declare the skimmer our most fascinating coastal bird. However, if you watch skimmers closely, they are full of some other surprises, too.

Skimmers could have been a prototype for stealth bombers. Although large, they are fast and quiet, and seem to appear out of thin air when they are flying towards you. I first noticed this when I worked as a tern warden. If you upset nesting skim-

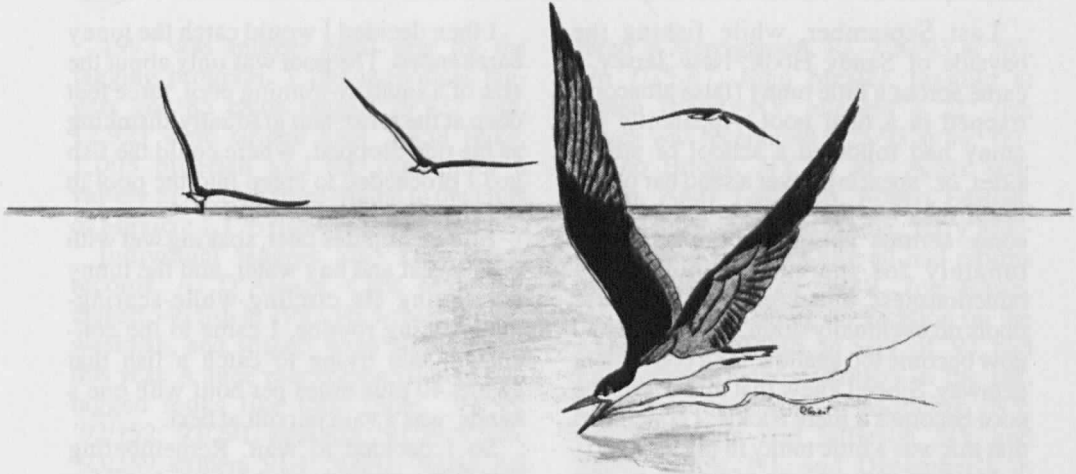
mers, they usually fly off, disappear downwind, and later fly straight towards you at eye level — your eyes. A skimmer's head-on silhouette is almost as thin as the horizon and unless you are anticipating an attack, its approach is not always noticed until the bird pulls up at the last second and lets out its guttural call... "kuk, kuk, kuk - AAAR!"... enough to scare off predators - and the pants off most beachcombers!

It was during such an encounter that Torre Knowler, a graduate student studying the tern colonies at Sandy Hook first reported behavior that I've also observed. After joining some least terns in mobbing a crow that had blundered into their air space, the agitated skimmers flew through the colony, dragging their bills in the sand. I later discovered in the literature that this odd behavior, which is imitative of how they skim the water to feed, accounts for the Latin Americans' name for the skimmer: "rayador" - one who draws lines.

Is this how skimmers clean their bills at the beach where they are few hard surfaces? Or, is it a way to release tensions after a frustrating, threatening encounter, or perhaps display to mates? Add "puzzling" to the list of awards that can go to the skimmer.

Skimmers also have some puzzling flight characteristics and seem to function as high-performance sailboats when they are feeding over water.

When birds fly parallel to my car, I often occupy myself while I drive to work by noting their speed. On a few occasions, I've paced feeding skimmers at Horseshoe Cove, where the road is very close to the eroded shoreline of the bay. When the wind is from the east/northeast the cove has an offshore breeze and is calm; providing skimmers with a perfectly flat fishing ground to glide across. I've clocked fishing skimmers in a cross-wind, keeping pace with my car traveling at 25 mph; even though the wind speed (according to the car radio and my observations) was much slower



than that. At the same site, I've also stood on the beach many times, scrutinizing sailing skimmers as they race past and observed them "reaching", that is, sailing into the wind at an angle.

Can this be right? Can skimmers actually move faster than the wind or sail against it even though they seem to be gliding and not flapping their wings?

Finding a skimmer to study closely proved more difficult than I had imagined. Because of the bird's peculiar habit of gliding low over bridges rather than passing under them as they fly up and down river I assumed there would be plenty of road-killed specimens available to measure wind and bill sizes to compare with sail and keel ratios of sailboats. Not so. No mounted specimens with outstretched wings could be found and few museum skins were available.

By collecting bits and pieces of skimmers (literally), and some complete common terns (which are smaller, but similar in proportions to the skimmers - but not

as street wise), I've drawn this conclusion: The skimmer is both a consummate flier and seafarer.

According to my rough measurements, the skimmer's ratio of bill-to-wing area approaches the ratio for a sailboat keel-to-sail area. By adjusting the attitude of its wings (or trim of its sails, if you prefer), and by immersing its lower bill into the water to act like a centerboard, perhaps the skimmer is indeed able to tack into the wind like a high performance sailboat. For what it's worth, my observations of it altering its glide path into the wind, arching its bill in the water, and adjusting its wings, have made me a believer.

How does this relate to you? Get out and watch birds, don't just check them off on lists! And, if there's anyone out there with access to a radar gun, meet me at Sandy Hook in August when the skimmers are sailing. I've got an anemometer and want to work out this theory about skimmers...

Trouble for Tunny

by STEPHEN SAUTNER

Last September, while fishing the bayside of Sandy Hook, New Jersey, I came across a little tunny (false albacore) trapped in a tidal pool. Apparently the tunny had followed a school of silver-sides, or "spearing" over a sand bar on the flood tide, and moved into the pool for some serious autumn gorging. Unfortunately for the tunny, in its ram-bunctiousness, it had forgotten that these pools do eventually drain, and its exit had now become too shallow for a convenient getaway. Since I knew that at low tide the pool becomes a mere trickle, I concluded that this was a little tunny in big trouble.

My first instinct was of course to cast to the tunny, thinking of those famous hundred-fifty yard runs they shoot away on when hooked in the surf. Further, this would be my first tunny on the fly rod. I had already been fortunate enough to hook a few on spinning tackle, and I was thoroughly impressed with their speed and stamina. I could only imagine what the fish would be like on fly tackle. I pictured the tunny, which looked about eight or nine pounds, taking my fly — a home-tied spearing imitation — then streaking out of the pool and over the bar in ankle-deep water like a bonefish or a permit, and making its way into deep water for serious battle — me running, splashing, and stumbling in hot pursuit, my reel "screaming in protest" just like in the magazine articles.

But it was not to be. The tunny was just not interested, despite my placing the flies within inches of its nose. It continued to circle the confines of the pool nervously, repeatedly panicking the school of spearing that was trapped in the pool with it. It wanted out, plain and simple.

Sautner, an ardent fisherman, is a staff member of Clean Ocean Action who will contribute regularly to the UN.

I then decided I would catch the tunny barehanded. The pool was only about the size of a small swimming pool, three feet deep at the most, and gradually shrinking as the tide dropped. Where could the fish go? I proceeded to creep into the pool in my chest waders.

Fifteen minutes later, soaking wet with both sweat and bay water, and the tunny continuing its circling-while-scaring-the-spearing routine, I came to the conclusion that trying to catch a fish that swims 40 plus miles per hour with one's hands, was a vain pursuit at best.

So I decided to wait. Remembering that "time and tide wait for no man" (or tunny), I knew that eventually the fish would simply run out of water. I waited and watched. It then occurred to me what a rare opportunity this was. I was able to watch a largely pelagic species swimming in the wild (sort of). Too often, the little tunny offers the angler a mere glimpse — breaking water while chasing baitfish, or racing through a chumslick. Seeing it hooked on the end of a fishing line isn't the same thing either. I watched the fish's sickle-shaped caudal fin — the mag-tire of the fish world — and its spiny dorsal, which it can tuck into a neat slot, along with its pectoral and pelvic fins. This enables the fish to become almost perfectly hydrodynamic for super-quick bursts of speed. It was also the first time I noticed that the Atlantic mackerel-like pattern across its back serves as a perfect camouflage in the broken light rays found just below the ocean's surface.

The fish's circling grew shorter and shorter, more and more spearing exited the pool on the dropping tide, and pretty soon there was a false albacore in a jacuzzi-sized tidal pool.

I waded into the pool, and easily chased it ashore, its rapidly beating tail

Continued on page 33



TAGGING REPORT

compiled by PAM CARLSEN

1993 was another great year for the tagging program. 1,100 individual taggers and 85 clubs tagged 19,937 fish. 12,923 were striped bass, 3,858 fluke, 1,003 bluefish and the remainder a variety of species from Maine to the Gulf of Mexico; 1,176 fish were recaptured.

Individual taggers also keep great records. Al D'Amato, Cape May, NJ, tagged 546 fish in 1993. He wrote, "Fluke, weakfish, and stripers were all abundant this year. A three year comparison of fish tagged looks like this: fluke, '91/38; '92/152; '93/291; weakfish, '91/59; 92/46; '93/189; stripers '91/1; '92/31; '93/46. All three fish are making tremendous comebacks, thanks to the new regulations. Stripers were still being caught Dec. 20-23 in the Cape May area and it's amazing to see what the comeback of this fish has done for the local economy. Bait shops that used to close in October are now open into December. My marina used to be empty by Oct. 15, now boats are kept in the water till the first week of December."

ALS taggers are busy helping with other programs studying fish. Mentioned in the year-end report of the Striped Bass Cooperative Anglers, of the N.Y.S.D.E.C, were scale samplers, Terry Marburger and David Mann, and tagging clubs, The Manhasset Bay Sportsmen's Club and The Huntington Anglers, all from the north shore of Long Island. The data collected are used to evaluate stock status. Ron Wellman, Tom Rinaldi, and Steve Kellner are working with Cornell University Sea Grant on a hook mortality study, involving striped bass caught on a variety of hooks, tagged, and released into L.I. Sound.

Ray Leja, Bridgeport, CT reported his 1,000th striped bass tagged on 6/26/93, at 32"-15 lbs. Ray has tagged since 1980 and just received the return of a bass out for seven years. This fish was tagged at Bridgeport, 10/25/86 at 24" and was recap-

tured in Narragansett, RI, 7/30/93 at 38". On 7/25/87, John Mester, tagging at Staten Island, NY, released a 22" fish which was recaptured 9/25/93 at the Verrazano Bridge, NY, at 30". A six year return. Andy LoCascio, Robert Feather, David Johansen, John Andia, Terry Marburger, and Dennis Kelly all had returns of fish tagged in 1989. Joe Kane, Hopewell, NJ, fishing on vacation on the Kennebec River, ME, in Sept. of '93, had four returns of those stripers in the fall. October's bass was in Montauk, NY, November's in Port Jefferson, NY, and Sandy Hook, NJ, and December's in Hughlett Point, VA. Smart fish going south for the winter.

Bluefish are also known to travel at different times of the year. George Dulka's 31" bluefish tagged offshore, Rudee Inlet, VA, 5/23/93 was recaptured at Mark's and Ragged Islands, ME, on 8/7/93. Capt. Howard Andersen's 33" bluefish tagged in Cape Cod Bay, MA, was recaptured in Nags Head, NC, 12/15/93.

Jeff Wyman, fishing at Spring Hill beach in Sandwich, MA, in May, reported a lot of large sea worms, six inches or longer, washed up on the beach. He wrote, "I have never seen this before. Do these worms migrate and is this part of their migration? Maybe I should have tagged one, ha! ha!" Frank Steimle, NMFS, Sandy Hook Lab, and ALS advisory board member answered this one. "The worms are nereid worms. In the spring, usually at the full moon, these worms swarm out of the mud and swim to the surface to spawn. After spawning, they die and are washed ashore. It happens in all coastal estuarine areas." Steimle observed that it would probably be the time to use worms for stripers as they would more than likely be feeding on these worms. Interestingly, our taggers were worming at that time. Our taggers are smart.

TAGGING RETURNS

Species	Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
Atlantic Bonito								
	25	A Autieri	Offshr., Montauk, NY	09/22/91	W Moniz	Jamestown, RI		08/20/93
Atlantic Cod								
	16	T Stanik	Offshr., Gloucester, MA	07/01/92	F/V "Mary V"	25 mi. ENE Boston, MA	21	01/07/94
Black Sea Bass								
	12	J Dotsey	Rockaway Reef, NY	07/13/93	T Nelson	Sheepshead Bay, NY	12	07/15/93
	05	T Camp	Offshr., Cape May, NJ	05/30/93	N Robbins	Cape May, NJ	08	08/10/93
	07	T D'Amato	Delaware Bay, NJ	07/07/93	H Hudson	Cape May, NJ	09	11/23/93
Bluefish								
	36	T Marburger	Shinnecock Inlet, NY	09/15/92	D Ambrico	Coney Is., NY		07/01/93
	20	M Zachara	Offshr., Mud Buoy, NJ	09/20/92	D Long	181 St., NYC		07/19/93
	28	T DeBenevento	David's Is., NY	07/04/93	R Fravola	Cold Spring Harbor, NY		07/31/93
	23	R Bennett	17 Fathoms, Offshr., NJ	06/16/93	D Spear	Bridgeport, CT	27	08/02/93
	24	H Sweet	Providence R., RI	05/30/93	R King	Riverside, RI	29	08/03/93
	31	G Dulka	Offshr., Rudee Inlet, VA	05/23/93	J Barbour	Mark's & Ragged Is, ME	34	08/07/93
	20	E Collins	Northport, NY	07/16/93	A Schweithelm	Northport, CT	22	08/10/93
	21	A Schweithelm	Northport, NY	06/19/93	J Clarke	Little Gull Is. Lt., NY	08	08/11/93
	26	H Sweet	Warren, RI	08/11/93	Unknown fishrmn	Barrington, RI		08/14/93
	18	B Shillingford	Corson's Inlet, NJ	05/17/93	P Zaita	Shoreham, NY		08/15/93
	21	J Samyn	Manhasset Bay, NY	10/12/92	S Maselli	Hart Is., NY	25	08/25/93
	18	G Horvath	Barnegat Inlet, NJ	07/22/93	J White	Barnegat Inlet, NJ	18	08/28/93
	23	A Schweithelm	Northport, NY	06/06/93	A Crosby	Mid L.I. Sound		08/31/93
	08	M Contessa	Moriches, NY	08/18/93	H Musto	Moriches Bay, NY		09/01/93
	19	G Horvath	Barnegat Inlet, NJ	07/23/93	J White	Barnegat Inlet, NJ		09/02/93
	32	T Wood	20 mi. SE Ocean Cty, NJ	06/20/93	T Maugeri	Milford, CT	34	09/12/93
	20	D Mann	Mt. Misery Shoal, NY	06/11/92	S McDowell	Martha's Vineyard, MA		09/12/93
	30	B Finke	Stamford, CT	09/01/93	C Vitiello	Darien, CT		09/19/93
	29	H Sweet	Jamestown, RI	09/25/93	M Arsenault	Brenton Tower, RI		09/25/93
	32	F Heal	Staten Is., NY	10/07/93	R Lopez	Tin Can Grounds, NY	32	10/11/93
	32	B Finke	Stamford, CT	09/01/93	J Thorne, Sr	Stamford, CT	32	10/12/93
	18	T McCandless	North Kingstown, RI	06/13/93	P Chisholm	Somerset, MA		10/16/93
	27	H Andersen	Barnstable, MA	09/12/93	B Edwards	Stratford, CT		11/06/93
	17	E Collins	Kings Park, NY	07/15/93	J Kaminsky	Mattituck Inlet, NY		11/08/93
	15	S Cunningham	Jones Inlet, NY	07/23/93	G Nichols	Offshr., Dover DE	17	11/25/93
	33	H Andersen	Cape Cod Bay, MA	09/12/93	P Peyton	Nags Head, NC		12/15/93
	18	J O'Keefe	Stuart, FL	11/28/93	J Kohn	Stuart, FL		03/19/94
Dolphin								
	20	G Dulka	SE Rudee Inlet, VA	09/12/93	J Bayliss	NE Oregon Inlet, NC		09/13/93
Fluke								
	13	M Greatsinger	Fire Is. Inlet, NY	08/08/93	G Carlin	Fire Is. Inlet, NY	13	
	12	G Dickerson	Manasquan Inlet, NJ	09/05/92	P Connors	Manasquan Inlet, NJ		09/18/92
	14	C Witek	W. Istip, NY	05/16/93	A Franklin	Robert Moses Brdg., NY	14	05/26/93
	12	R Anderson Jr.	Captree, NY	06/01/93	J Roubal	West Islip, NY	12	06/03/93
	13	A D'Amato	Delaware Bay, NJ	08/26/92	J Mohr Sr.	Wildwood, NJ	14	06/21/93
	11	R Anderson Jr.	Captree, NY	06/05/93	P Greenbey	Babylon, NY	11	06/23/93
	11	D Rosen	Lido Beach, NY	06/24/93	I Mendelsohn	Reynolds Channel, NY	12	07/01/93
	12	A Autieri	Fire Is. Inlet, NY	08/28/91	T Kostew	Captree Boat Basin, NY	14	07/02/93
	11	R Anderson Jr.	Captree, NY	06/01/93	F Naldrett	Captree Boat Basin, NY	11	07/03/93
	12	S Knapik	Pt. Lookout, NY	05/31/93	T Mangoni	Pt. Lookout, NY		07/03/93
	11	S Knapik	Pt. Lookout, NY	06/23/93	M Kaferstein	Pt. Lookout, NY	11	07/03/93
	11	C Witek	Babylon, NY	05/23/93	F Losasso	Great South Bay, NY		07/03/93
	10	M Zielen	Sandy Hook, NJ	06/28/92	E Mannino	Great South Bay, NY	14	07/04/93
	13	S Knapik	Pt. Lookout, NY	05/15/93	R Garal	Long Beach, NY	14	07/04/93
	10	A Hagovsky	Chincoteague, VA	06/26/93	J Benchoff	Chincoteague, VA	10	07/04/93
	11	R Anderson Jr.	Fire Is. Inlet, NY	06/13/93	P Luksic	Robert Moses Brdg., NY	11	07/04/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
12	C Fiorillo	Avon, NJ	06/25/93	L Frazer	Belmar, NJ		07/04/93
11	A Hagovsky	Chincoteague Inlet, VA	06/25/93	P Ramage	Chincoteague, VA	11	07/05/93
13	J Calamia	Democrat Pt., NY	07/12/92	M Lorditch	Fire Is. Inlet, NY	17	07/06/93
13	B Howell	Sandy Hook, NJ	07/03/93	F Tenore Sr.	Earle Pier, NJ	13	07/06/93
13	D Evans	Sea Girt, NJ	06/24/93	J Makar	Shark R. Inlet, NJ	13	07/06/93
13	M Daniewicz	Sandy Hook, NJ	06/26/93	T Bubaw	Leonardo Pier, NJ	14	07/09/93
11	J White	Great South Bay, NY	07/03/93	E Howell	West Islip, NY	11	07/09/93
13	C Witek	W. Islip, NY	05/16/93	B Huergo	Great South Bay, NY		07/09/93
11	T Williams	Jones Inlet, NY	06/27/93	D Simon	Lido Beach, NY	12	07/09/93
11	C Fiorello	Avon, NJ	06/25/93	E Betsch	Shark R., NJ	11	07/09/93
10	M Greatsinger	Fire Is. Inlet, NY	07/03/93	K Intili	U.S.C.G., Fire Is., NY	10	07/09/93
10	J Timmermann	Freeport, NY	06/30/93	D Artus	Freeport, NY	10	07/10/93
13	C Fiorello	Shark R., NJ	07/05/93	M Garison	Shark R. Inlet, NJ		07/10/93
11	S Carlsen	Shark R., NJ	06/03/93	M Garison	Shark R. Inlet, NJ	13	07/10/93
10	S Knapik	Pt. Lookout, NY	07/09/93	A Keller	Pt. Lookout, NY	10	07/10/93
13	M Daniewicz	Sandy Hook, NJ	06/26/93	J Hagen	Sandy Hook, NJ		07/10/93
10	R Anderson Jr.	Fire Is. Inlet, NY	06/06/93	C Weckerle	Great South Bay, NY		07/11/93
12	T Stanik	Coney Island Flats, NY	07/12/92	V Olivero	Jones Inlet, NY	16	07/11/93
10	V Rossi	Long Beach, NY	07/12/93	A Ehrhardt	Atlantic Beach, NY		07/13/93
12	J Calamia	Point Lookout, NY	05/26/93	R Tompkins	Jones Inlet, NY	13	07/13/93
10	H Schneider	Shark River, NJ	07/05/93	F Pike	Shark R. Inlet, NJ	10	07/15/93
12	C Witek	Fire Is. Inlet, NY	06/01/92	K Capella	Bay Shore, NY	14	07/15/93
13	M Greatsinger	Snake Hill Chan., NY	06/06/93	F Broyles	Jones Inlet, NY		07/15/93
13	C Fiorillo	Shark River, NJ	07/02/93	W Sistasd	Shark River, NJ		07/15/93
11	J Timmermann	Pt. Lookout, NY	06/05/93	P Kuveikis	Reynolds Chan., NY	13	07/16/93
12	K Lohraff	Sandy Hook, NJ	07/12/93	J Burulia	Sandy Hook, NJ		07/17/93
12	S Knapik	Pt. Lookout, NY	07/09/93	J Janas	I ido Beach, NY	12	07/17/93
10	S Knapik	Pt. Lookout, NY	07/09/93	R Christiansen	Reynolds Chan., NY	11	07/17/93
12	B Shillingford	Corson's Inlet, NJ	07/08/93	R Reed	Corson's Inlet, NJ		07/17/93
12	S Fries	Gravesend Bay, NY	07/17/92	J Federocko	Jones Inlet, NY	13	07/18/93

"Do you have tags for turtles? I caught quite a few (15 to 20 inches across the shell), with crab traps and released them in Harmon Cove, Secaucus, NJ. I saved quite a few hatchlings from a parking lot where they were being run over by trucks or being eaten by sea gulls. I picked up dozens by hand and put them in the water and on the mud flats."

