underwater naturalist

Vol. 26. No. 1

FIELD TRIPS 2002

A few of the upcoming field trips for Spring 2002. Check out the Field Trip Schedule for the rest of the year; for local trips check your newsletters. Call ALSHQ for more details.

April 8-23

New Zealand

This will be a first-time field trip for the Littoral Society to a land filled with flora and fauna the likes of which you have never seen. Also within the two main islands there are volcanoes, glaciers, and geothermal-fed waters. There are 13 national parks, 19 forest, three maritime, and two marine parks. After flying into Auckland Airport we travel to Lake Taupo, North Island, where the trip starts and end at Blenheim, South Island. The major portion of our visit will be spent on South Island. Up North we will visit Huka Falls, spend a full day exploring (with guides) Mt. Ruapehu volcano, do some boating and hiking on Lake Taupo and the Waikato River, and weather permitting some swimming. From there we head by plane to Wellington

April 25-28

Delmarva

The mid-Atlantic shoreline, Virginia's in particular, has unspoiled beaches bursting with dynamic beauty and wildlife. Join us in this spring adventure to see the way islands change and in the process welcome the spring migration. From Assateague we travel to other locations including Chesapeake marshes, Virginia barrier islands, and wildlife management areas. This trip includes easy to moderately strenuous hiking and boating. In particular we will examine island geomorphology as it is related to the past winter, identify returning spring birds (nesting behavior, plumage, and display behavior), botanize, and enjoy. We will also look at marine invertebrates, mammals, and coastal lepidoptera. Our motel is on Chincoteague Island close to the Assateague bridge, only a leisurely walk from Chincoteague National Wildlife Refuge. Limit: 10. Leaders: Tom & Sally Dick.

May 16-19

Assateague Spring Weekend

Come and enjoy the Chincoteague National Wildlife Refuge and Assateague National Seashore. Visit one the east coast's best known and best loved wildlife refuges during the spring migration. Visit a saltmarsh, hike the wildlife loop, and walk the beach. See nesting eagles, osprey, and hawks, migrating herons and shorebirds, butterflies, deer, turtles, snakes, and of course, Chincoteague ponies. Saturday evening enjoy a seafood dinner on the water. Limit: 40. Leaders: Don Riepe and Mickey Cohen.

May 20-26

Belize

Our third trip to Belize, Central America with Joe Garel as the guide par excellence. The trip has changed a little for 2002. Instead of Crooked Tree Lagoon we will visit the Lamanai Mayan Ruins by jungle boat. Another change will be the Green Hills Butterfly Farm and Mt. Pine Ridge Forest Reserve looking at the many species of flora and fauna that Belize's wetlands have to offer. Along with this we will again visit the Belize Zoo, the Community Baboon Sanctuary where there are black howler monkeys, rain forest, go for a dip in the Rio On Pools near Hidden Valley Falls, and do some snorkeling at Hol Chan Marine Reserve. Experience six days of geographic and cultural diversity, including hiking (not too strenuous), river trips, and spectacular snorkeling. Limit: 12. Leader: Joe Garel.

Bulletin of the American Littoral Society

Volume 26, Number 1

	To the Editor
DAVE GRANT	Leks, Larks, and the Crane River3
BARNEY COLE	FIELD NOTES Rays Cruising the Florida Beach14
MIKE O'REILLY	A New Kind of Sand 15
John Clark	Reds & Blacks16
Dave Bulloch	COASTWATCH: Florida
Pam Carlsen	Tales Taggers Tell II 19
	TAGGING REPORT 24
	BOOK REVIEWS45
D.W. Bennett	THE LAST PAGE
	Cover Photo: The Judge's Shack at Island Beach State Park, NJ, Autumn of 2001. by <i>Kenneth P. Hollins</i>

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Corps of Engineers I for one am tired of your constant picking on the Corps (of Engineers). You don't seem to be able to say a good thing about

them. After all, they do provide us with flood protection, they have built some of the country's most beautiful beaches, and they are responsive to the needs of the community.

Why, then do you feel it necessary to