ELIGIO INGIGNOLI, SECAUCUS, NJ

"I don't catch all of those channel bass, just my share. I fish with four other guys, one week in the spring and one in the fall. They catch their share. The fish were all caught in the surf."

HOWARD BLAZER, HOG ISLAND, VA
Written in response to Pam Carlsen's comment regarding the number of large (47-50") channel bass (red drum) tagged at Hog Island.

11	S Knapik	Pt. Lookout, NY	07/09/93	S Flinn	Pt. Lookout, NY		07/18/93
12	J Snell	Sea Girt, NJ	07/07/93	M Feldman	Spring Lake, NJ	12	07/19/93
12	J Timmermann	Pt. Lookout, NY	06/13/93	B Patterson	Long Beach, NY	12	07/20/93
15	A D'Amato	Delaware Bay, NJ	07/01/93	J Clay	Delaware Bay, NJ		07/20/93
13	D Dinger	Sea Girt, NJ	06/24/93	J Bogan	Bay Head, NJ	14	07/21/93
13	K Miles	Sea Girt, NJ	06/13/93	G Tamasy	Manasquan R., NJ	13	07/21/93
11	D Rosen	Long Beach, NY	06/24/93	A Seelick	Long Beach, NY	13	07/21/93
10	D Rosen	Long Beach, NY	06/24/93	J Hanley	Pt. Lookout, NY		07/21/93
14	S Carlsen	Atlantic Highlands, NJ	06/22/93	A Wolenter	Sandy Hook, NJ	15	07/22/93
13	D Gladysiewicz	Upper Raritan Bay, NJ	06/25/93	A DiGiambattista	Raritan Bay, NJ	13	07/22/93
08	F Waltzinger III	Avon, NJ	07/13/93	R Czop	Shark R. Inlet, NJ	11	07/22/93
12	B Shillingford	Corson's Inlet, NJ	07/07/93	R Reed	Corson's Inlet, NJ		07/23/93
09	M Greatsinger	Fire Is. Inlet, NY	07/17/93	B Wanderer	Great South Bay, NY	10	07/23/93
11	J White	Point Lookout, NY	07/07/93	J Eckes	Reynolds Channel, NY	12	07/23/93
11	R Anderson Jr.	Fire Is. Inlet, NY	06/27/93	T Jensen	Great South Bay, NY		07/23/93
13	T Stanik	Sandy Hook, NJ	07/18/93	D Schmehr	Sandy Hook, NJ	13	07/24/93
10	S Carlsen	Atlantic Highlands, NJ	06/14/93	J Coluccio	Earle Pier, NJ	13	07/24/93
13	N Fiorillo Jr.	Long Branch, NJ	07/03/93	B Truex	Long Branch, NJ		07/24/93
12	R Conklin	Cape May, NJ	08/05/92	T Buban	Raritan Reach Chan., NJ	13	07/24/93
10	S Carlsen	Shark River, NJ	06/07/93	W Sharpe	Shark R. Inlet, NJ	11	07/24/93
13	B Dalton	Long Branch, NJ	07/15/93	B Stromko	Deal, NJ	13	07/25/93
10	B Shillingford	Corsons Inlet, NJ	07/09/93	H Roesberg	Inside, Strathmere, NJ	12	07/25/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
12	B Filce	Bayhead, NJ	07/22/93	O Vernacchio	Manasquan Inlet, NJ	13	07/25/93
12	R Anderson, Jr	Captree, NY	05/29/93	T Iwanejko	Fire Is. Inlet, NY	13	07/27/93
13	S Fries	Offsh., Coney Is., NY	06/26/93	J King	Seagate, NY	14	07/27/93
12	R Halsey	Mantaloking, NJ	07/16/93	Unknown fshrman	Manasquan Inlet, NJ	13	07/27/93
13	J Timmermann	Pt. Lookout, NY	06/05/93	G Doris	Lido Beach, NY		07/27/93
10	D Rosen	Long Beach, NY	06/24/93	M Zullo	Jones Inlet, NY	12	07/28/93
14	J Jackson	Cape May, NJ	07/24/93	A Croathamel	Cape May, NJ	14	07/28/93
10	C Fiorillo	Avon, NJ	06/25/93	T Lund	Sea Girt, NJ	11	07/28/93
11	T Stanik	Sandy Hook, NJ	07/18/93	K Casey	Sandy Hook, NJ	11	07/28/93
11	B Shillingford	Corson's Inlet, NJ	07/07/93	C Stabolepszy	Corson's Inlet, NJ		07/28/93
09	R Gremli	Fire Is. Lt., NY	07/04/93	G Maier	Fire Is. Lt., NY	11	07/28/93
12	K Leopold	Great South Bay, NY	06/13/93	C Cunningham	Great South Bay, NY	13	07/28/93
12	L Saul	Moriches Bay, NY	07/14/93	F DeCosterd	Moriches Bay, NY	12	07/29/93
13	S Carlsen	Atlantic Highlands, NJ	06/13/93	J Miotta	Earle Pier, NY	14	07/29/93
12	J Timmermann	Freeport, NY	06/19/93	W Kirchstetter	Jones Inlet, NY	13	07/29/93
12	R Anderson Jr.	Captree, NY	07/11/93	B Schultheis	Babylon, NY		07/30/93
12	C Fiorillo	Long Branch, NJ	06/02/93	T Buban	Raritan Reach Chan., NJ	13	07/30/93
13	R Anderson Jr.	Fire Is. Inlet, NY	06/13/93	J Hartman	Fire Is. Inlet, NY		07/31/93
10	J White	Great South Bay, NY	07/03/93	C Brand	Great South Bay, NY	12	07/31/93
11	S Knapik	Pt. Lookout, NY	07/09/93	B Riever	Lido Beach, NY		07/31/93
12	S Knapik	Pt. Lookout, NY	06/26/93	B Gorelin	Long Beach, NY		07/31/93
13	B Shillingford	Corson's Inlet, NJ	07/04/93	M Stewart	Avalon, NJ	15	07/31/93
12	M Greatsinger	Fire Is. Inlet, NY	07/17/93	J Milton	Great South Bay, NY	12	07/31/93
13	R Anderson, Jr	Fire Is. Inlet, NY	05/22/92	B Gozzi	Guilford, CT	15	08/01/93
11	E McDonald	Delaware Bay, NJ	07/10/93	C Baur	Delaware Bay, NJ		08/01/93
11	A Kahlau	Rockaway Inlet, NY	06/12/93	G Jakubauskas Sr.	Manhattan Beach, NY	13	08/01/93
13	F Spall	Sandy Hook, NJ	07/19/93	M Teixeira	Sandy Hook, NJ	13	08/01/93
13	R Hipp	Merrick, NY	06/08/93	F DiFiglia	Merrick, NY		08/01/93
13	F Waltzinger III	Ocean Grove, NJ	06/29/93	J Marascio	Asbury Park, NJ	13	08/02/93
13	B Dalton	Long Branch, NJ	07/10/93	D Froscella	Long Branch, NJ	13	08/02/93
12	E Puzio	Navesink R., NJ	09/15/92	M Youngelman	Pt. Lookout, NY	12	08/02/93
13	J Snell	Sea Girt, NJ	07/07/93	Unknwn fisherman	Sea Girt, NJ	13	08/03/93
12	J Timmermann	Pt. Lookout, NY	06/13/93	K Theobald	Long Beach, NY	12	08/03/93
13	D Rosen	Reynolds Chan., NY	06/25/93	C Emilio	Lido Beach, NY	14	08/03/93
14	A Nelson	Navesink R., NJ	07/31/93	L Maliszewski	Navesink R., NJ	14	08/04/93
15	P Hahn	Pt. Sandy Hook, NJ	05/22/93	L Maliszewski	Navesink R., NJ	15	08/04/93
11	E Feret	Merrick, LI., NY	07/31/93	R Mendelson	Freeport, NY		08/04/93
12	S Knapik	Pt. Lookout, NY	08/28/92	P Lemze	Pt. Lookout, NY	13	08/05/93
12	A D'Amato	Cape May, NJ	07/22/93	J Conrad	Cape May, NJ	13	08/05/93
10	R Haug	Moriches Bay, NY	07/03/93	J Tuszyński	Moriches Bay, NY	13	08/05/93
13	S Stepanski	Miah Maul Shl, DE Bay	07/30/92	T Buban	Raritan Reach Chan., NJ	16	08/07/93
11	K Leopold	Great South Bay, NY	07/11/93	T Stallone	Great South Bay, NY	11	08/08/93
12	C Witek	West Islip, NY	08/02/93	A Troll	Fire Island, NY	13	08/08/93
11	R Anderson Jr.	Captree, NY	06/01/93	C Kumpa	Fire Is. Inlet, NY		08/08/93
12	S Wisniewski	Barneget Bay, NJ	07/06/93	J Strobel	Barneget Inlet, NJ	14	08/08/93
12	J Tirpak	Manasquan River, NJ	06/05/93	G Kovacevich	Ambrose Channel, NY	14	08/09/93
14	B Hrobak	Island Beach, NJ	07/30/93	B Richardson	Barneget Light, NJ	14	08/09/93
13	C Witek	Bay Shore, NY	08/02/93	E Ramsey	Bay Shore, NY		08/09/93
12	R LaBella	Amityville, NY	07/31/93	M Lazzaro	Copiague, NY		08/09/93
12	S Fries	Raritan Bay, NJ	07/24/93	R Robertson	Raritan Bay, NJ	13	08/09/93
11	S Knapik	Point Lookout, NY	06/26/93	B Toth	Reynolds Channel, NY	12	08/10/93
14	B Filce	Mantaloking, NJ	07/13/93	E Pharo	Manasquan Inlet, NJ	15	08/10/93
13	B Shillingford	Ludlam Bay, NJ	07/07/92	H Roesberg Jr.	Ocean City, NJ	13	08/11/93
12	R Anderson Jr.	Robt. Moses Brdg., NY	06/05/93	A Heinsohn	Great South Bay, NY	11	08/11/93
13	P Hahn	Sandy Hook, NJ	07/03/93	A Ladzinski	Earle Pier, NJ	13	08/12/93
13	R Meyer	Earle Pier, NJ	08/13/93	W Bannon	Earle pier, NJ		08/13/93
11	S Carlsen	Atlantic Highlands, NJ	06/13/93	A Trimarco	Rockaway Inlet, NY	14	08/14/93
15	M Habel	Raritan R., NJ	07/25/93	D Veldkamp	Staten Is., NY	15	08/14/93
11	A D'Amato	Cape May, NJ	08/04/93	P Wittensoldner	Cape May Inlet, NJ		08/14/93
11	J Timmermann	Point Lookout, NY	07/15/93	A Mandel	Jones Inlet, NY	12	08/14/93
15	J Dotsey	Lido Beach, NY	05/09/93	G Grimaldi	Captree St. Pk., NY	16	08/15/93
12	M Greatsinger	Fire Is., Inlet, NY	08/08/93	K Tisch	Fire Is. Inlet, NY	13	08/15/93
13	P O'Neil	Harey Cedars Lump, NJ	07/21/93	J Safaryn	2 mi. S Barneget Inlet, NJ13		08/15/93
14	R Johnson	Long Branch, NJ	07/17/93	P Donnelly	Long Branch, NJ	14	08/18/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
13	J White	Fire Is. Light, NY	08/20/93	B Shannon	Kismet, L.I., NY	14	08/21/93
10	J Seton	Sandy Hook, NJ	06/19/93	D Menge	Earle Pier, NJ	10	08/21/93
13	T Stanik	Earle Pier, NJ	08/13/93	T Buban	Earle Pier, NJ	13	08/21/93
12	R Anderson, Jr	Fire Is. Inlet, NY	05/22/92	D Reed	Bay Shore, NY	19	08/21/93
14	S Fries	Jamaica Bay, NY	08/16/93	G Carter	Marine Pkwy. Brdg., NY	15	08/22/93
11	B Shillingford	Corson's Inlet, NJ	07/09/93	H Rosberg	Corson's Inlet, NJ	13	08/23/93
13	W Gano	Moriches Bay, NY	08/03/93	R Buggy	Shinnecock Bay, NY		08/23/93
13	W Gano	Moriches Bay, NY	08/05/93	W Reynolds	Moriches Bay, NY	14	08/24/93
13	M Greatsinger	Fire Is. Lt., NY	07/10/93	G Fuchs	Fire Is. Inlet, NY		08/24/93
11	J Timmermann	Pt. Lookout, NY	06/05/93	E Mobilio	Jones Inlet, NY	12	08/24/93
13	A D'Amato	Cape May Pt., NJ	08/05/93	R Link	Cape May, NJ		08/25/93
13	B Shillingford	Ludlum Bay, NJ	05/18/93	H Hutt	Ludlum Bay, NJ	14	08/25/93
13	A D'Amato	Cape May, NJ	07/23/93	T McCausland	Delaware Bay, NJ		08/25/93
12	C Wilcox	Moriches, NY	06/17/93	M La Clair	Moriches Bay, NY	13	08/25/93
14	J Calamia	Merrick, NY	06/04/93	R Marino	Merrick Bay, NY	14	08/25/93
13	M Zielen	Sandy Hook, NJ	06/28/92	G Jasinski	Ambrose Chan., NJ	15	08/26/93
	NJ Marine S.C.	Sandy Hook Bay, NJ	08/24/93	B Pellicano	Earle Pier, NJ	16	08/26/93
13	R Haug	Moriches Inlet, NY	08/07/93	G Stephani	Moriches Inlet, NY	14	08/26/93
14	R Joyce	Pt. Judith, RI	08/03/92	F/V Miss Shannon	Offshr., Nantucket, MA		08/26/93
12	R Haug	Moriches Bay, NY	06/14/93	C Coppola	Moriches Bay, NY	13	08/26/93
12	A D'Amato	Cape May, NJ	07/30/93	D Milligan	Cape May Inlet, NJ	13	08/27/93
13	D Haug	Moriches Inlet, NY	08/07/93	T Cangelosi	Moriches Inlet, NY	14	08/28/93
13	R Hipp	Merrick, NY	06/08/93	T Viola	Sloop Chan., NY	13	08/29/93
11	E Feret	Freeport, NY	06/06/93	G Danko	Wantagh, NY	15	08/29/93
14	T Surgent	Shark River, NJ	08/08/93	G Haag IV	Belmar Inlet, NJ	14	08/30/93
13	A Evangelista	Staten Island, NY	08/29/92	S Filippone	Sandy Hook Chan., NJ	14	08/30/93
12	T Surgent	Shark River, NJ	08/07/93	J Maffia	Shark River, NJ	13	08/30/93
10	S Wisnewski	Barnegat Lt., NJ	07/06/93	B Chappell	Barnegat Bay, NJ		08/30/93
12	J Calamia	Merrick, NY	05/31/93	W Neumann	Merrick Bay, NY	14	08/31/93
12	A Autieri	Fire Is. Inlet, NY	08/23/93	J Weder	Great South Bay, NY		08/31/93

"Greetings from Stuart, FL. I hope all is well. The bluefish I tagged 2/27/94 is my 2,000th fish tagged. This winter, I've been tagging one year old blues with the hope of a northeast return. I've been tagging almost 20 years and have 119 returns. Setting my sights on 3,000."

JACK O'KEEFFE.

"Day after Thanksgiving, Brad talked me into going out for a daytime trip. I was convinced it's over, (it's been real cold, teen and single digits at night), what do you know, we find a big school of big bluefish in 60' of water in the Race. Some fast action to end the season with."

MICHAEL KEEGAN, GROTON, CT

10	C Fiorillo	Shark River, NJ	07/02/93	M Ladjack	Shark River, NJ	13	09/02/93
13	E Lelie	Raritan Bay, NJ	07/22/93	S Moskal	South Amboy, NJ	14	09/03/93
13	S Fries	Jamaica Bay, NY	08/16/93	A Outeiral	Jamaica Bay, NY	09	09/03/93
14	R Johnson	Long Branch, NJ	07/17/93	J Rios	Long Branch, NJ	14	09/04/93
13	C Witek	Fire Is. Inlet, NY	08/06/93	J Condia Jr.	Fire Is. Inlet, NY	14	09/05/93
13	W Gano	Moriches Bay, NY	08/05/93	M Becker	Moriches Inlet, NY	14	09/05/93
12	M Contessa	Moriches, NY	08/04/93	F Mellon	Moriches Bay, NY	13	09/05/93
14	S Carlsen	Shark River, NJ	07/26/93	R Grochocki	Shark R. Inlet, NJ	14	09/05/93
13	W Gano	Moriches Bay, NY	07/21/93	J Griffin	Moriches Inlet, NY	14	09/05/93
13	S Fries	Ambrose Chan., NJ	08/28/93	R Raymond	Ambrose Chan., NJ	13	09/05/93
13	S Fries	Ambrose Chan., NJ	08/28/93	S Atanacio Jr.	Ambrose Chan., NJ	13	09/05/93
13	W Filce	Pt. Pleasant, NJ	08/29/93	J Schmidt	Manasquan Inlet, NJ	13	09/06/93
12	S Knapik	Pt. Lookout, NY	08/26/93	R Mittasch	Jones Inlet, NY	13	09/06/93
13	S Knapik	Pt. Lookout, NY	08/26/93	B Castle	Jones Inlet, NY		09/06/93
12	E Feret	Merrick, NY	08/15/93	G Ehmman	Neds Creek, L.I., NY	13	09/07/93
11	F Waltzinger III	Lavallette, NJ	08/06/93	R Nickerson	Spring Lake, NJ	13	09/07/93
12	W Filce	Manasquan R., NJ	08/30/93	T Cusmano	Manasquan, NJ	13	09/07/93
13	R Joyce	Pt. Judith, RI	06/14/92	F/V Jenasara	Nantucket Sound, MA	17	09/08/93
12	S Fries	Sea Bright, NJ	06/05/93	T Buban	Sandy Hook Chan., NJ	14	09/09/93
10	S Knapik	Pt. Lookout, NY	06/12/93	M Nathanson	Lido Beach, NY	13	09/10/93
11	C Fiorillo	Shark River, NJ	06/08/92	H Sundermann	Jamaica Bay, NY	14	09/10/93
13	C Wilcox III	Moriches Bay, NY	08/02/93	A Kozusko	Moriches Inlet, NY	14	09/10/93
13	T D'Amato	Cape May, NJ	08/19/93	J Fuscellaro	Cape May Inlet, NJ	14	09/11/93
12	S Knapik	Pt. Lookout, NY	06/23/93	J Jakubowski	Reynold's Chan., NY		09/11/93
12	E Willner	Sandy Hook, NJ	06/20/93	G Currie Jr.	Long Branch, NJ	16	09/11/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
13	E Feret	Freeport, NY	07/31/93	R Padillo	Jones Inlet, NY	16	09/11/93
13	M Ross	West Bank Lt., NY	07/11/93	T Rupp	Ambrose Chan., NJ	14	09/12/93
13	D Mann	Pt. Jefferson, NY	08/22/93	A Wilson	Pt. Jefferson, NY	13	09/13/93
12	D Dingler	Manasquan Beach, NJ	06/24/93	G Bachert	Sea Bright, NJ	13	09/14/93
12	A D'Amato	Cape May, NJ	07/28/93	T McCausland	Offsh., Stone Hrbr, NJ	14	09/14/93
13	S Fries	Rockaway Inlet, NY	08/29/93	F Hill	Rockaway Reef, NY		09/15/93
13	S Fries	Coney Is., NY	07/03/93	D Lang	Coney Is., NY	16	09/15/93
11	M Contessa	Moriches, NY	08/04/93	M Varecka	Moriches, NY		09/18/93
14	E Zinke	Manasquan, NJ	06/07/93	N Macher	Belmar, NJ		09/18/93
13	G Boiko	Moriches Bay, NY	07/25/93	J Makarewicz	Moriches Bay, NY	13	09/18/93
14	S Carlsen	Shark R., NJ	07/26/93	P Lytle	Asbury Pk, NJ	14	09/19/93
10	S Carlsen	Atlantic Highlands, NJ	06/22/93	R Raymond	Riis Park, NY	12	09/19/93
10	R Johnson	Raritan Bay, NJ	07/31/93	M Camhi	Jones Inlet, NY	13	09/19/93
13	W Gano	Moriches Bay, NY	08/19/93	A Costadura	C. Moriches, NY	14	09/19/93
13	J Hickey	Spring Lake, NJ	07/09/93	J Burkitt	N of Manasquan Inlet, NJ	13	09/19/93
12	N Fiorillo Jr.	Belmar, NJ	09/04/93	G Barnett	Spring Lake, NJ	12	09/20/93
14	S Knapik	Pt. Lookout, NY	08/22/93	B Surowiec	Pt. Lookout, NY	15	09/20/93
15	B Filce	Mantaloking, NJ	07/13/93	J Cusick	Bay Head, NJ	16	09/21/93
13	S Wisniewski	Belmar, NJ	07/16/93	E Travers	Belmar, NJ	13	09/24/93
13	J Calamia	Pt. Lookout, NY	06/04/93	V Colamussi	Jones Inlet, NY	14	09/24/93
13	A Nelson	Navesink R., NJ	07/31/93	R Kastner	Oceanic Brgd., NJ	15	09/24/93
13	S Fries	Rockaway Inlet, NY	09/12/93	M Cuneo	Breezy Point, NY		09/25/93
12	T Surgent	Shark River, NJ	08/07/93	J Moffin	Shark River, NJ	14	09/28/93
12	K Case	Freeport, NY	08/13/93	H Scarabeni	Merrick, NY		09/30/93
13	T Cusmano	Manasquan Beach, NJ	09/07/93	M Over	Asbury Park, NJ	14	10/01/93
12	F Waltzinger III	Ocean Grove, NJ	06/29/93	J Nieffen	Shark River, NJ	13	10/02/93
11	S Carlsen	Shark River, NJ	07/26/93	J Nieffen	Shark River, NJ	13	10/02/93
14	G Horvath	Island Bch. St. Pk., NJ	08/15/93	C Breil	Island Bch. St. Pk., NJ	17	10/03/93
11	R Nelson	Merrick Bay, NY	09/20/93	F Patterson	Jones Inlet, NY	12	10/03/93
14	A D'Amato	Cape May, NJ	09/29/93	J Klatszky	Cape May, NJ	14	10/06/93
14	A D'Amato	Cape May, NJ	10/01/93	K Ward	Cape May, NJ	14	10/06/93
14	D Koenig	Delaware Bay, NJ	07/25/93	D Bradshaw	Cape May, NJ	14	10/09/93
14	M Greatsinger	Captree, NY	05/30/93	V Titone	Bay Shore, NY		10/10/93
12	C Witek III	Robert Moses Brgd., NY	07/12/90	V Titone	Bay Shore, NY	17	10/10/93
13	M Contessa	Moriches, NY	08/18/93	J Miller	Moriches, NY		10/12/93
15	S Carlsen	Shark R., NJ	09/13/93	K Daniels	"Off New York"	15	11/08/93
11	A Kahlau	Rockaway Pt., NY	07/18/92	S Daniels	Offsh., NC/VA		12/03/93
14	B Filce	Mantaloking, NJ	07/13/93	F/V Fare Lady	Offsh., Hudson Canyon	16	12/28/93
14	L Ruch Jr.	Tuckerton, NJ	06/19/93	Sea Rich Seafood	SW of Block Is., RI		01/03/94
12	B Shillingford	Ludlum Bay, NJ	07/05/93	F/V Fare Lady	Offsh., Hudson Canyon	13	01/07/94
14	S Fries	Ambrose Chan., NY	09/14/93	Nordstrom Fish Co.	Offsh., Block Canyon		01/21/94
14	C Goldfarb	Shinnecock Inlet, NY	09/22/93	F/V Heather Lynn	Offsh., Rhode Is.		01/24/94
14	M Russo	Moriches Bay, NY	06/07/93	Captain's Ketch Sfd.	Philadelphia Fish Market	14	01/25/94
10	M Zielen	Sea Bright, NJ	07/03/92	R Barber	Offsh., Hudson Canyon	18	01/27/94
13	M Keegan	Stonington, CT	08/28/93	R Barber	Offsh., Hudson Canyon	14	01/27/94
12	A Kahlau	Tin Can Grounds, NY	06/29/92	K Schneider	Offsh., Nantucket, MA	17	01/29/94
13	W Gano	Moriches Bay, NY	08/03/93	F/V Mary Elizabeth	Offsh., Rhode Is.	14	02/02/94
11	S Carlsen	Atlantic Highlands, NJ	06/14/93	P Westcott	Offsh., Mth Vnyrd, MA	14	02/02/94
15	M Contessa	Moriches, NY	09/04/93	T McVey	Offsh., Rhode Is.		02/03/94
14	D Evans	Spring Lake, NJ	09/19/93	F/V Fare Lady	Offsh., Hudson Canyon	14	02/03/94
15	P Schrader	Moriches Bay, NY	07/19/93	R Barber	Offsh., Atlantis Canyon	18	02/09/94
13	W Filce	Manasquan R., NJ	08/30/93	F/V Susan L	Offsh., Block Canyon	14	02/20/94
13	R Meyer	Earle Pier, NJ	08/08/93	K Barrington	Offsh., Block Canyon		03/01/94
11	S Carlsen	Atlantic Highlands, NJ	06/13/93	J Yates	Offsh. Rhode Is.	14	03/14/94
14	S Carlsen	Atlantic Highlands, NJ	06/28/92	Oceans Seafood	Landed in VA	17	03/16/94

Greater Amberjack

37	G Dulka	Offsh., Rudee Inlet, VA	07/02/93	C Potter	Currituck Bch., NC	37	07/02/93
41	G Dulka	Offsh., Rudee Inlet, VA	07/02/93	JC Wright	Offsh., Rudee Inlet, VA		07/18/93
41	G Dulka	Offsh., Rudee Inlet, VA	07/02/93	D Clark	Offsh., Rudee Inlet, VA	41	08/09/93
40	G Dulka	Offsh., Rudee Inlet, VA	09/17/93	D Snelling	Chesapeake Lt. Twr, VA		09/22/93

Red Drum

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
17	E Fuss	Bald Head Is., NC	11/30/92	V Steed Jr.	Corncake Inlet, NC	25	08/03/93
16	E Fuss	Bald Head Is., NC	09/20/93	E Garber	Bald Head Is., NC	16	09/28/93

Red Grouper

13	B Norris	Offsh., Sarasota, FL	07/25/92	V Brock	Offsh., Homosassa, FL	20	12/04/93
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Sheepshead

18	A Bonney	Pamlico Sound, NC	09/18/93	E Veal	Hatteras Inlet, NC		10/27/93
08	D Sherman	Offsh., Savannah, GA	12/04/93	D Sherman	Offsh., Savannah, GA	08	12/08/93
08	D Sherman	Offsh., Savannah, GA	02/22/94	D Sherman	Offsh., Savannah, GA	08	03/06/94
12	D Sherman	Offsh., Wassau Is., GA	03/06/94	Russo's Seafood	Offsh., Wassau Is., GA	12	03/09/94
12	D Sherman	Offsh., Wassau Is., GA	03/06/94	Cavuoto	Offsh., Wassau Is., GA		03/15/94
10	D Sherman	Offsh., Savannah, GA	02/22/94	B Baker	Savannah Reef, GA	13	03/31/94

Snook

19	C Gifford	Sebastian River, FL	01/29/91	B Roake Jr.	Lake Worth Spillway, FL	31	09/01/93
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Striped Bass

37	D Magnasco	Boston Harbor, MA	06/27/93	W Ramos	Dorchester, MA		
16	W Ricci	Plum Is., MA	06/01/89	N Nazquetelles	Rye Beach, NY	18	05/12/90
33	E Baracchini	Cape Cod Canal, MA	05/29/91	S Kane	Cape Cod Canal, MA	33	06/08/91
35	E Baracchini	Cape Cod Canal, MA	05/25/91	T Carroll	Cape Cod Canal, MA	38	06/22/91
33	E Baracchini	Cape Cod Canal, MA	06/06/91	J Reilly	Cape Cod Canal, MA	35	06/29/91
18	F Casey	Boston, MA	10/07/91	J Brilliant	Boston, MA		11/06/91
21	F Casey	Boston, MA	09/27/91	M Schubert	Montrose, NY	21	04/27/92
32	E Baracchini	Cape Cod Canal, MA	05/26/91	T Koslowski	Cape Cod Canal, MA	37	07/29/92
34	R Anderson Jr.	Fire Is. Inlet, NY	07/05/92	J Proetta	Fire Is. Inlet, NY	38	08/15/92
29	F Casey	Boston, MA	06/17/91	P Pender	Boston, MA		08/15/92

"We caught stingrays on the NJ side of the Delaware Bay on the mud flats at a little town called Del Haven, NJ. Every year, they are thick in there, mating. You can see them from the beach."

JERRY JACKSON, VILLAS, NJ

"It's finally spring, the herring are in the runs. Here on the Cape the schoolies should be in this week. This is going to be a HUGE year. 10 wt. flyrods will take their share."

BOB MAHONEY, HARWICH, MA

17	D Goodwin	Indian R. Inlet, DE	08/14/92	Morris & Son Sfd.	Rappahannock R., VA		12/20/92
30	A Anderson	Pt. Judith, RI	10/25/91	R Brown	Hog Is. James R., VA		02/20/93
21	J Samyn	Barker Pt., NY	12/01/93	M Parker	Port Monmouth, NJ	24	04/20/93
24	G D'Amato	Stratford, CT	05/15/92	N.Y.S.D.E.C.	Hudson River, NY	26	04/28/93
25	A Dangelo	Watch Hill, RI	10/06/92	N.Y.S.D.E.C.	Hudson River, NY		04/29/93
30	T Hodun	Stratford, CT	09/02/92	N.Y.S.D.E.C.	Hudson River, NY		04/29/93
19	A Schweithelm	Eatons Neck, NY	11/11/92	D Gary	East R. at 97th St., NY		05/01/93
34	K Muise	Nahant, MA	07/26/92	J Stephens	Mouth Patuxent R., MD	35	05/02/93
36	P Grippo	Long Beach, NY	06/14/92	N.Y.S.D.E.C.	Hudson River, NY	37	05/11/93
24	K Leopold	Rbrt Moses St. Pk., NY	06/17/92	N.Y.S.D.E.C.	Hudson River, NY	27	05/14/93
22	R Pearson Jr.	Croton Bay, NY	05/07/93	C Burnett	Shinnecock Inlet, NY	24	05/15/93
33	D Wells	Stratford, CT	06/14/92	N.Y.S.D.E.C.	Hudson River, NY	36	05/21/93
24	R Anderson Jr.	Tobay Beach, NY	11/23/90	P Timmins	Merrimack R., MA		05/24/93
27	J Della Porta	Swampscott, MA	08/18/90	N.Y.S.D.E.C.	Hudson River, NY	33	05/24/93
33	O Van Helmond	East Marion, NY	11/13/91	N.Y.S.D.E.C.	Hudson River, NY	35	05/26/93
29	E Noll	Brenton Reef, RI	06/30/92	M Treeman	Brenton Reef, RI	32	05/28/93
29	J Brotz Jr.	Plum Island, MA	08/10/92	R Lynch	Newburyport, MA	30	06/01/93
22	C Payne	Boston, MA	06/15/92	R Balnis Jr.	Montauk Pt., NY		06/01/93
31	T Pendyk	Hoffman Is., NY	06/02/93	J Helberg	Robbins Rf. Lt., NY		06/03/93
29	M Morse	Block Island, RI	06/14/92	A Dangelo	Block Is., RI	30	06/03/93
28	A Anderson	Block Is., RI	07/09/92	A Dangelo	Block Is., RI	30	06/03/93
33	G Glowinski	Kings Pt., NY	09/17/92	S Witthuhn	Cold Spring Harbor, NY	33	06/04/93
35	C Lienau	Montauk, NY	08/31/92	D Vaughan	Westhampton, NY	38	06/05/93
31	J Caputo	Barkers Pt., NY	08/29/92	J Lowe	Cold Spring Harbor, NY	32	06/09/93
33	A Dangelo	Block Is., RI	03/27/92	C Donilon	Block Is., RI	33	06/10/93
35	A Anderson	Block Is., RI	06/11/92	E Jones	Jones Beach, NY	37	06/10/93
17	T Marburger	Northport, NY	04/12/92	N Mauro	Throgs Neck Brdg., NY	21	06/15/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
28	K Gleason	Stamford, CT	06/18/93	J Kelley, Jr	Stamford, CT	30	06/25/93
24	L Richards	Atlantic Beach, NY	06/27/93	R Doyle Jr.	Atlantic Bch. Brdg., NY	26	07/01/93
16	D Beshara	Merrimack R., MA	07/10/92	R Wilkins	Plum Is., MA	16	07/01/93
24	M Aiken	Stratford, CT	09/11/92	K Sedlak	Stratford, CT	24	07/01/93
21	J Doyle	Lambertville, NJ	07/13/91	S Kollar	Yardley, PA	28	07/01/93
36	B Siegel	Cos Cob, CT	06/20/93	T Kochan	Greenwich, CT		07/02/93
22	G Kerkhan	Provincetown, MA	07/09/92	P DiDomenico	Chatham, MA	26	07/02/93
38	J Carroll	Marshfield, MA	09/03/92	R Hamlin	Meduncook R., ME	41	07/02/93
18	D Sowerby	York, ME	08/27/92	J Cuister	Portsmouth, NH		07/02/93
24	J Doyle	Sandy Hook, NJ	09/15/91	F Sabatino	Fire Is., NY		07/03/93
22	W Brett	Nantucket, MA	10/23/92	G Brown	York Harbor R., ME	24	07/03/93
18	W Leahey	Newark, NJ	11/27/92	W Smith	Kill Van Kull, NJ	27	07/03/93
28	R Nystrom	Stratford, CT	06/03/91	S Durkee	Milford, CT		07/03/93
31	R Szellan	Verrazano Brdg., NY	11/17/91	R Lutzen	Charlestown, RI	33	07/03/93
21	T Lake	Chelsea, NY	04/28/92	E Ernst	Montauk Pt., NY	24	07/03/93
22	F Gunther Jr.	NY Harbor	09/27/91	D Ambrico	Breezy Pt., NY		07/03/93
33	E Miller	Hell Gate, NY	12/02/90	D Ambrico	Coney Is., NY		07/03/93
31	F Stunkel	Darien Harbor, CT	06/06/91	E Liss	W. L.I. Sound	33	07/03/93
22	M Ando	Cryder Pt., NY	04/23/90	R Specyalski	Westbrook, CT	38	07/03/93
31	K Gleason	Darien, CT	08/22/90	M Aulenti	Darien, CT	46	07/04/93
20	F Coronato	Staten Island, NY	06/22/93	G Gifford	Verrazano Brdg., NY		07/04/93
20	S Gross	City Island, NY	06/17/93	N Mauro	Throgs Neck Brdg., NY		07/04/93
	E Petronio Sr.	Block Is., RI	06/19/93	R Parri	Block Is., RI	32	07/04/93
25	A Autieri	New Rochelle, NY	06/25/92	S Friedman	New Rochelle, NY	30	07/04/93
21	F Danylczuk	Westhampton, NY	05/24/93	M Dania	Moriches Inlet, NY		07/04/93
26	A D'Amato	Cape May Pt., NJ	11/24/92	M Marchand	Cape Cod Canal, MA	26	07/04/93
24	P Krueger	Atlantic Bch. Brdg., NY	07/24/92	R Alvosia	E. Rockaway, NY		07/04/93
26	J Foti	Ft. Wadsworth, NY	09/01/92	G Gifford	Verrazano Brdg., NY		07/04/93
21	R Canfield	Darien, CT	07/26/92	R Canfield	Darien, CT	23	07/04/93
24	G Hansen	Sea Bright, NJ	11/23/91	A Finnie	Larchmont, NY		07/04/93
22	J Foti	Ft. Wadsworth, NY	08/02/92	G Gifford	Verrazano Brdg., NY		07/04/93
27	J Foti	Verrazano Brdg., NY	07/03/92	G Gifford	Verrazano Brdg., NY		07/04/93
34	B Billerman	Newburyport, MA	09/10/91	G Lalbie	Newburyport, MA	37	07/05/93
26	W Ridder	Sakonnet R., RI	05/25/91	D Carusoe	Barrington R., RI	30	07/05/93
34	E Wargo	Westport, CT	07/06/92	T Russo	Westport, CT	36	07/05/93
33	F Strmiska	Fishers Is., NY	06/20/93	F Strmiska	Fishers Is., NY	33	07/05/93
30	J Foti	Ft. Wadsworth, NY	06/26/93	J Bulling	Coney Island, NY	34	07/05/93
36	B Cotiaux	Plum Is., NY	09/18/92	G Grosselfinger	Orient Pt., NY		07/05/93
25	J Della Porta	Swampscott, MA	09/06/90	J Bulling	Coney Island, NY	34	07/05/93
28	F DeMenezes	Newport, RI	06/19/93	P Ferreira	Little Compton, RI	28	07/05/93
33	F Strmiska	E. end Fishers Is., NY	06/20/93	F Strmiska	E. end Fishers Is., NY	33	07/05/93
25	G Buono	Verrazano Brdg., NY	07/03/93	J Foti	Ft. Wadsworth, NY	25	07/06/93
	P Bombino	Statue of Liberty, NY	05/30/93	F Heal	Staten Island, NY	27	07/06/93
32	M Keegan	The Race, L.I. Sound	08/23/92	P Carrera	New London, CT	40	07/06/93
34	G Keenan	Shinnecock, NY	05/21/93	C Raynor	Shinnecock Inlet, NY		07/06/93
16	G Wernock	Bayonne, NJ	05/23/93	O Christianson	Bayonne, NJ	19	07/06/93
27	A Anderson	Charlestown, RI	10/06/92	L Zarella	Barnstable, MA	29	07/06/93
26	B Silva	Staten Island, NY	06/23/93	D Mineo	Ft. Wadsworth, NY		07/06/93
30	A Anderson	Block Is., RI	06/30/93	P Brassard	Block Is., RI		07/06/93
23	J Karolides	Danvers, MA	08/05/92	S Saniewski	Sea Girt, NJ	24	07/07/93
22	J Kleuskens	Mays Landing, NJ	04/09/93	M Christiansen	Longport, NJ	23	07/07/93
17	T Marburger	Northport, NY	01/03/93	B Conley	Chatham, MA	18	07/07/93
31	G Keenan	Shinnecock, NY	05/26/93	J Lemke	Block Is., RI	31	07/07/93
20	R Grobarz	Sandy Hook, NJ	12/14/90	T Pendyk	Verrazano Brdg., NY	23	07/08/93
25	G Buono	Verrazano Brdg., NY	07/03/93	T Pendyk	Verrazano Brdg., NY	27	07/08/93
28	G Buono	Verrazano Brdg., NY	06/19/93	G Chandler	Sandy Hook, NJ	30	07/09/93
33	D Kelly	Orient Point, NY	06/28/91	R Wein	Orient Pt., NY	36	07/10/93
22	S Kellner	Mattituck, NY	06/06/92	F Milenkovic	Throgs Neck Brdg., NY	28	07/10/93
24	S Penta	Boston, MA	06/07/93	J Della Porta	Boston, MA	24	07/10/93
18	W Matuszak	Gilgo Beach, NY	04/29/92	R Nystrom	Stratford, CT	23	07/10/93
28	A LoCascio	Hart Is., NY	06/25/92	D Beck	Hart Is., NY	30	07/10/93
34	J Della Porta	Boston, MA	06/17/93	R Bergeron	Boston Hrbr Islnds, MA	36	07/10/93
25	K Sprankle	Outer Banks, NC	01/26/91	S Moreira	Pt. Judith, RI	27	07/10/93
24	J Brotz Jr.	Plum Island, MA	08/10/92	S Balthazar	Newburyport, MA	28	07/11/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
30	B Shillingford	Cape May, NJ	11/12/92	C DeCrescenzo	East River, NY		07/11/93
31	J Caputo	Hart Island, NY	05/30/92	D Butti	Ellis Is., NY		07/11/93
31	D Magnasco	Boston Harbor, MA	06/21/91	J Ciulla	Winthrop, MA	34	07/11/93
22	D Kelly	Orient Pt., NY	09/17/91	N Cyprus	Orient Pt., NY	37	07/11/93
26	F Coronato	Staten Island, NY	06/29/93	DeCrescenzo	East R., NY		07/11/93
33	S Witthuhn	Cold Spring Harbor, NY	06/03/92	S Witthuhn	Cold Spring Harbor, NY	34	07/12/93
30	T Lynch	Stamford, CT	10/09/92	B Finke	Stamford, CT	30	07/12/93
23	T Lake	Chelsea, NY	05/06/93	S Russo	Northport, NY	24	07/12/93
22	A Autieri	New Rochelle, NY	09/17/92	F Giuliani	New Rochelle, NY	22	07/12/93
19	F Stunkel	Stamford, CT	07/26/89	T Lynch	Stamford, CT	28	07/13/93
34	F Stunkel	Darien, CT	10/24/92	S Yarish	Darien, CT		07/13/93
31	F Stunkel	Darien, CT	08/22/92	R Yarish	Darien, CT	34	07/13/93
34	M Favale	Boston, MA	07/03/92	B Matthes	Weymouth, MA	37	07/13/93
33	J Calamia	Montauk Pt., NY	07/04/93	S Witthuhn	Montauk Pt., NY	35	07/13/93
29	D Partusch	Shrewsbury R., NJ	10/24/92	L Meyran	Sands Pt., L.I. Sound	30	07/14/93
38	A Vallas	Gilgo Beach, NY	10/23/92	D Gagne	Shark R., NJ	39	07/14/93
26	W Ridder	Sakonnet River, RI	05/29/91	W Dickinson Jr.	Old Saybrook, CT	32	07/15/93
23	M Russo	Stony Brook, NY	09/09/92	K O'Connor	Smithtown, NY	27	07/15/93
24	J Banas	Sandy Hook, NJ	11/10/92	B Young	Stony Brook, NY	26	07/15/93
25	D Barter	Island Beach St. Pk., NJ	12/04/91	B Nyzio	Warren R., RI		07/15/93
32	K Black	Merrimack R., MA	08/14/92	D Auger	Newburyport, MA	36	07/15/93
24	R Olsen	Narragansett, RI	09/27/91	R Dabkowski	Fishers Is., NY		07/15/93
28	W McDonald	Montauk Point, NY	11/09/90	F Hawkes	Cundy's Hbr., ME		07/15/93
31	A Anderson	Block Is., RI	10/18/92	W Hooven	Plum Is., MA		07/16/93
23	R Kyker	Norwalk, CT	07/18/92	S Tardella	Norwalk, CT	33	07/16/93
16	J O'Keefe	Stratford, CT	05/24/93	B Berger	Stratford, CT	16	07/16/93
34	K Sprinkle	Outer Banks, NC	02/04/92	R Julius	Scituate, MA	36	07/16/93
34	A Anderson	Block Is., RI	06/01/93	A Whittet	Chatham, MA	34	07/16/93
32	G Cardel	Northport, NY	04/04/93	D Auger	Newburyport, MA	35	07/16/93

"From 11/4/93 - 11/10/93, was one of the best runs of striped bass that I've seen since early 1955. For three to four days of that period, the fish fed on top and were visible for a stretch of one mile. The birds worked the whole mile as bass pushed the bait to the surface. It was a sight for my sore eyes, plus for my son and son-in-law, who never saw a blitz."

FRED STUNKEL, STAMFORD, CT

"We have observed juvenile white ibis for the second year in a row feeding in the Pinetree Branch of Lynnhaven River, VA. Last year, they stayed from May through October. Even the older folks, who have spent 70 or more years on this river) have never seen them before. I hope this may interest some of the bird lovers of ALS..."

LINWOOD GORDON JR., VA BEACH, VA

33	A Anderson	Charlestown, RI	11/15/91	Unkwn Fisherman	Back R. of Kennebec, ME	36	07/17/93
29	W Kobel Jr.	Montauk, NY	06/19/92	D Baldwin	Moriches Inlet, NY		07/17/93
27	R Grobarz	Sea Bright, NJ	06/27/93	F Tenere	Sandy Hook, NJ	28	07/17/93
32	D Siniscalchi	New Rochelle, NY	06/30/93	T Lyons	New Rochelle, NY	35	07/18/93
19	T Marburger	Northport, NY	04/30/93	E Hertello	Boston, MA		07/18/93
22	R Canfield	Darien, CT	09/15/92	R Canfield	Darien, CT	24	07/18/93
33	H Ashley Jr.	Sandy Neck, MA	08/08/92	J Hopwood	Cape Cod Canal, MA	35	07/19/93
32	R Canfield	Norwalk Is., CT	06/28/92	C Toth	Norwalk Is., CT	33	07/19/93
33	J Andia	Elberon, NJ	11/19/89	R Ozycz Sr.	Martha's Vineyard, MA	37	07/19/93
27	A LoCascio	Manhasset Bay, NY	07/02/91	A LoCascio	Manhasset Bay, NY	31	07/19/93
28	A Anderson	Block Is., RI	05/26/92	G Champlin III	Niantic, CT	31	07/19/93
30	F Casey	Boston, MA	09/16/92	J Brilliant	Boston, MA	30	07/20/93
27	F Stunkel	Stamford, CT	09/22/90	F Stunkel	Stamford, CT	29	07/20/93
25	W Perlman	Atlantic Beach, NY	05/20/93	A Liotti	Long Beach, NY	26	07/20/93
27	T Prisco	E. Rockaway Inlet, NY	11/21/91	D Ambrico	Rockaway, NY		07/20/93
25	K Bilodeau	Old Saybrook, CT	08/25/92	C Patrick	Branford, CT	25	07/21/93
15	H Bergere	Stratford, CT	07/19/93	W Komaromi	Stratford, CT		07/21/93
29	G Adams Jr.	Christiana R., DE	06/22/92	J McMullen	Clay Creek, DE	29	07/21/93
21	A Anderson	Charlestown, RI	10/23/92	E Adams	Pt. Judith, RI	25	07/21/93
33	W Kobel Jr.	Moriches Inlet, NY	06/04/92	G Swift	Moriches Inlet, NY	35	07/22/93
23	B Perlman	Atlantic Beach, NY	07/30/92	T Mikoleski	Atlantic Beach Bldg., NY	29	07/22/93
23	M Matula	Arthur Kill, NJ	07/01/93	M Habel	Keasby, NJ	23	07/22/93
35	S Witthuhn	Cold Spring Harbor, NY	06/01/93	E Kirchmeier	Montauk, NY	38	07/23/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
32	A Dangelo	Watch Hill, RI	10/07/92	B Cuddy	Martha's Vineyard, MA		07/23/93
28	F Como	New Rochelle, NY	07/05/93	S Klumpp	David's Is., NY	28	07/23/93
25	J Foti	Ft. Wadsworth, NY	06/20/93	G Buono	Verrazano Brdg., NY	26	07/24/93
28	B Finke	Stamford, CT	07/14/93	T Lynch	Stamford, CT	28	07/24/93
20	N Roman Jr.	Port Monmouth, NJ	04/24/93	W Moffatt Jr.	Sandy Hook, NJ	20	07/24/93
14	M Romano	Kill Van Kull, NY	06/07/92	O Christianson	Bayonne, NJ	14	07/24/93
29	C Ponte	Vineyard Sound, MA	06/26/92	M Ugucioni	Waterford, CT	28	07/24/93
29	F Stunkel	Darien, CT	06/25/92	B Pirone	Darien, CT	30	07/24/93
39	G Christman Jr.	Naushon, MA	10/10/91	S Pietruska	Cuttyhunk, MA		07/24/93
27	J Caputo	Manhasset Bay, NY	09/07/92	D Effertz	Manhasset Bay, NY	30	07/25/93
28	A LoCascio	Manhasset Bay, NY	08/15/91	D Effertz	Manhasset Bay, NY	30	07/25/93
28	G Glowinski	Kings Pt., NY	06/04/93	D Effertz	Manhasset Bay, NY	30	07/25/93
28	A LoCascio	Manhasset Bay, NY	10/13/91	D Effertz	Manhasset Bay, NY	30	07/25/93
28	A Dangelo	Watch Hill, RI	10/06/92	D McPartland	Hampton, NH	31	07/25/93
33	P Geiselman	Fire Is. Inlet, NY	07/08/93	M Mathes	Robert Moses Brdg., NY	33	07/26/93
28	F Gunther	Statue of Liberty, NY	06/16/91	D Ambrico	Rockaway, NY		07/26/93
25	K Sprankle	Outer Banks, NC	02/04/92	J Janos	Annapolis, MD		07/26/93
32	B Perlman	Lido Beach, NY	11/30/91	D Ambrico	Rockaway, NY		07/26/93
35	N Jalbert	Bonnet Shores, RI	06/19/93	P Tameo	Jamestown, RI	36	07/26/93
35	A Anderson	Charlestown, RI	10/03/92	A Hilbourne	York, ME	37	07/27/93
28	B Roesch	Fairfield, CT	06/01/92	J Wheeler	Southport, CT	30	07/27/93
25	D Kelly	Orient Pt., NY	10/11/89	A Dangelo	Block Is., RI	30	07/27/93
26	J Ziobo	Bridgeport, CT	06/11/93	J Niemczyk	Orient Pt. NY	27	07/28/93
24	C Payne	Boston, MA	07/09/93	L Colby	Quincy Bay, MA	27	07/28/93
34	F Tellefsen	Lower NY Bay	11/20/92	D Ambrico	Rockaway, NY		07/29/93
33	S Trask	Newburyport, MA	05/28/93	R McKie	Rye, NH	34	07/29/93
24	F Coronato	Staten Island, NY	06/25/93	A Bilello	Great South Bay, NY		07/30/93
20	T Marburger	Northport, NY	04/25/92	L Cook	Pt. Judith, RI	26	07/30/93
17	M Romano	Kill Van Kull, NY	09/01/92	J Staton	New York Harbor		07/30/93
24	R Leja	Bridgeport, CT	10/25/86	B McNulty	Narragansett, RI	38	07/30/93
21	R Litke	Jones Beach, NY	09/30/92	J Mifsud	Jones Beach, NY		07/30/93
	A LoCascio	Manhasset Bay, NY	06/10/89	J DiTraglia	Block Island, RI	30	07/30/93
29	R Leja	Bridgeport, CT	10/17/90	R Speycalski	Westbrook, CT	39	07/31/93
33	G D'Amato	Stratford, CT	10/23/91	C Ornowski	Housatonic R., CT	33	07/31/93
30	F Hart	Lyme, CT	06/14/91	R Saitta	Niantic, CT	31	07/31/93
34	A Anderson	Charlestown, RI	11/06/92	H O'Neal	Westport, ME	35	07/31/93
31	M Lewchik	Old Saybrook, CT	07/21/93	T Wentworth	Old Saybrook, CT	32	08/01/93
28	A Anderson	Block Island, RI	10/01/91	R Martin	Jamestown, RI	30	08/01/93
19	M Aiken	Milford, CT	09/28/92	M Smolen	Milford, CT	24	08/01/93
11	J O'Keefe	Stratford, CT	05/28/93	C Debernardo	Devon/Strtrfd Brdg., CT		08/01/93
21	J Karolides	Danvers, MA	06/10/92	J Harvey	Danvers, MA	26	08/01/93
36	K Gleason	Darien, CT	06/29/93	T Masone	Stamford, CT		08/01/93
33	A LoCascio	Manhasset Bay, NY	06/28/91	M Corbisiero	Manhasset Bay, NY	33	08/02/93
26	J Treat	Cuttyhunk, MA	07/25/93	P Skinner	Cuttyhunk, MA	27	08/02/93
33	P Grippo	Tobay Beach, NY	10/24/92	T Kozlowski	Cape Cod Canal, MA	37	08/02/93
25	J Foti	Verrazano Brdg., NY	07/03/92	D Ambrico	Rockaway, NY		08/02/93
26	H Blazer	Cape May, NJ	11/14/91	P Anderson	Newport, RI	29	08/02/93
20	I Gordon	Rockaway Beach, NY	11/28/91	D Ambrico	Rockaway, NY		08/02/93
24	B Cotiaux	Gardiners Is., NY	11/10/92	C Toth	Norwalk, CT		08/03/93
11	B Arnsdorf	Sacramento, CA	08/10/91	S Jones	American R., CA	20	08/03/93
28	A Anderson	Block Is., RI	06/19/93	C Willi	Block Is., RI		08/03/93
25	A Dangelo	Off Pt. Judith, RI	07/14/92	M Gagne	Pt. Judith, RI	28	08/03/93
33	K Sprankle	Outer Banks, NC	02/04/92	J Kelley	Phippsburg, ME	37	08/03/93
25	D Judkins	Stratford, CT	06/15/93	G Burgos	Stratford, CT		08/03/93
28	S Penta	Boston, MA	09/25/92	E Soares	Winthrop, MA	33	08/03/93
29	J Posh	Stratford, CT	07/30/92	W Conroy	Stratford, CT	32	08/04/93
29	K Gleason	Darien, CT	06/15/91	D Ambrico	Rockaway, NY		08/04/93
22	R Pearson Jr.	Croton Bay, NY	05/06/92	G Duclos	Cuttyhunk, MA	30	08/04/93
23	T Marburger	Northport, NY	04/26/89	M MacMillen	Cuttyhunk, MA	36	08/04/93
28	M Romano	Kill Van Kull, NJ	07/03/93	K Cisek	Narrows, S.I., NY	30	08/05/93
27	E Wargo	Bridgeport, CT	06/24/93	J Demarais Jr.	Bridgeport, CT	28	08/05/93
18	T Marburger	Northport, NY	01/12/92	A Marsello	Swansea, MA	20	08/05/93
26	G Nigro	Sandy Hook, NJ	11/28/92	D Zambrotta	Cuttyhunk Is., MA		08/06/93
22	R Canfield	Norwalk, CT	07/11/92	C Toth	Norwalk, CT		08/06/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
42	J Dotsey	Long Beach, NY	07/05/93	J Dotsey	Long Beach, NY	42	08/06/93
28	K Gleason	Darien, CT	07/28/93	J Bova	Stamford, CT		08/07/93
32	W Edwards	Stratford, CT	06/08/91	R Kozdeba	Stratford, CT	33	08/07/93
20	T Nowell	Newburyport, MA	08/11/92	J Mitchell	Newbury, MA		08/08/93
32	B Finke	Stamford, CT	07/11/93	F Pelliccione	Stamford, CT	33	08/08/93
23	F Stunkel	Stamford, CT	10/21/91	D Mennona	Stamford, CT		08/08/93
12	J Mester	Narrows, S.I., NY	08/25/90	O Christianson	Bayonne, NJ	20	08/09/93
28	W McDonald	Montauk Pt., NY	10/26/92	W Robinson	Scituate, MA	28	08/09/93
30	M Favale	Boston Harbor, MA	05/30/93	D Cerulli	Winthrop, MA	34	08/11/93
30	K Sprankle	Outer Banks, NC	01/27/91	D Krah	Wiscasset, ME	35	08/11/93
29	A LoCascio	Manhasset Bay, NY	07/29/93	R Glaittli	Hart Is., NY	30	08/11/93
18	R Fink	Pleasant Plains, NY	05/29/91	B Fana	Staten Island, NY	27	08/11/93
28	M Berger	Debs Inlet, NY	06/06/93	L Richards	Atlantic Beach, NY	26	08/13/93
27	G Horvath	Manasquan, NJ	07/13/93	A Knight	Brielle, NJ	26	08/13/93
26	F Stunkel	Stamford, CT	06/14/93	G Wasicki Jr.	Stamford, CT	28	08/14/93
26	L Richards	Atlantic Beach, NY	08/21/92	W Perlman	Atlantic Beach, NY	28	08/14/93
28	F Stunkel	Stamford, CT	10/03/91	G Wasicki Jr.	Stamford, CT	28	08/14/93
22	W Finke	Stamford, CT	09/22/92	W Finke	Stamford, CT	25	08/15/93
29	A LoCascio	Hart Is., NY	07/12/91	E Copioli	Hart Is., NY	30	08/15/93
19	T Lynch	Greenwich, CT	08/26/92	D Petit	Greenwich Pt., CT		08/15/93
22	J Foti	Verrazano Brdg., NY	07/02/92	D Ambrico	Breezy Pt., NY		08/15/93
27	J Della Porta	Swampscott, MA	06/15/93	S Geannaris	Cape Cod Canal, MA		08/15/93
27	K Martin	Newport, RI	07/07/92	S Fougere	Newport, RI	30	08/15/93
17	M Romano	Kill Van Kull, NY	10/26/92	C Lee	Bayonne, NJ	17	08/15/93
21	J Calamia	Astoria, NY	06/03/93	M Picarello	Eastchester Bay, NY		08/16/93
19	W Ridder	Portsmouth, RI	07/20/92	B Mosher	Sakonnet R., RI		08/16/93
37	B Shillingford	Cape May, NJ	11/13/92	W Englehardt	Marblehead, MA		08/16/93
31	A Dangelo	Block Is., RI	06/12/92	C Mohr	Monomoy Is., MA	32	08/16/93
29	B Billerman	Newburyport, MA	07/26/91	J Kane	Plum Is., MA	37	08/16/93

"Many fish caught on 5/30/94 had bruises, scrapes and missing scales (from being caught in gill nets?). They were active, but showed signs of infection. These fish were not tagged, although if you want them tagged, please let me know."

MARVIN BERGER, LYNBROOK, NY

"I guess this starts to happen when you fish a specific spot for long periods. The fish frequent specific feeding areas (areas that hold bait food), much the same as humans return to well liked restaurants." Good analogy.

MIKE AIKEN, MILFORD, CT

Written after two recaptures of his own striped bass.

31	G Ministeri	Cape Cod Bay, MA	07/24/93	T Hooper	Provincetown, MA		08/17/93
32	J Andia	Montauk, NY	11/21/92	G Kauffman	Scituate, MA	32	08/17/93
18	F Urban	Flynn's Knoll, NJ	06/09/92	R Pena	Perth Amboy, NJ	19	08/18/93
36	H Rego	Newport, RI	06/20/93	W Moniz	Newport, RI		08/18/93
36	J Dotsey	Rockaway, NY	07/03/93	J Dotsey	Rockaway, NY	38	08/18/93
28	A Dangelo	Montauk, NY	12/01/91	P Meech	Marshfield, MA	31	08/18/93
26	F DeMenezes	Newport, RI	06/14/92	W Moniz	Newport, RI		08/18/93
28	G Kerkhan	Sea Bright, NJ	06/28/92	R Bingham	Kittery, ME	31	08/19/93
21	T Rinaldi	Riverhead, NY	11/06/92	R Nystrom	Stratford, CT	22	08/19/93
20	T Marburger	Northport, NY	04/24/90	R Martin	Rockport, MA	27	08/20/93
31	R Grobarz	Sea Bright, NJ	07/01/92	R Soyka	Sea Bright, NJ	32	08/21/93
33	C Jalbert	Bonnet Shores, RI	06/19/93	B Fay	Narragansett Bay, RI		08/22/93
22	J Brown	Noank, CT	06/11/92	W Moniz	Newport, RI		08/24/93
27	J Jackson	Cape May Rips, NJ	04/30/93	W Moniz	Newport, RI		08/24/93
26	T Lake	Chelsea, NY	04/29/93	W Moniz	Newport, RI		08/24/93
21	S Penta	Boston, MA	07/30/92	E Soares	Winthrop, MA	25	08/24/93
22	J Caputo	Barker Pt., NY	08/05/93	L Meyran	Port Washington, NY	23	08/25/93
21	G Nigro	Sandy Hook, NJ	06/19/93	B Ryan	Homeport, S.I., NY	24	08/26/93
24	S Penta	Boston, MA	06/05/93	L Terrazano	Boston, MA		08/26/93
17	F Stunkel	Northwalk, CT	05/06/89	N Senecal	Stamford, CT	30	08/26/93
36	N Jalbert	Bonnett Shores, RI	07/11/92	P Peters	Narragansett Bay, RI	38	08/27/93
34	A Anderson	Block Is., RI	08/16/92	C Freeman	The Race, L.I. Sound	40	08/27/93
18	GS Gray	Charlestown, RI	05/25/91	W Moniz	Newport, RI		08/28/93
27	C Lienau	Montauk, NY	08/31/92	J Woodman	Watch Hill, RI	28	08/28/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
34	W Perlman	Jones Beach, NY	11/21/92	J Richer	N. Truro, MA	34	08/28/93
35	D Magnasco	Boston, MA	07/26/93	D Hayes	Boston, MA	35	08/29/93
32	S Maguire	Newburyport, MA	07/01/93	R Mitchell	Rowley, MA	35	08/29/93
24	R Granfield	Nauset Beach, MA	10/23/91	R Breasett	Moriches Inlet, NY	27	08/29/93
19	P Krueger	Atlantic Bch Brdg., NY	08/31/93	A Iantorno	Far Rockaway, NY		08/30/93
30	D Goodwin	Montauk Pt., NY	09/25/92	G Sweet	Cape Cod Canal, MA	33	08/30/93
36	T Marburger	Montauk, NY	10/09/92	R Howes	Westport Is., ME	37	08/30/93
34	B Roesch	Bridgeport, CT	08/05/93	J Rivera	Bridgeport, CT		08/30/93
27	K Sprankle	Outer Banks, NC	01/26/91	S Durkee	Stratford, CT		08/31/93
13	T Lake	Danskammer Pt., NY	10/23/90	R Pastore	Robbins Reef, NY	21	09/01/93
27	S Penta	Boston, MA	06/21/92	J Brilliant	Boston, MA	29	09/02/93
20	T Marburger	Northport, NY	05/11/93	S Hodgdon	Boothbay Harbor, ME	20	09/02/93
16	R Fink	Pleasant Plains, NY	10/13/90	R Pastore	Robbins Reef, NY	24	09/03/93
29	K Engstrand	Buzzard's Bay, MA	07/26/93	B Roussos	Cape Cod Canal, MA	33	09/03/93
30	B Billerman	Newburyport, MA	07/30/92	B Richard	Merrimack R., MA	36	09/05/93
21	M Paterno	Fire Is. Inlet, NY	11/21/92	M Boisvert	Bass R., MA	22	09/06/93
21	J Sullivan	Merrimack R., MA	05/27/90	R Guziejka	Merrimack R., MA	31	09/06/93
20	A Marsello	Swansea, MA	08/13/93	A Constantino	Swansea, MA		09/06/93
20	W Edwards	Stratford, CT	06/17/93	J Bassett	Norwalk, CT	22	09/06/93
18	J Karolides	Danvers, MA	07/07/93	T Rawls	Beverly, MA	20	09/07/93
31	K Conway	Hingham, MA	08/05/92	C Rich	Hingham, MA	34	09/09/93
23	B Gallagher	Sandy Hook, NJ	12/09/92	G Coyne	Middletown, RI		09/10/93
23	K Sprankle	Outer Banks, NC	02/04/92	M Lofton	West R., MD	26	09/11/93
20	A Fette	S. Kingstown, RI	07/18/92	R Chamberland	Allen's Harbor, RI	23	09/11/93
36	A Fette	S. Kingstown, RI	06/22/93	D Gallagher	E. Matunuck St. Bch., RI	39	09/12/93
27	D Mann	Quick's Hole, MA	08/02/92	G Spencer	Quick's Hole, MA	28	09/13/93
19	A LoCascio	Manhasset Bay, NY	08/21/93	L Meyran	Manhasset Bay, NY		09/14/93
25	D Goodwin	Indian R. Inlet, DE	10/10/92	G Varnes	Rehoboth Bch., DE	25	09/15/93
31	J Andia	Highlands Brdg., NY	05/20/93	R Setnir	Smith Pt., NY	32	09/16/93
14	A Marsello	Swansea, MA	08/13/93	P Boissonault	Swansea, MA		09/16/93
22	T Prisco	E. Rockaway Inlet, NY	06/27/92	S Just	Hampton Bays, NY	25	09/16/93
36	R Fink	Rockaway, NY	06/10/93	P Cilento	Moriches Inlet, NY	37	09/17/93
21	C Smith	Stratford, CT	05/09/91	M Kane	Kennebec R., ME	26	09/17/93
31	G Ministeri	Wellfleet, MA	06/25/93	R Conti	Chatham, MA	31	09/17/93
22	A LoCascio	Manhasset Bay, NY	10/15/92	L Meyran	Manhasset Bay, NY	23	09/17/93
24	J Sullivan Jr.	Methuen, MA	06/15/93	C Santangelo Jr.	Montauk, NY	24	09/18/93
19	W Sharpe	Navesink R., NJ	05/01/93	G Ciriello	Offsh., Sandy Hook, NJ	24	09/18/93
35	B Miller	Raritan Bay, NY	10/22/91	N.Y.S.D.E.C.	E. Hampton, NY	34	09/19/93
17	B Edwards	Stratford, CT	06/24/93	R Nystrom	Stratford, CT	19	09/19/93
15	T Lake	Danskammer Pt., NY	10/16/90	E Checchi	Kill Van Kull, NY		09/19/93
12	J Calamia	Roosevelt Is., NY	11/24/91	G Schechtman	Kings Pt., NY	16	09/19/93
17	J Karolides	Danvers, MA	06/29/91	F Barone	Croton Bay, NY	20	09/19/93
28	R Feather	Matinecock Pt., NY	07/22/89	J Valente	Roslyn, NY	36	09/20/93
35	G Keenan	Shinnecock Inlet, NY	06/03/93	G Santiago	Martha's Vineyard, MA	35	09/20/93
23	D Gulbicki	Martha's Vineyard, MA	10/20/92	M Cinone	Babylon, NY		09/20/93
24	D Partusch	Shrewsbury R., NJ	05/08/93	N.Y.S.D.E.C.	E. Hampton, NY	25	09/20/93
24	D Johansen	S. Boston, MA	07/15/89	L Meyer	Martha's Vineyard, MA	35	09/21/93
32	S Penta	Boston, MA	06/14/91	C Parkos	Boston, MA	38	09/22/93
14	F Hart	Old Saybrook, CT	05/06/91	R Kelly	Jamesstown, RI	18	09/22/93
33	R Grobarz	Sea Bright, NJ	10/18/92	B Gray	Sandy Hook, NJ	37	09/22/93
28	F Heal	Staten Island, NY	07/06/93	C Colletti	Verrazano Brdg., NY	30	09/22/93
14	J Karolides	Danvers, MA	10/04/91	E Mersey	Tiverton, RI	20	09/23/93
27	K Gleason	Darien, CT	06/24/93	D Nowins	Stamford, CT		09/24/93
23	T Lynch	Stamford, CT	08/25/92	N Senecal	Stamford, CT	28	09/25/93
19	R Messinger	Narragansett Bay, RI	05/14/92	E Musk	Narragansett Bay, RI	26	09/25/93
22	J Mester	Staten Is., NY	07/25/87	T Das Santas	Verrazano Brdg., NY	30	09/25/93
33	R Mountford	Fairfield, CT	06/29/93	D Scotto	Sluiceway, NY	34	09/25/93
14	K Morgan	East River, NY	11/09/90	T Zientek	Bayonne, NJ	18	09/25/93
19	M Gomolka	Verona, ME	08/07/93	G Cairns	Plum Island, MA		09/25/93
18	R Chmiel	Ledyard, CT	04/14/93	N Spector	Norwich, CT	26	09/26/93
33	A Stearns	Boston, MA	06/23/93	M DeAmato	Boston, MA	35	09/26/93
36	F Strmiska	Fishers Is., NY	07/05/93	L Rodriguez	Bridgeport, CT	37	09/26/93
37	D Kelly	Orient Point, NY	07/04/90	J Wilhelm	Plum & L. Gull Is., NY	43	09/26/93
26	D Kelly	Orient Pt., NY	07/03/93	J Argevine	Fishers Is., NY		09/26/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
21	W Matuszak	Gilgo Beach, NY	06/06/92	W Lison	Martha's Vineyard, MA		09/27/93
37	J Kane	Kennebec R., ME	09/14/93	J Clark	Bath, ME		09/27/93
24	F Ryan	Darien, CT	07/11/93	C Nelson	Darien, CT	25	09/27/93
24	S Penta	Boston Harbor, MA	08/19/90	R Jandreau	Winthrop, MA	32	09/29/93
22	J Calamia	Pt. Lookout, NY	08/10/92	T Buell	Riis Park, NY		09/29/93
35	G D'Amato	Stratford, CT	08/11/93	F Garwacki	Stratford, CT		09/29/93
12	M Romano	Kill Van Kull, NJ	04/14/93	F Barone	Croton Bay, NY		09/29/93
22	R Seuffert	Sea Bright, NJ	07/12/92	V Manzi	Sea Bright, NJ		09/30/93
20	J Neville	Cape Cod Canal, MA	06/08/93	S Toland	Newport, RI	24	09/30/93
12	M Aiken	Milford, CT	06/16/93	J Feller	Milford, CT	14	10/01/93
21	S Penta	Boston, MA	09/03/92	H Page	Winthrop, MA	22	10/01/93
36	J Karolides	Beverly, MA	09/12/93	D Boardman	Danvers R., MA	38	10/01/93
20	S Kellner	Horton's Pt., NY	08/31/92	P Hebrank	Cove Pt., MD	22	10/01/93
19	J Zaffuto	Gilgo Beach, NY	05/17/92	P Sagliano	69th St. Pier, NY		10/01/93
10	M Romano	Kill Van Kull, NY	09/04/92	M Romano	Kill Van Kull, NY	15	10/01/93
39	T Sobka	Sandy Hook, NJ	07/08/93	V Dolan	Montauk Pt., NY	41	10/01/93
22	K Bilodeau	Norwich, CT	04/06/93	R Braun	Marshfield, MA		10/02/93
19	K Sigvardson	Turkey Pt., MD	04/18/92	D Allison	Welch's Pt., MD	22	10/02/93
16	T Pretakiewicz	East River, NY	05/27/91	T Aaron	L.I. City, NY	23	10/02/93
32	B Billerman	Newburyport, MA	06/28/92	B Quattrone	Merrimack R., MA	35	10/02/93
20	A Marsello	Bristol, RI	06/08/93	R Larsson	Somerset, MA	23	10/03/93
14	G Baxter	Gilgo Beach, NY	07/29/93	R Harris	Merrick, NY	17	10/03/93
23	M Berger	Debs Inlet, NY	07/25/92	M Whalen	Breezy Pt., NY	24	10/04/93
23	W Sharpe	Shrewsbury R., NJ	05/12/92	H Bussem	Highlands Brdg., NJ	29	10/05/93
17	A Lo Cascio	Manhasset Bay, NY	10/15/92	L Meyran	Manhasset Bay, NY	18	10/05/93
20	G Kerkhan	Sea Bright, NJ	07/04/93	G Kerkhan	Sandy Hook, NJ	20	10/06/93
27	G Cardel	Eatons Neck, NY	10/27/92	M McInerny	Cold Spring Harbor, NY	28	10/06/93
19	S Penta	Boston, MA	10/13/92	B Pfaff	New Haven, CT	22	10/06/93
30	F Strmiska	E. end Fishers Is., NY	07/05/93	J Pelloni	E. end Fishers Is., NY	32	10/07/93

"I fish aboard the fishing vessel "Mary V" and on 1/7/94, while we were longlining, we came upon a cod fish with your tag on it. It was caught approximately 25 mi. ENE of Boston in 44 fathoms. It was 21 1/2" and was 4 lbs."

CAPT. RICK NAVES, GLOUCESTER, MA.

This fish was tagged by Tony Stanik 40 mi. E of Gloucester, MA, 7/1/92 at 16".

"We have just had a big fish kill over here after the last big storm. There were lots of fish washed up all over the beach. Most of us feel the fish were weakened due to the extremely cold water temperatures this year (33 degrees). The N.Y.S.D.E.C. guys were over here collecting samples to study. Hopefully, they will find out something. It just kills me to see all these fish washed up."

TERRY MARBURGER, NORTHPORT, NY

25	K Sprankle	Outer Banks, NC	02/04/92	M Brockmeyer	Pooles Is., MD	27	10/08/93
24	B Pearce	Shrewsbury R., NJ	05/07/92	R Harbina	Sandy Hook, NJ	25	10/09/93
	GS Gray	Charlestown, RI	05/13/92	J Barton	Westport R., MA	29	10/09/93
22	A Dangelo	Charlestown, RI	10/09/91	D Colella	Barrington, RI	24	10/09/93
24	T Rinaldi	Horton's Pt., NY	08/16/91	C DeCrescenzo	Tin Can Grounds, NY		10/10/93
25	J Karolides	Beverly, MA	07/02/92	C DeCrescenzo	Tin Can Grounds, NY		10/10/93
22	J Brotz Jr.	Plum Island, MA	08/16/92	D Ottaviano	Race Pt., MA		10/10/93
28	N Wynne	Stamford, CT	08/02/92	R Skinner	Orient Pt., NY	28	10/11/93
21	M Romano	Kill Van Kull, NJ	09/23/93	M Romano	Kill Van Kull, NJ	21	10/11/93
21	R Conklin	Stamford, CT	05/29/88	T Brennan	Barneget Inlet, NJ	36	10/11/93
24	J Reiches	Davids Is., NY	05/26/91	W Andermann	Orchard Beach, NY	28	10/12/93
33	R Grobarz	Sea Bright, NJ	06/23/93	F Kampf	Monmouth Beach, NJ	35	10/13/93
18	M Romano	Kill Van Kull, NJ	09/04/92	M Romano	Kill Van Kull, NJ	21	10/13/93
19	R Nystrom	Stratford, CT	05/25/93	R Coleman	Piermont, NY		10/13/93
20	M Romano	Kill Van Kull, NJ	09/23/93	M Romano	Kill Van Kull, NJ	20	10/13/93
33	C Bailey	Montauk Pt., NY	06/14/92	J Miller	Montauk, NY		10/13/93
28	E Wright	Moriches Inlet, NY	05/19/93	E Trovitch	Moriches Inlet, NY		10/14/93
24	J Della Porta	Swampscott, MA	08/31/90	W Rampe	Plum Is., MA	33	10/14/93
33	A Anderson	Block Island, RI	10/31/92	D Nunamaker	W of Love Pt., MD	33	10/14/93
18	A Formisano	New Rochelle, NY	07/17/93	C Tomassetti	Scarborough, NY		10/14/93
15	G Baxter	Gilgo Beh., NY	09/25/93	C Andreski	Wantagh, NY	15	10/15/93
28	K Sprankle	Outer Banks, NC	02/04/92	D May	S. of Chsapeake Beh., MD	31	10/15/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
30	T Bozan	Avon, NJ	07/19/93	J Webber	Belmar, NJ	30	10/15/93
29	F Ryan	Darien, CT	07/17/93	F Stunkel	Darien, CT	29	10/15/93
24	R Baumann	S. Mantoloking Bch., NJ	12/07/91	C Bacchi	Orient Pt., NY	29	10/15/93
27	D Mann	Quick's Hole, MA	07/30/93	R Murawski	Watch Hill, RI	30	10/15/93
21	M Christiansen	Longport, NJ	10/01/93	C Dudzek	Ocean City, NJ	22	10/15/93
26	F Stunkel	Darien, CT	08/12/92	C Nelson	Darien, CT	28	10/15/93
24	C Nelson	Darien, CT	10/15/93	B Nolte	Darien, CT	24	10/16/93
19	F Stunkel	Darien, CT	08/14/93	C Finlay	Greenwich Cove, CT	21	10/16/93
25	J Caputo	Manhasset Bay, NY	10/06/93	W Yackel	Port Jefferson, NY	27	10/17/93
24	J Sullivan	Newburyport, MA	05/31/93	R McKee	Off Nantucket, MA	25	10/18/93
36	S Maguire	Newbury, MA	09/02/93	M Haborman	The Race, L.I. Sound	37	10/19/93
24	M Russo	Westhampton, NY	09/22/92	R Muller	Ellis Is., NY	27	10/19/93
21	D Partusch	Shrewsbury R., NJ	11/04/92	W Sharpe	Navesink R., NJ	25	10/19/93
19	W Anderson	Provincetown, MA	10/16/92	S Burnett	Groton, CT		10/19/93
32	A Dangelo	Montauk, NY	10/19/93	F Sawicki	Pt. Judith, RI	33	10/19/93
34	C Jalbert	Bonnet Shores, RI	06/19/93	B Ricca	Montauk Pt., NY	36	10/21/93
24	A LoCascio	Manhasset Bay, NY	06/23/92	J Sheridan	S. Kingston, RI	30	10/21/93
41	K Brodeur	Niantic, CT	05/13/91	R Nowakowski	Waterford, CT	45	10/22/93
31	D Siniscalchi	Fort Slocum, NY	06/30/93	T Lyons	New Rochelle, NY	32	10/22/93
26	J Karolides	Beverly, MA	09/12/93	S Csutor	South West Reef, CT	32	10/22/93
25	S Kellner	Duck Pond Pt., NY	09/09/90	C Messina	Montauk, NY	32	10/22/93
27	R Mahaffy	Parker Creek, MD	05/11/91	J Graf	Chesapeake Bay, MD	29	10/23/93
30	T Rinaldi	Duck Pond Pt., NY	06/09/93	A Barbarino	Fire Is. Inlet, NY	32	10/23/93
33	G Heisler	Norwalk Is., CT	07/10/92	L Zullo	Norwalk, CT	36	10/23/93
25	P Orenzo	East River, NY	03/16/91	R Cepale	59th St., East R., NY	27	10/24/93
33	A LoCascio	Manhasset Bay, NY	10/16/93	J Diaz	Manhasset Bay, NY		10/24/93
30	K Sprankle	Outer Banks, NC	02/04/92	D Schmidtice	Millford, CT	32	10/25/93
26	W Ridder	Sakonnet R., RI	05/25/91	T Barrette	Black Pt., CT	38	10/25/93
24	K Lohraff	Sandy Hook Bay, NJ	10/18/91	K Lohraff	Sandy Hook Bay, NJ	28	10/26/93
32	F Stunkel	Darien, CT	07/04/92	C McDermott	Stamford, CT	34	10/27/93
27	W Perlman	Atlantic Beach, NY	08/29/92	J McLoone	Long Beach, NY		10/27/93
21	B Pearse	Atlantic Highlands, NJ	05/25/93	M Galetta	Watch Hill, RI	22	10/28/93
37	K Bilodeau	New London, CT	05/28/93	M Galetta	New London, CT	37	10/28/93
28	J Kane Jr.	Kennebec R., ME	09/11/93	P Tatem	Montauk Pt., NY		10/29/93
31	J Doyle	Trenton, NJ	05/23/93	C Miller	Smith Island, MD		10/29/93
23	E Musk	Narragansett Bay, RI	08/25/93	L Early	Orient Pt., NY	23	10/29/93
21	D Kelly	Orient Pt., NY	10/17/93	S Kellner	Mattituck, NY		10/29/93
24	A Marsello	Swansea, MA	09/16/93	D Kay	Somerset, MA	24	10/29/93
34	R Canfield	Westport, CT	06/20/92	T Kalmanidas	Norwalk, CT	40	10/30/93
24	F Stunkel	Darien, CT	09/21/93	P Hulst	Stepping Stone Lt., NY	26	10/30/93
18	M Romano	Kill Van Kull, NJ	08/24/92	M Romano	Kill Van Kull, NJ	19	10/31/93
25	K Sprankle	Outer Banks, NC	02/04/92	D Diven	Craig Hill Lt., MD	27	11/01/93
28	G Ministeri	Provincetown, MA	08/26/93	J Webber	Sandy Hook Bay, NJ	29	11/02/93
29	R Leja	Bridgeport, CT	07/22/93	T Galletta	Staten Is., NY	30	11/02/93
30	J Doyle	Trenton, NJ	05/30/93	K Smoot	2 mi. NW James Is., MD	33	11/02/93
17	R Wellman	Horton's Point, NY	07/07/91	A Bailey	Union Beach, NJ		11/02/93
27	W Sharpe	Navesink R., NJ	10/17/93	W Sharpe	Navesink R., NJ	27	11/02/93
20	J Kane	Kennebec R., ME	09/17/93	C Szarka	Lloyd Pt., NY	21	11/03/93
24	R Ries	Cold Spring Harbor, NY	06/10/90	J Kaminsky	Mattituck Inlet, NY	29	11/03/93
25	F Casey	Boston, MA	09/16/93	K Baracchini	Cape Cod Bay, MA		11/03/93
31	A Anderson	Block Is., RI	06/30/93	R Franciosi	Little Egg Inlet, NJ	34	11/04/93
19	D Hawkins	Smithtown, NY	07/20/93	B Nurnberger	Eatons Neck, NY		11/04/93
35	G Keenan	Shinnecock Inlet, NY	06/30/93	N Wagenheim	Cape May, NJ		11/04/93
15	G Wernock	Bayonne, NJ	04/14/93	J Velez	Perth Amboy, NJ	15	11/04/93
25	D Kelly	Orient Pt., NY	10/28/92	J Siebold	Goldsmith Inlet, NY	29	11/05/93
39	F Ryan	Darien, CT	07/04/93	F Heal	Staten Is., NY	38	11/05/93
28	L Richards	Atlantic Beach, NY	08/13/93	L Sanford	125th & 12th Ave., NY	30	11/07/93
25	K Sprankle	Outer Banks, NC	02/04/92	W Austin	Montauk Pt., NY		11/08/93
30	A Bendersky	Fire Island, NY	07/17/92	K Larsen	Raritan Bay, NJ	35	11/08/93
26	D Kelly	Orient Pt., NY	10/14/93	J Skinner	Wading R., NY		11/08/93
27	K Sprankle	Outer Banks, NC	01/28/91	R Williams Jr.	Chesapeake Bch., MD	32	11/09/93
28	K Sprankle	Outer Banks, NC	02/04/92	R Frederick	Cape May, NJ	33	11/09/93
36	J Kane Jr.	Back R., ME	09/13/93	J Katsaros	Port Jefferson, NY		11/10/93
15	T Marburger	Northport, NY	05/09/93	F Confino	Great Neck, NY		11/10/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
20	A Schweithelm	Northport, NY	08/01/93	N.Y.S.D.E.C.	E. Hampton, NY	21	11/10/93
28	A LoCascio	Manhasset Bay, NY	08/09/93	J Lozito	City Is., NY	28	11/11/93
32	O Van Helmond	Shinnecock, NY	09/21/93	J Menzel	Offshr., Rehbth Bch., DE	31	11/11/93
21	K Black	Merrimack R., MA	08/07/92	A Mazzullo	Smithtown, NY	26	11/11/93
21	R Wellman	Riverhead, NY	11/04/93	B Cumings	Sound Beach, NY	21	11/12/93
28	W Perlman	Atlantic Beach, NY	05/29/93	C Dando	Cape May Pt., NJ	30	11/12/93
23	GS Gray	Charlestown, RI	05/29/91	S Fries	Sandy Hook Chan., NJ	27	11/12/93
20	D Magnasco	Boston, MA	10/09/92	W Perlman	Rockaway, NY	22	11/13/93
24	A Dangelo	Charlestown, RI	09/24/92	H Wong	VA Beach, VA	25	11/13/93
28	W Barbeall	Martha's Vineyard, MA	05/22/93	N Crosley	Lewes, DE	31	11/13/93
32	F Coronato	Staten Island, NY	06/29/93	G Nigro	Sandy Hook, NJ	33	11/13/93
23	R Nystrom	Stratford, CT	06/19/92	N Pyle	Cape May, NJ	28	11/13/93
27	GS Gray	Charlestown, RI	10/25/92	G Caputi	Long Branch, NJ	29	11/14/93
24	J Kane Jr.	Kennebec R., ME	09/08/93	A DeLauro	Sandy Hook, NJ	25	11/14/93
27	R Wellman	Mulford Pt., NY	08/30/92	G Klawitter	Cape May, NJ	29	11/14/93
34	F Coronato	West Bank Lt., NY	11/03/92	D Mosher	Sandy Hook, NJ	34	11/14/93
22	R Nystrom	Stratford, CT	08/05/93	W Finney	Gangway Rock, L.I., NY	23	11/14/93
32	C Stamm	East River, NY	11/03/91	L Howard	East River, NY	36	11/15/93
19	F Stunkel	Stamford, CT	10/18/93	J Victor	Sound Beach, NY	11/15/93	
27	G Ciriello	Sandy Hook, NJ	06/16/93	G Gilbert	Cape May Rips, NJ	28	11/15/93
22	R Grobarz	Cliffwood Beach, NJ	05/05/93	M Hagen	Hampton Bays, NY	24	11/15/93
31	C Jalbert	Bonnet Shores, RI	06/19/93	S Lang	Cheapeake Bay, MD	36	11/16/93
17	S Gross	City Is., Ny	10/09/93	C Lopez	East R., NY	20	11/16/93
17	M Russo	Stony Brook, NY	11/25/92	T Sledzik	Norwich, CT	20	11/16/93
24	A Dangelo	Narragansett, RI	06/26/93	L Limper	Monmouth Beach, NJ		11/17/93
20	T Rinaldi	Mattituck, NY	05/28/93	J Dotsey	Long Beach, NY	24	11/17/93
24	L Quinn	New Haven, CT	07/10/93	K Wolfe	E. Moriches, NY	24	11/17/93
23	D Kelly	Orient Pt., NY	06/25/93	V Minafo	Rockaway Jetty, NY		11/17/93
30	J Sullivan Jr.	Newburyport, MA	09/20/92	R Smith	Sandy Hook, NJ		11/18/93
30	R Fink	Annadale, NY	05/02/90	L Carroll	Mid-Chesapeake, MD	36	11/18/93
29	D Mann	Sow and Pigs, MA	08/22/93	J Jefferson	Kiptopeke Beach, VA	34	11/18/93
22	GS Gray	Charlestown, RI	06/04/93	N.Y.S.D.E.C.	E. Hampton, NY	22	11/18/93
22	K Sprankle	Outer Banks, NC	02/04/92	H Whitaker	Ches. Bay Brdg. Tn., VA	24	11/19/93
30	T Pendyk	Verrazano Brdg., NY	10/22/92	M Dore	Verrazano Brdg., NY	32	11/19/93
21	K Sprankle	Outer Banks, NC	02/04/92	L Cumberland	Mth of Potomac R., VA		11/19/93
20	B Woodroffe	Ft. Tilden, NY	11/16/86	D Nalepa	Flynn's Knoll, NJ	28	11/20/93
26	R Grobarz	Sea Bright, NJ	10/06/93	J Hunter	Cape May, NJ		11/20/93
29	J Anderson	South Shore, RI	08/13/92	S Kowalski	Cape May Rips, NJ	32	11/21/93
22	K Gleason	Darien, CT	08/06/92	V Badame	Rockaway Inlet, NY	35	11/21/93
	K Conway	Hull MA	08/07/92	E Marconi	Monmouth Beach, NJ	29	11/22/93
32	J Karolides	Danvers, MA	07/23/93	J Schulz	Flynn's Knoll, NJ	34	11/22/93
29	T Nowell	Merrimack R., MA	09/12/93	M Tabasso	Atlantic City, NJ	32	11/22/93
21	S Kellner	Riverhead, NY	11/15/93	J Sinning, Sr.	East Marion, NY	21	11/23/93
18	P Jakubecy	Sea Bright, NJ	05/19/90	E Bradford	Sandy Hook Bay, NJ		11/26/93
30	J Della Porta	Nahant, MA	08/26/91	R Burris	Cape May, NJ	33	11/26/93
34	G Buono	Sandy Hook, NJ	10/23/93	V Mayer	Raritan Reach Chan., NJ	35	11/27/93
33	T Lyons	New Rochelle, NY	07/15/93	M White	Monmouth Beach, NJ		11/27/93
24	F Dorry	Sandy Hook Chan., NJ	10/23/93	T Surgent	Atlantic Highlands, NJ	26	11/28/93
24	P Nasca	Green Is., NY	09/29/92	R Nickerson	Manasquan, NJ	27	11/28/93
22	I Gordon	Jamaica Bay, NY	10/06/93	B Ramirez	Breezy Pt., NY		11/29/93
27	T Sobka	Highlands Brdg., NJ	06/08/93	B Ramirez	Breezy Pt., NY		11/29/93
27	G Nigro	Sandy Hook, NJ	10/15/93	J Newby	Kill Van Kull, NJ	30	11/30/93
30	J Della Porta	Swampscott, MA	08/26/93	C Hall	Ches. Bay Brdg. Tn., VA	30	12/02/93
20	L Richards	Atlantic Beach, NY	07/14/93	D Christinzio	Island Bch. St. Pk., NJ		12/02/93
32	T Marburger	Shinnecock Inlet, NY	07/14/92	D Pirok	Smith Pt. Lt., VA	32	12/02/93
26	J Kane	Kennebec R., ME	09/20/93	B Bonnell	Hughlett Pt., VA		12/02/93
18	T Marburger	Northport, NY	06/04/91	J Meagher	Ches. Bay Brdg. Tn., VA	26	12/03/93
23	D Taft	Martha's Vineyard, MA	07/09/93	L Strickland	Ches. Bay Brdg. Tn., VA	29	12/04/93
25	S Penta	Boston, MA	08/04/92	D Taylor	Mth Rappahannock R, VA26		12/04/93
27	G Epple	Charlestown, RI	11/02/92	J Knehr	Normandy Bch., NJ	30	12/04/93
14	M Aiken	Milford, CT	08/29/92	D Beyer	Devon/Milford Brdg., CT22		12/05/93
33	P Donahue	Cape Cod Canal, MA	08/30/92	Chincoteague Co-op	Chincoteague, VA		12/05/93
21	C Wilcox	Moriches Bay, NY	09/27/93	C Kern	Island Bch. St. Pk., NJ		12/06/93
23	A Dangelo	Watch Hill, RI	10/09/92	F Kertesz	Beach Haven, NJ		12/07/93

Species

Lgth	Tagger	Place Tagged	Date	Recapturer	Location	Lgth	Date
25	R Leja	Bridgeport, CT	10/22/92	J Rizzo	Stony Brook, NY	30	12/07/93
19	A LoCascio	Manhasset Bay, NY	06/29/92	W Blackman	Lavelleed, NJ	26	12/08/93
08	R Piscopo	Englewood, NJ	10/31/93	A Liberti	Englewood, NJ	09	12/09/93
24	T Marburger	Nissequogue R., NY	09/19/93	A Karpel	Rockaway Pt., NY		12/10/93
23	D Keegan	Plymouth Bay, MA	07/18/93	R Wilhelm	James R. Brdg., VA		12/10/93
29	T Strmiska	Fishers Is., NY	10/17/93	D Conley	Reedville, VA		12/10/93
25	F Urban	Flynns Knoll, NJ	06/17/92	G Jennette	Ches. Bay Bg. Tn., VA	29	12/11/93
26	L Fitzgerald III	Sandy Hook, NJ	07/04/93	J Meagher	Ches. Bay Bg. Tn., VA	27	12/11/93
21	G Cardel	Eatons Neck, NY	11/08/93	W Denning	Throgs Neck Brdg., NY	22	12/11/93
25	G Karr	Island Bch. St. Pk., NJ	10/28/93	D Hopkinson	Barneget Bay, NJ	28	12/12/93
24	D Kelly	Orient Pt., NY	08/24/93	A Smith Jr.	Barren Is., MD		12/14/93
24	M Pavlov	Cape Cod Canal, MA	06/25/93	P Frangipane	Rockaway Jetty, NY	28	12/14/93
25	K Sprankle	Outer Banks, NC	02/04/92	G Van Scyoc	Ches. Bay Bg. Tn., VA	27	12/18/93
28	T Lynch	Stamford, CT	07/13/93	A Rodriguez	Verrazano Brdg., NY		12/19/93
19	A LoCascio	Manhasset Bay, NY	11/11/93	C Sterling	Island Bch. St. Pk., NJ	19	12/20/93
26	C Lienau	Montauk Pt., NY	11/11/93	G Gilbert	Cape May Rips, NJ	28	12/21/93
36	A Dangelo	Block Island, RI	06/28/91	D Thompson	Benedict, MD		12/05/94
26	R Leja	Bridgeport, CT	10/25/93	B Cumings	Northport, NY		02/02/94
22	J Karolides	Beverly, MA	08/21/93	B Kobel	Northport, NY		02/09/94
16	J Carlson	Westbrook, CT	07/25/92	B Cumings	Northport, NY	22	02/15/94
21	J Drew	Narragansett, RI	10/08/93	W Poulin	Big Stone Beach, DE Bay		02/16/94
27	K Chambers	Wellfleet, MA	06/19/93	W Poulin	Big Stone Beach, DE Bay		02/18/94
22	R Grobarz	Cliffwood Beach, NJ	05/05/93	W Poulin	Big Stone Beach, DE Bay		02/18/94
14	C Santangelo Jr.	Staten Island, NY	09/03/91	W Poulin	Big Stone Beach, DE Bay		02/18/94
19	J Della Porta	Boston, MA	09/28/93	F Belvin	Hog Is., VA		02/23/94
11	R Piscopo	Englewood, NJ	11/06/93	D McMillan	Newark Bay, NJ		03/04/94
21	J Karolides	Danvers, MA	09/25/92	T Baum	Delaware Bay, NJ	23	03/14/94
20	S North	Island Beach, NJ	11/16/91	T Baum	Delaware Bay, NJ	28	03/14/94
16	B Reynolds	Ellis Is., NY	11/26/93	R Miller	Newark Bay, NJ		03/15/94
19	A Marsello	Bristol, RI	06/08/93	R Fink	Northport, NY	22	03/19/94
12	T Marburger	Northport, NY	03/15/94	T Marburger	Northport, NY	12	03/19/94
16	D Kelly	Sag Harbor, NY	06/10/93	M Campbell	Nyack, NY	18	03/23/94
19	J Della Porta	Mystic R., MA	06/05/93	C Santangelo Jr.	Northport, NY	20	03/24/94
22	M Russo	Riverhead, NY	11/06/92	D Feague	Big Stone Bch., DE Bay		03/25/94
20	GS Gray	Charlestown, RI	06/15/92	D Feague	Big Stone Bch., DE Bay		03/25/94
25	J Karolides	Danvers, MA	09/02/93	D Feague	Big Stone Bch., DE Bay		03/25/94
22	H Sweet	Barrington, RI	05/13/93	T Baum	Delaware Bay, NJ	23	03/31/94
16	T Marburger	Northport, NY	03/06/94	G Trotta	Northport, NY	16	04/01/94
12	A Drew Jr.	Charlestown, RI	06/09/93	J Blair	Norwich, CT		04/01/94

Tautog

10	R Nelson	Wantagh Brdg., NY	09/27/93	M Horan	Wantagh Brdg., NY	10	10/02/93
11	W Stuvén	Eatons Neck, NY	10/24/92	J Rossi	Eatons Neck, NY	13	10/09/93
09	D Mann	Old Field Point, NY	10/05/91	S Witthuhn	Buoy 28C, L.I. Sound	15	10/29/93
10	S Cappel	Barneget, NJ	03/29/93	L Yoson	Offsh., Barneget Intl, NJ	14	11/10/93
13	M Ladjack	Shark R. Inlet, NJ	09/16/93	A Ristori	Elberon, NJ	14	11/11/93
10	R Carlson Jr.	Pt. Judith, RI	09/16/91	P Rabidou	Pt. Judith, RI	14	11/14/93

Weakfish

27	F Tenore Jr.	Sandy Hook, NJ	07/26/93	H Goldblum	Flynns Knoll, NJ	27	08/08/93
15	G Ottavio	Cape May Pt., NJ	09/20/93	L Kosilla Jr.	Cape May Pt., NJ		10/11/93
13	A D'Amato	Delaware Bay, NJ	10/07/93	D Huffnagle	Off NC Coast	13	02/01/94

Winter Flounder

11	W Brett	Provincetown, MA	08/21/92	L Dundas	Provincetown, MA		08/25/93
10	K Leopold	Sore Thumb, F.I., NY	06/05/93	C Drowns	Sore Thumb, F.I., NY	10	09/22/93
12	W Anderson	Provincetown, MA	10/20/92	P Newmier	Provincetown, MA	13	10/11/93
11	W Brett	Provincetown, MA	09/14/92	J Macara	Provincetown, MA	13	10/25/93
10	W Anderson	Provincetown, MA	10/22/92	D Dutra	Provincetown, MA		11/01/93
12	W Anderson	Provincetown, MA	05/28/93	D Dutra	Provincetown, MA		11/01/93
10	W Anderson	Provincetown, MA	05/26/93	J Macara	Provincetown, MA		11/04/93

Continued from page 33

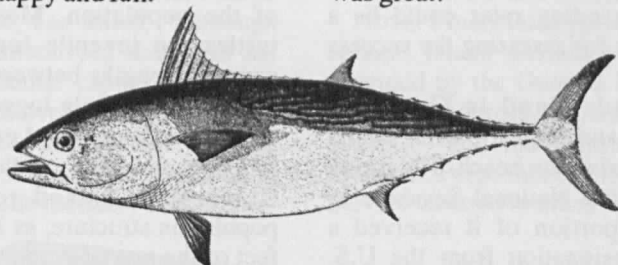
sounding like a sped-up paddlewheel slapping the surface of the water. I picked the tunny up, tail in one hand cradling its belly with the other. I felt the fish's powerful body trying to swim. This was eight pounds of swimming muscle. Muscle so strong, it actually gives off heat—a unique characteristic to the tuna family.

Now, what to do with my little tunny. One of the best kept secrets in the fish-eating world is that little tunny are delicious. But they must be immediately bled, filleted and iced. If not, you're stuck with a foul-tasting bloody mess. I had already caught one tunny this year, and it made several people happy and full.

But, we anglers are a superstitious lot. And for some reason, I began to feel that this was not a "legitimate" angling catch, though I probably burned off more calories on this fish than on any other.

I made my decision. As a sort of "offering" to the Fishing Gods, I waded into the bay up to my waist, placed the fish in the water and let go. The tunny took off into the depths, leaving a large boil on the surface.

Two days later, I caught a little tunny in the surf, which I subsequently bled, steaked, marinated, and grilled over a charcoal hibachi. I served it with a tossed salad, corn-on-the-cob, and dark beer. It was great!



Little tunny, *Euthynnus alleteratus*

GENERAL STORE

Here is a list of books the Littoral Society keeps in stock at discount prices, plus other items for sale. All prices listed include cost of postage.

BOOK SHELF

Discovering Sharks. Edited by Samuel H. Gruber. Covers feeding habits, reproductive strategies, anatomical features, and sensory systems from deep-sea dwellers to coastal cruisers. \$10.

Natural Lives: Modern Times, by Bruce Stutz, chronicles the people, places, and natural history of the Delaware River. \$20.

Anglers' Guide to Sharks, by John Casey. A reprint of this classic brief on how to identify sharks. \$3.

One Square Mile on the Atlantic Coast, by John R. Quinn. *An Artist's Journal of the New Jersey Shore.* Paperback \$14.

Fishing for Striped Bass, by Gary Caputi. Paperback \$16.

A Field Guide to the Atlantic Seashore, by Kenneth Gosner. Peterson Series. Paperback \$12.

OTHER ITEMS

Fish Tag Hats: Blue/white baseball cap sporting tagged striped bass and ALS Tagging Program logo. One size fits all, \$7.

Crew Neck Sweatshirts: A littoral scene featuring night heron, bass, shellfish on grey Jerzees 50/50 (teal ink). M, L, XL, \$18.

New T-shirts: Same as sweatshirt 100% cotton; ash grey with purple, red, or teal accent oval border, collar trim and roll-up cuffs. Specify color. M, L, XL, \$15.

Littoral Society Logo: Blue and white. Jacket patch, \$4; window decal, \$1.

Fish Tag kits: Regular kit of 10 tags, needle, instructions, \$6; tagger's jacket patch, \$4.

AMERICAN LITTORAL SOCIETY BOOKS

By Lyons & Burford, Publishers

The Underwater Naturalist: A Layman's Guide to the Vibrant World Beneath the Sea, by David K. Bulloch. A natural history of the sea. \$20, hardcover.

The Seaside Reader. Edited by Dery Bennett. A coastal anthology mixing nature writing and other casual coastal musing. \$20, hardcover.

The Whale Watcher's Handbook, by David K. Bulloch. A field guide to the whales, dolphins and porpoises of North America. \$10, paper.

For all items in this notice send a check made out to:

AMERICAN LITTORAL SOCIETY, SANDY HOOK, HIGHLANDS, N.J. 07732

Sea Turtle Stranding Survey of Cumberland Island

by CAROL RUCKDESCHEL

A major source of sea turtle mortality was presumed to be the result of entrapment in shrimp trawls. As a conservation measure, federal regulations requiring commercial trawl nets to carry turtle excluder devices (TEDs) were put in place for part of 1990 and 1991. They have been in place full time since 1992.

The ocean beach of Cumberland Island, Georgia, has been surveyed regularly for sea turtles since 1979, and changes in stranding rates could be a trend indicator for assessing the success of the TEDs.

Cumberland Island is Georgia's southernmost and largest barrier island with 17 miles of ocean beach. The island was designated a National Seashore in 1972, and a portion of it received a Wilderness designation from the U.S. Congress in 1982.

Since 1979, weekly — often daily — beach surveys for stranded vertebrates, especially endangered species (i.e., sea turtles) have provided baseline data on numbers of animals, sizes, sex ratios, and other natural history parameters. All turtles are measured and necropsied, gut contents are collected, and tissue samples preserved from fresh specimens. Many carcasses are prepared as museum specimens for either the Cumberland Island Museum or the Smithsonian Institution.

Four species of sea turtles that stranded on Cumberland Island within the last two decades include the loggerhead, *Caretta caretta*; ridley, *Lepidochelys kempii*; leatherback, *Dermochelys coriacea*; and green, *Chelonia mydas*. Loggerheads are by far the most common and regularly nest on the island during the summer

Ruckdeschel has conducted research on sea turtle strandings, woodstars and alligators of Cumberland Island and started the natural history museum there.

months. Ridley's, the most endangered of these species, are frequently found in local waters, although in much lower numbers than loggerheads.

There were 71 sea turtle strandings in 1992. This disturbing stranding level was surpassed only once in the past decade, when, in 1987, 74 turtles stranded.

Through a population model, Crouse et al. (1987) showed that a large juvenile size class is most important to the success of the population. Most stranded sea turtles are juvenile loggerheads with carapace lengths between 20 and 30 inches. Adult female loggerheads nesting on Cumberland Island exceed 34 inches in carapace length. If the strandings on Cumberland Island reflect juvenile population structure, as is likely, one effect of the mortality caused by commercial fisheries can be estimated by the decrease in average size of the juvenile animals. Based on stranding data, the 31 inch size class of juvenile loggerheads, the group which would provide recruits for the nest breeding population, is essentially absent. Equally distressing, the carapace length of stranded juveniles continues to decline each year.

The Georgia Department of Natural Resources monitors strandings on Cumberland and other barrier islands. Comparing strandings along the entire coast of Georgia from 1979 through 1992, Cumberland Island has varied over the years, but never exceeded 42 percent of the state total until 1992. This prompted state officials to ask why there were proportionally so many more strandings on Cumberland Island in 1992.

Greater fishing effort may have occurred off Cumberland Island than along the remainder of the coast—there is no way to measure commercial fishing activity in a particular location. However,

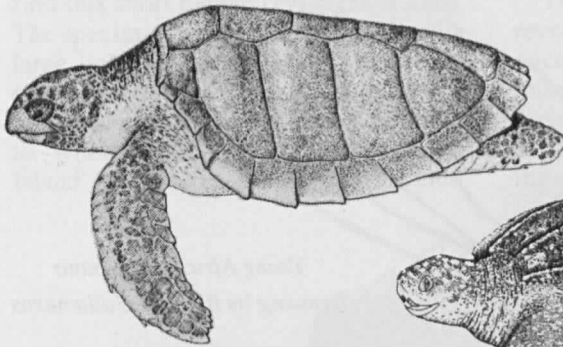
at least two violations of the TED regulations by shrimping vessels were discovered immediately off Cumberland Island, confirming the involvement of commercial fisheries in the strandings. A comatose sea turtle was found in each net when one vessel was boarded by law enforcement officials.

A new threat to sea turtles has been the development of a summer shark gill net fishery. One or two miles of large mesh net were set at night just outside state waters (3 miles) and retrieved the following morning. Non-target species suspected of being killed in these nets include large tarpon, jack crevalle, and sea turtles. The SE Regional Director of the National Marine Fisheries Service, has stated, "Although we have never monitored shark gill net operations, incidental capture and mortality of 20 turtles over a two week period would not be totally unexpected." Because this fishery was suspected of contributing to the high sea turtle mortality on Cumber-

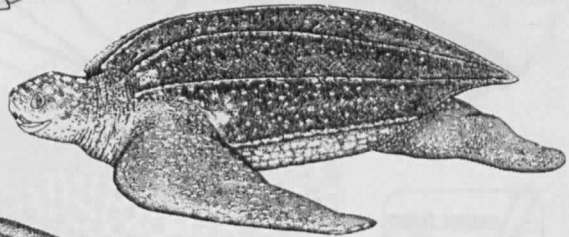
land Island in the summer of 1992, temporary regulations were enacted requiring an approved observer aboard such vessels. Such regulations will presumably be continued.

Long-term monitoring of the sea turtle strandings on Cumberland Island has provided the only data available to measure the impact of commercial fishing operations on the mortality of loggerhead sea turtles. No assessments can be made from incomplete, irregular, or short-term surveys. Such long-term monitoring programs should also contribute to adoption of regulations protecting sea turtles and provide much information on their natural history.

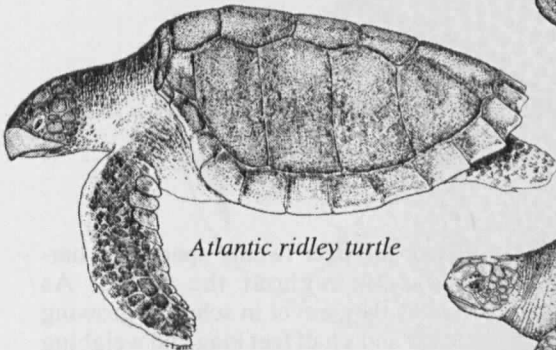
NOTE: Financial support for the Cumberland Island stranding program was provided by the Georgia Department of Natural Resources, the American Littoral Society, and the Cumberland Island Museum. Personnel of the National Park Service assisted in many ways.



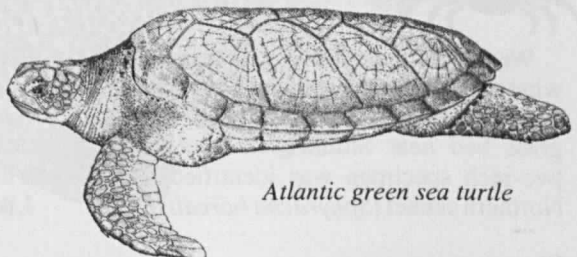
Atlantic loggerhead turtle



Atlantic leatherback turtle



Atlantic ridley turtle

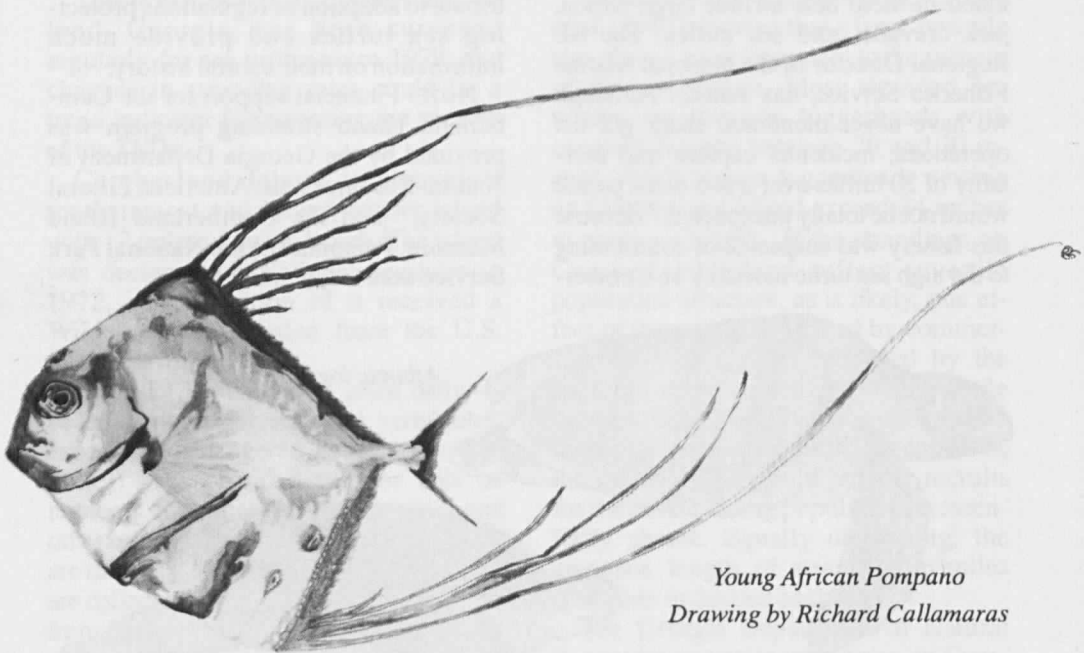


Atlantic green sea turtle

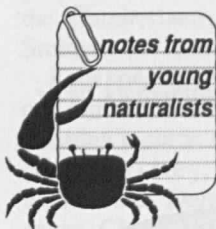
It is our pleasure to introduce UN readers to a new feature focusing on the younger set.

Notes from Young Naturalists, presents children's reflections about the sea through their artwork and writing. In this issue, we're happy to welcome three students from Smithtown High School — Susan Governale, Ryan King and Deborah Tishfield — who participated in a marine biology field project taught by Wendelin Giebel. Richard Callamaras, a student of Judith Jones, from St. John Vianney High School, provided the excellent drawing of the baby African pompano.

Notes to Young Naturalists, offers a short lesson from educators. In this issue, we're pleased to feature Mayzette Stover's brief essay on different watery eating habits. We hope you enjoy this new feature and look forward to submissions by you and your children.



Young African Pompano
Drawing by Richard Callamaras



Juvenile Barracuda

by RYAN KING and SUSAN GOVERNALE

We recently obtained a specimen of what appeared to be a juvenile barracuda. The specimen was seined from an eel grass bed near Shinnecock Inlet. This two-inch specimen was identified as a Northern sennet (*Sphyraena borealis*).

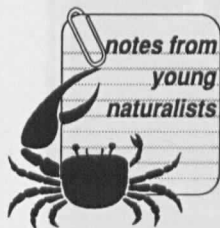
There are over twenty species of barracudas throughout the world. As juveniles they travel in schools, growing up to six and a half feet long and weighing one hundred pounds.

Like all barracudas, the Northern sen-



net has a slender shape, with a long head, a first dorsal fin situated opposite the ventrals, a second dorsal opposite the anal, and a forked tail. The lower jaw of

the sennet has a fleshy tip. As an adult, this species may reach eighteen inches. The sennet ranges from Massachusetts to southern Florida and the Gulf of Mexico.



Short Bigeye

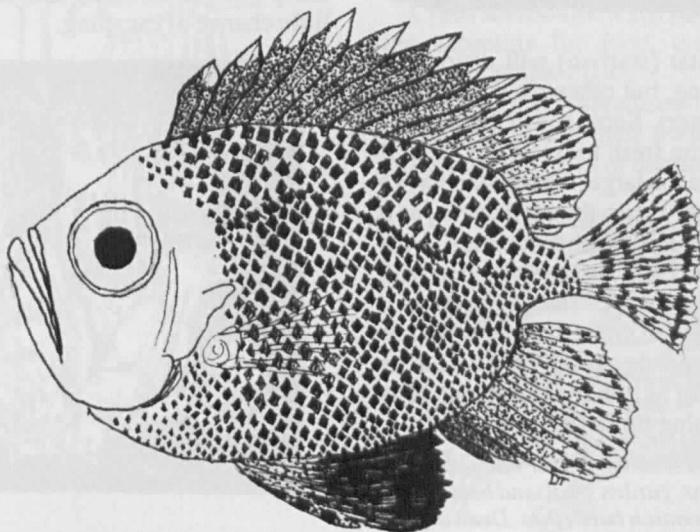
by DEBORAH TISHFIELD and RYAN KING

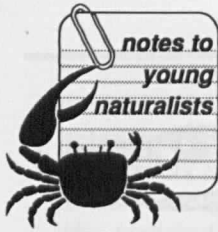
We were pulling beach seines in the waters adjacent to Shinnecock Inlet in September of 1992 and were surprised to find this short bigeye (*Pristigenys alta*). The specimen is a brilliant red color with large golden eyes, slanting mouth and extraordinary scales.

This species is well-documented north to Woods Hole and arrives on Long Island's shores compliments of the Gulf

Stream's eddies, the remnants of which collide with our shores in the summer months.

The stomach contents of specimens reveal that this fish may not be entirely nocturnal. It is considered rare to find this animal in water above 100 feet, since members of this family are thought to disperse over long distances by following drifting flotsam on the ocean surface.



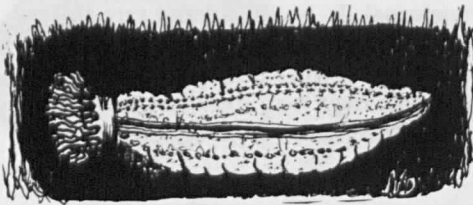


Mind Your Manners

by MAZETTE E. STOVER

When dining at the seashore every creature brings its own tableware. Some have built-in pincers or drills while others come equipped with poison darts, siphons, or lassoes. Table manners are a personal matter in the ocean. What's proper for one species just wouldn't work for another.

The sea cucumber, so named because of its shape, is a dark-colored animal that lumbers in the shallows. To eat it sticks out ten "tongues" or tentacles which move through the water glueing unsuspecting prey to their sticky surfaces. These tentacles are drawn back into the mouth to be scraped. The smaller ones wipe off the big ones like napkins. Then they too are scraped. Every bit of food is finished and the tentacles cleaned before the next search.

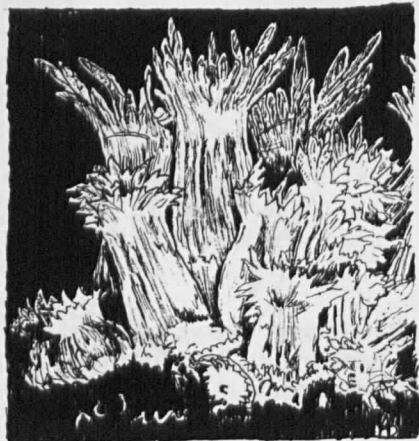


The bat star (starfish) will devour almost anything, but other sea star species are picky eaters. Some relish coral while others feast on fresh mussels or clams. If the bivalve is too large, the sea star plays a waiting game. When the shell opens, as it must, the sea star attaches its arms to the outside of the clam and pries it open with its powerful suckers. The sea star has a small mouth with no teeth for chewing its prey. Who needs teeth? It pushes its stomach out of its mouth and surrounds its meal, absorbing the food directly.

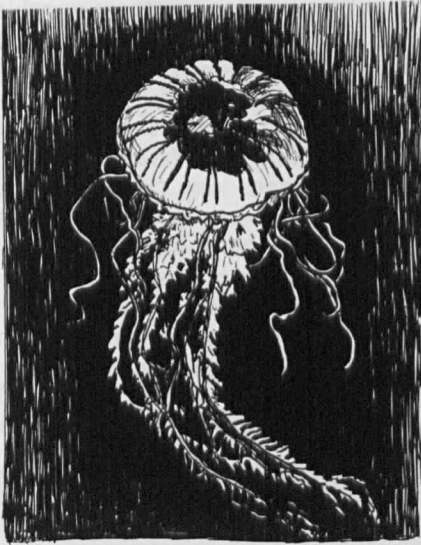
Naturalist and teacher, Stover has published on earthworms, garden snails and beetles and lectures on monarch butterflies. Drawings by Mary Donnelly.



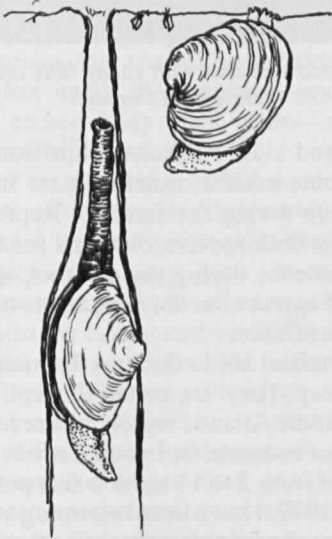
The branch coral, like all members of the coral family, gathers tidbits of zooplankton with flower-like tentacles. These creatures shop for groceries from their front doors, moving together to create the water currents that carry food into their apartments. The coral releases coiled thread-like springs equipped with sharp poisonous barbs and victims have little chance of escaping.



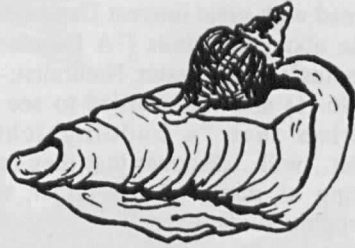
Jellyfish are able to graze over large areas. They, too, are equipped with poisonous barbs and tentacles guide food to their mouths. Some species are skilled cowboys and lasso their prey with the released threads which they pull into their mouths.



Clams employ yet another method for feasting. They come equipped with straws or siphons through which they strain ocean water for food particles and then shoot out what they cannot use.



Dog whelks and moon snails have built-in drills complete with sharp teeth for boring into delicacies such as clams and oysters.

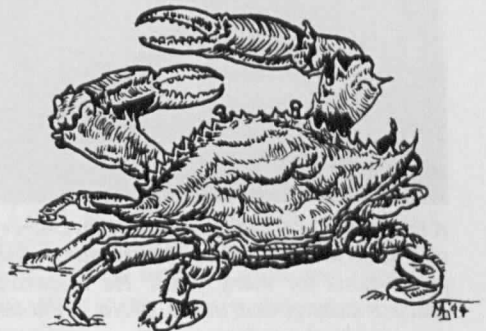


The barnacle, which is attached by its head to stone, wood, or shell, stuffs its mouth with zooplankton collected with feather-like legs.



Crabs scuttle sideways shopping along the shoreline for food, crushing their prey with pincer claws.

All these sea creatures have dietary requirements and their own specialized tableware and rules of etiquette.





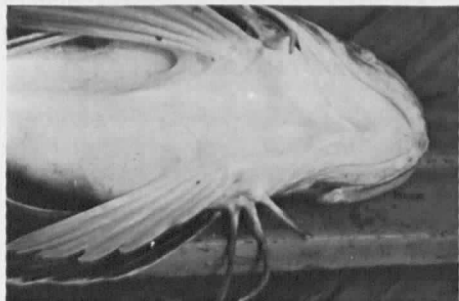
Searobins: Deserving a Closer Look

by RICHARD McBRIDE

I read with great interest Dave Grant's article about searobins ("A Parasite for Prionotus"; *Underwater Naturalist*; Vol. 22, No. 1) and was startled to see him mention that "a budding ichthyologist...will...discover that they are as exciting as many of our larger, more thoroughly studied species". I suppose I am that person, as I have been studying searobins for almost five years as part of my dissertation research at Rutgers University. Searobins are extremely intriguing fishes, but I share this fascination with several others.

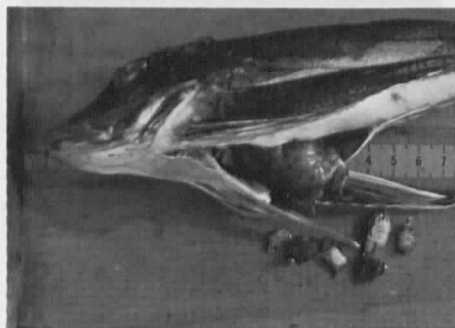
Searobins have attracted considerable scientific interest because their swim-bladder musculature is connected, by nerves, to their spinal column. These innervations allow searobins to produce sound, and the noise they make is the reason the French name for searobin is "gurnard" from *grogner* (to grunt). In addition, searobins have been studied because their pectoral fins have free-moving rays that are also innervated. These prehensile fin rays can be used to detect food sources, and their frenzied movement can sometimes make the fish appear to be walking instead of swimming along the bay bottom.

Prehensile finrays



A recent doctoral graduate of Rutgers University, McBride has studied coastal marine fish populations for many years. He discussed bluefish management in Vol. 20 No. 3. Photos provided by the author.

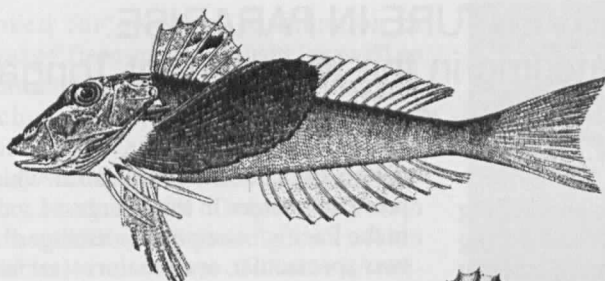
Other scientists, including myself, have examined the ecology of the two species common to the Middle Atlantic region: the striped and northern searobin. These studies have found several differences between the species' life style, some of which may be familiar to more experienced anglers. For example, striped searobins grow faster and reach a larger maximum size (and age) than northern searobins. Both species eat primarily crabs and shrimp but they can be fairly omnivorous, and striped searobins in particular have a more diverse diet that frequently includes fin-fish. Striped searobins generally occupy seasonally warmer waters, which leads them to be more abundant in shallow



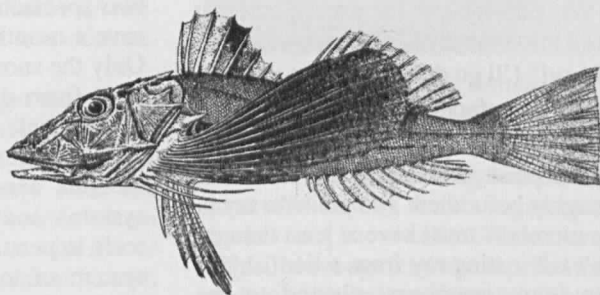
Striped searobin with young blue crabs taken from stomach

bays and close to shore, while northern searobins inhabit coastal waters further offshore during the summer. Reproduction by both species overlaps for about four months during the summer, and as winter approaches they migrate to deeper waters offshore.

Searobins hold a dubious distinction as a fishery. They are certainly familiar in the Middle Atlantic region, where federal surveys estimate that sport catches have ranged from 2 to 11 million fish per year since 1979. I have heard alarming stories of some shore anglers throwing these fish



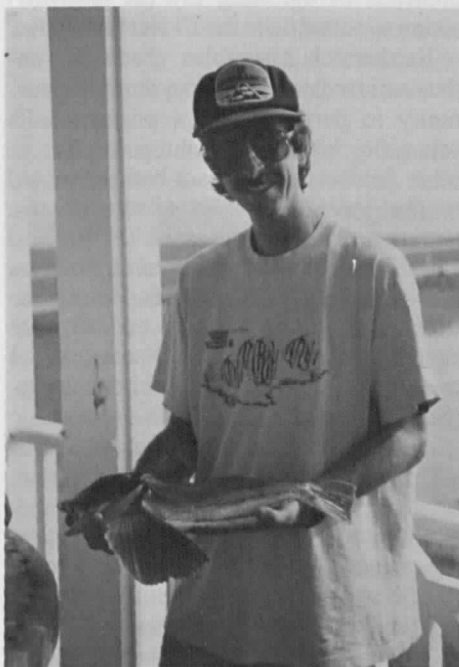
Northern searobin



Striped searobin

on the beach to die, but such attitudes are largely based on ignorance or perhaps even misinformation that searobins are inedible or dangerous to handle. Over the years I have conducted an informal survey among anglers to find that most are well aware that searobins are tasty and easy to prepare. Many people will keep larger searobins (particularly when fluke are not biting) and they often use the gut contents for bait. Some anglers complain that it requires careful attention to handle searobins while extracting a hook, because of their head spines, but most fish have spines that should be avoided. On the other hand, these spines—and the finely etched bony head plates—make their profile rather dramatic.

They are popular at public aquariums because of this profile, their ruddy h and their frenetic prehensile fin ra. This popularity may have interesting consequences, as I recently learned that searobins are occasionally sold live (like lobsters) in some restaurants in southern New England. In many other parts of the world, searobins “fare” even better in the mind of the general public. In Europe, searobins are larger than the North American species and are commercially exploited. Epicures might recognize



Stan Halis holding 19" searobin from So. NJ

them as a basic ingredient in bouillabaisse.

I can, perhaps more than some other people, appreciate the remarkable discovery made by Mr. Grant and applaud his efforts to take a closer look at searobins.



ADVENTURE IN PARADISE: Reefwatching in the Kingdom of Tonga

by JEFFREY HALL

"What's down there?"

"A sting ray...we were snorkelling back to the boat when we found a sting ray. We followed it for awhile, then it ducked into that cave."

"Wow!" I'll go down and take a look."

(After resurfacing) "There's a *lionfish* in the cave."

At this point, our Earthwatch team was thoroughly befuddled. Too polite to say it, some members must have at least thought "Can't tell a sting ray from a lionfish?!?" Other team members, alerted to the presence of the sting ray (or lionfish?) swam over and dove the 20 feet to the cave.

Earthwatch assembles groups of enthusiastic amateurs who pay for the opportunity to participate in a professional's scientific, historical, anthropological, or other fieldwork. Our team had assembled in the Vava'u Islands of the Pacific Kingdom of Tonga to assist Dr. Richard Chesher of the Marine Research Foundation in his study of coral reefs. We met the enthusiasm criterion easily, but we were equally well described as "amateurs." I was one of three biology teachers; we included teachers in other fields, from music to kindergarten for deaf children, as well as a U.S. park ranger, a writer, a librarian, even the videotape editor from Saturday Night Live. A number of us had underwater experience, but fieldwork in the South Pacific was new to us all. Still, sting rays and lionfish are each pretty distinctive.

The sting ray emerged and skimmed away, just off the bottom. A few swimmers followed it on the surface. The ray was easily outdistancing them when it reconsidered, reversed its field, and

Hall chairs the science department at the Pennington School, where he teaches biology and, in the summer, an intensive course in marine biology. He provided the photos for this article.

darted back to the cave...from which a prime contender in the "Largest Lionfish in the Pacific" competition emerged! The two spectacular sea creatures sat at the cave's mouth, right next to each other. Only the snorkels in our mouths kept our jaws from dropping open in collective amazement.

Rick Chesher is trying to establish baseline conditions of the Tongan reef systems and document damage to the reefs to persuade the Tongans to set up a system of locally protected sanctuaries that will preserve their most precious natural resource. His earlier work in Vava'u led to a number of sanctuaries for the giant clam (*Tridacna*), so he has a model on which to work as well as a history of success with the local residents.



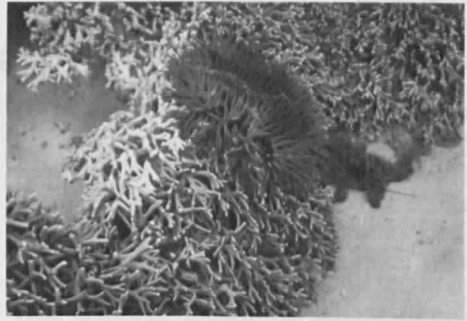
Pincushion starfish

Our job, snorkelling survey transects over each reef, attempting to evaluate the health of the reefs by enumerating coral predators and assessing the damaged or diseased condition of the coral, also gave us plenty of chances to appreciate the variety and wonder of these underwater ecosystems. We mapped areas of *Acropora*, *Porites*, *Millepora*, and other corals. Some of our Earthwatch team counted butterfly and other coral-eating fish during their transects; another group

looked for evidence of infection or damage from natural causes, as well as destruction from reef-walking, dragging anchor chains, and other human activities; a few experienced camerapeople taped scenes for an educational video being produced for Tongans; my own team tallied coral-grazing pincushion (*Culcita*) and crown-of-thorns (*Acanthaster*) starfish as well as less-destructive gastropods.

I must admit that, amongst the vibrant diversity of the Tongan reefs, it was difficult to concentrate on just our target organisms. Distractions were rife: the color-changing octopus that couldn't seem to decide whether to regard us with fear or curiosity...the startling patterns of Picasso triggerfish or Moorish idols...the brilliant colors of wrasse or angelfish...the mother and calf humpback whales that relaxed on the surface as we sailed by...the grotesque beauty of a moray eel. Most remarkable were the reefs themselves, riots of form and color that stirred both aesthetic and emotional responses within each of us.

And some of our undersea encounters were marked with at least minor drama, like finding the sting ray and lionfish. The banded sea snake I discovered as it prowled a coral head in about 30 feet of

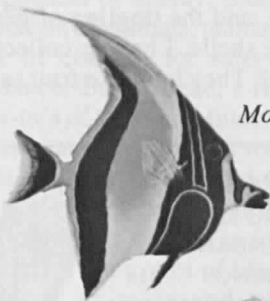


Acanthaster starfish, whitened coral destroyed by starfish

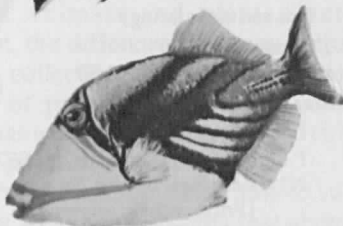
water certainly caught our attention. All those hours of watching Nature on PBS paid off—having seen a segment on sea snakes in a show called “The Coral Triangle,” I recognized the reptile immediately and called my friends’ attention to it. I also knew it was highly venomous, albeit rather timid. Still, the potential danger made us watch its undulations with care as well as fascination as we floated above it.

Of course, a snake lacks gills, so it must surface to breathe. As our snake rose, we drew back to give it plenty of room. Its alternating black and white stripes made it surprisingly hard to see in the gentle waves rippling the ocean’s surface. When we all got a fix on it, I told my colleagues that I was going to approach it cautiously for a photo. I moved closer and snapped my picture, but just then the snake seemed to turn toward me. I say “seemed” because my attention became highly concentrated on my attempt to swim very rapidly in the other direction. I got a good photo, but everyone else got a good laugh at my expense.

Most of our work was not marked by real or perceived danger or drama, but by a combination of awe at the wonder of life on the reef and satisfaction at contributing to a worthwhile scientific and conservation project. The opportunity to form a research team, to meet and interact with Tongans, and to live and study for a few weeks in the South Pacific was a remarkable experience. It’s not everyday I hear someone say, “There’s a lionfish in that cave.”



Moorish idol



Picasso triggerfish



Fruits at the Beach

by THOMAS ALLEN STOCK

On the first day of spring this year, I walked the beach at Crane Neck Point on Long Island Sound. I couldn't help noticing beautiful lemon, orange, and pearl-colored shells lying among the stones. Jingle shells. Their colors look like delicious wedges of lemons and oranges. I had to collect some.

Jingle shells are sometimes nicknamed Mermaids Toenails. I suppose their convex shape could be an imaginary nail. I can't quite understand this nickname because Mermaids don't have toes. Perhaps Mermaids Fingernails would be more accurate.

The species name, *simplex*, sounds strange to me. It sounds like a combination of the words simple and complex. And, in fact, the shell is both.

Simple in shape and color. Complex, as are all multicellular organisms, in its dozen different integrated life processes and a life cycle that is complexly intertwined with its habitat. A bivalve, the *Anomia simplex* has one flat valve often sacrificed to the rocks or algae it attaches to. I've even seen *Anomia* attached to a horseshoe crab shell.

Generally, the shell's colors are genetically determined, however, the black shells come by their color differently. These shells have become buried, and while submerged undergo chemical oxidation. The icon in the shell turns black and gives the shells their unusual color.

Hundreds of shells, lying on this north

A puppeteer, poet and essayist, Stock is a former ranger with a great love for the beach and beach collecting. He provided the photo with this field note.

shore beach, get their common name as the swash from an incoming wave tumbles them, resulting in a most delightful tingly sound as delicate jingle shells are tossed to and fro over the stones.

Gather a handful of jingle shells sometime, close your eyes, and shake



them near your ear. Imagine the swash and the stones on the beach face. Picture the tumbling, and the tingling of gently jostled jingle shells. I have a collection on my dresser. They look like fruit salad, ready to eat.

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Book Reviews

THE FASCINATING FRESH WATER FISH BOOK: How to Catch, Keep, and Observe Your Own Native Fish

by JOHN R. QUINN

1994, 122 pp. softcover
available from Wiley Publishers
605 Third Avenue, New York, NY 10158
(212) 850-6336 \$10.95

This delightful children's book does more than just tell the reader how to create a home aquarium filled with native critters; it helps launch a child into a gentle and respectful admiration for the natural world in their neighborhood. It teaches connectedness, awareness and responsibility. And, as if this weren't exciting enough, *THE FASCINATING FRESH WATER FISH BOOK* teaches these critical concepts so subtly and intelligently that the reader might just absorb them without even noticing.

Cynical about the appropriateness of encouraging kids to go rummaging through nature, I put this book to the acid tests of political correctness...I rolled up my sleeves and searched for attitudes of callousness or apathy; promotion of exploitation of animals, plants, stream beds; lack of concern for safety or parental guidance. But, instead, I read about the how-to's of tanks and filters and aerators; I was treated to excellent working definitions (in easy-to-see bold type) of concepts like vertebrate, substrate, littoral, territoriality; I reveled in intelligent discussion of the cycles of life, gentle treatment of animals and plants, water pollution, the difference between fishing and fish collecting. Even safety tips and urgings of parental guidance — those anathemas to any good, red-blooded child — were put forth attractively.

Somehow Mr. Quinn was able to successfully weave in concepts that should be the *modus operandi* for all nature-lovers: be gentle; work along with, not

against, nature; leave it — at the very least — as you found it, and preferably, better (cleaner); and, above all, love it.

FASCINATING FISH tells readers how to set up an aquarium, where to go to find appropriate inhabitants, how to handle fish (keep hands wet, etc.), what plants work best with what fish, how to feed, how to observe, how to acclimate new members to the aquarium community (and who eats whom). It also identifies different habitat, fish, plant and insect species, defines predator-prey relationships among freshwater fish, and discusses camouflage and other defenses. Quinn also highlights those species or groups that are not appropriate for aquarium life at all or should only be kept briefly and returned (amphibians, insects).

With rampant, excellent drawings and photos, an airy and very appealing layout and excellent content, *FASCINATING FISH* is a treat for children and adults alike.

PRJ

FIELD GUIDE TO COASTAL WETLAND PLANTS OF THE SOUTHEASTERN UNITED STATES

by RALPH W. TINER

University of Massachusetts Press, Amherst, MA
328 pp. Hardcover \$50; soft 17.95.

If you now live or plan to live near the coast of the Southeastern United States or along the Gulf of Mexico, you will find this a useful guide to the many shore plant species indigenous to this area that are a mystery to anyone from somewhere else.

The drawings, by Abigail Rorer, are clean, crisp, and definitive and they will be your main ally in wading through the more than 250 species illustrated.

Although the major portion of this book is given over to identification of plants, trees, and shrubs, descriptions of the types and locations of coastal marshlands broaden the value of the text as does a brief biological primer and key that precedes the main text.

Well worth having.

WETLANDS

by WILLIAM J. MITSCH
and JAMES G. GOSSELINK
Van Nostrand, Reinhold, NY.
722 pp. Hardcover \$62.95

So much information has accumulated on wetlands and its management that college courses are now being offered on the subject. This volume is a suitable text for such a course. It could also be of considerable service to environmentalists now engaged in wetlands conservation issues who have never had any formal training in the area. It compiles major wetland topics in logical order and sequence and can either be read sequentially or by specific topics as the need arises.

Valuable.

GUARDIANS OF THE WHALES

by BRUCE OBEЕ AND GRAEME ELLIS
1992, 169 pp. hardback
available from Alaska Northwest Books
22026 20th Avenue, SE
Bothell, WA 98021 (206) 487-6100
\$34.95

Vancouver Island author Bruce Obee and photographer Graeme Ellis team up to give us this beauty...beautiful to look at, great to read, full of excellent information. *GUARDIANS OF THE WHALES* is far more than a good coffee-table. It addresses some intriguing and controversial issues such as fixing salmon quotas in relationship to killer whales feeding

needs, shootings of whales by fishermen, the effect of oil spills, upstream logging and increased marine traffic on Alaskan whales. *GUARDIANS* also provides the reader with all sorts of juicy tidbits on whale behavior — transient killer whales battering sea lions before devouring them, the discovery of “friendly” gray whales, lightning fast wake riding adventures of Pacific white-sided dolphins.

A prominent feature of this book is Ellis' life-long work in photo-identification of killer whales including an historical sketch of how whale research has developed. Obee and Ellis also treat the reader to fascinating snapshots of relationships among whales and between humans and whales, such as the central role of maternal groups consisting of the mother and offspring, “superpod” gatherings of 70 or more killer whales, the authors' awe-struck stories of growing up alongside whales, and the dramatic effort by human rescuers to save gray whales trapped in the ice (in case you didn't keep track: three whales were trapped — one died; two were rescued when a Russian icebreaker opened a path to the open sea).

GUARDIANS OF THE WHALES does a superb job of providing the reader with a wide perspective on the lives of several different species of Pacific whales and what it takes to learn about them in their own habitat. Truly a labor of love. PRJ





SHADOWBIRDS: A QUEST FOR RAILS

by WILLIAM BURT

1994, 172 pp. hardcover
available from Lyons & Burford
31 West 21st Street
New York, NY 10010
\$25.00 hardcover

On page 157, there is a picture of Leon Arnold in his western shirt, bifocals, and farmer's cap. He's standing in the prairie near Esmond, ND, probably pointing toward the sound of a yellow rail, one of the two "shadowbirds" that author and photographer William Burt tracks in this delightful book.

Rails live in wetlands, salt and fresh. The clapper rail claps, Virginia and sora rails make other sounds, and the black rail (Burt's other target) goes "kickee-doo," usually late at night. Rails are sometimes called mudhens; they nest in grass. Most are shy and difficult to see — they tend to skulk in high grass.

They are well worth this sensitive book, full of insights into the birds' habits and charms. How does a yellow rail go? "Like a typewriter," Leon Arnold says. Arnold (and Burt) got it just right.

FISHWATCHING

by JOHN R. QUINN

1994, 232 pp. paper
available from The Countryman Press
PO Box 175, Woodstock, VT 05091
(800) 245-4151 \$20.50

When the American Littoral Society was founded in 1962, one of its goals was to encourage divers to watch fish and then tell marine biologists what fish do. The pages of this journal carry our members' observations. Now comes

John Quinn's how-to-do-it book, "your complete guide to the underwater world," as the subtitle says. Plenty of details about how to gear up, where to look, and when to go. There are many drawings plus a color photo section in the middle. Quinn is an excellent observer and naturalist, a model for all divers. Highly recommended.

HOW TO PHOTOGRAPH UNDERWATER

by NORBERT WU

1994, 128 pp. paper
available from Stackpole Books (800) 732-3669
or at bookstores
\$16.95 paper

Repeated frustrating attempts at catching marine wildlife in awe-inspiring activities have whittled down my photographic endeavors to snaps with disposable cameras at family parties. Thank goodness to Stackpole Book's "How to Photograph" series. This second volume, by noted underwater photographer, Norbert Wu, is a real gem. Writing in a conversational, humorous and detailed style, the author leads us through the critical basics: light underwater (diffusion, distortion, visibility, refraction); how to choose film (format, speed, grain, contrast, color rendition), cameras (SLR, housings), and lenses; when to use flash and strobe; and, using proper exposure time.

HOW TO PHOTOGRAPH UNDERWATER relies on real underwater photographs to point out the advantages and disadvantages and best combinations of different techniques and equipment. To my eye, all of his shots look great — but, I definitely could see the differences the author points out, especially in the side-by-side comparisons. The author also addresses photographic design, how to organize your library and how to get your photographs published and sold. This excellent book closes with equipment maintenance and advanced composition...such great shots. Hmmm...maybe that Nikonos deserves another chance.

PRJ

Easy Answers To Tough Questions III...

Obviously there are lots of you out there with ocean questions. Just when it seems we've answered everything, along come a bunch of new puzzlers—let's get right to the mailbag:

Q: Can left-handed people learn how to fish?

A: A better question would be can left-handers learn how to do anything? But seriously, the answer is that left-handers can learn to fish if they work hard at it. They are especially good at catching lefteye flounders like summer flounder (fluke) or southern flounder. However, they are weak on halibut, yellowtail, and winter flounder. Witness the fact that most commercial fishermen who pursue these species are right-handed.

Q: (follow up) : Why are flounders flat?

A; They live on the sea floor, and water pressure flattens them. The deeper the water, the flatter the flounder. A 400-pound halibut in 1000 feet of water is about as thick as a piece of shirt cardboard but can be half an acre wide.

Q: Is sea level rising along the mid-Atlantic coast?

A: It depends on whom you ask. Coastal geologists say yes. Realtors say no. The Corps of Engineers doesn't care—rising or falling, they can fix it.

Q: Are there mountains and valleys on the ocean floor?

A: The jury is still out on this one. But ask yourself: Are there any photos of undersea mountains? Ever met a mountain climber in the ocean? Until the "experts" prove otherwise, stick with the evidence: It's real flat down there.

Q: How fast can a fish swim?

A: I asked my flyfishing friend, Sedgewick Montague, to answer this one: "The fastest fish is the steelhead trout. I was dry fly fishing with an olive-blue bivisible on a #19 hook on the south branch of the Nombasquat River in British Columbia in November of 1983. A steelhead hit and headed downstream, breaking off 125 yards (45 dollars worth) of flyline

in six seconds. This calculates out to 127 miles an hour. Damn fine fish if I do say so myself."

Q: How did squid get their name?

A: Take a look at one—what else would you call it?

Q: What causes waves?

A: There are two sources. Most waves are caused by large vessels plying the seas. Think about it: how many times when you are standing on the beach do you see an ocean liner heading right toward you? Almost never. Big ships go parallel to the beach and their wake causes waves to come in. Secondly, some waves escape from wave tanks at marine engineering research centers. One such wave got out of a tank in Battersea, England, and destroyed the Spanish Armada. You can look it up.

Q: Why is it easier for me to float in saltwater than in freshwater (I am eleven years old).

A: First of all, you need not give your age to explain such a childish question. The answer is that an object immersed in water is buoyed up by a force equal to the weight of the water displaced. A person swimming in saltwater is less likely to swallow water. Thus he (or she) is lighter and floats more easily. (Might I suggest that you spend more time on your homework and less time in front of the TV.)

Q: What do gull sounds really mean?

A: The gull has two basic calls. A loud "Car-rup!" means "Stay away, I'm fishing here." A softer "Carrou" means I can't fly; I think I ate something rotten." A reported third call, "Caw, caw," has been tentatively identified as a message of joy, but this has not been confirmed. Research indicates that gulls, even laughing gulls, lack the joy chromosome.

Q: Where and when do sharks sleep?

A: Anywhere and anytime they want.

Next time, answers to such questions as: Why did the tuna cross the ocean? Is a mossbunker a menhaden? What causes sea urchins?

D.W. Bennett

1995 FIELD TRIP SCHEDULE

Below is listed a tentative outline of the Littoral Society field trip schedule for 1995. Exact dates, descriptions, and costs will be sent out to all members in about six weeks—this preliminary listing is meant to sharpen your appetite for the littoral outdoors and allow you to plan ahead (as opposed to planning behind).

If you want specifics, feel free to call the office at 908-291-0055. We will try to fill in some details and give you a running start. Trips are open to members and family.

January

New Year's Day beachwalks
Montauk weekend

February

Sharks of Bimini

March

Culebra
Mexico Dive/Fish
NY/NJ Chapter Symposium, NYC

April

Cumberland Island, GA
Member's Day, Sandy Hook, NJ
Western PA, Freshwater
Wetlands Biology
Belize

May

Murderkill DE Canoe/Camp
Delaware Bay red knots

June

Maine coast
Montauk weekend
Alaska
Pine Barrens NJ
Shark tagging

July

Newfoundland

August

Chincoteague/Assateague,
Beaches, birds, fish
Crab feast, Easton, MD
Maine and stripers

September/October

Annual meeting—Gloucester
or Woods Hole MA

October

Jamaica snorkeling
Cape May NJ, Hawkwatch

November

Suwannee River FL, Canoe/Camp
Assateague weekend
Chesapeake Oyster Dive

AMERICAN LITTORAL SOCIETY

REGIONAL OFFICES

The Society maintains regional offices where members may keep up with local issues and events. Call the chapters for newsletters and local field trip information.

NEW YORK

28 West 9th Road
Broad Channel, NY 11693
718-634-6467

NEW JERSEY

American Littoral Society
Highlands, NJ 07732, 908-291-0055

NY/NJ HARBOR BAYKEEPER

American Littoral Society
Highlands, NJ 07732, 908-291-0176

WATERSHED ASSOCIATION OF THE DELAWARE RIVER

P.O. Box 753, Lambertville, NJ 08530
609-397-4410

DELAWARE RIVERKEEPER

12 Delaware, Lambertville, NJ 08530
609-397-3077

SOUTH ATLANTIC/ GULF COAST

Box 3828 Sarasota, FL 34230
813-951-0884

SOUTHEASTERN FLORIDA

7601 S.W. 134 Avenue, Miami, FL 33183
305-385-6880

PROJECT REEFKEEPER

2809 Bird Ave., Suite 162, Miami, FL 33133
305-858-4980

CAPE FLORIDA PROJECT An Ecological Restoration

1200 South Crandon Blvd.
Key Biscayne, FL 33149
305-667-4166

WESTERN REGION

P.O. Box 6048 Olympia, WA 98502
206-754-1417



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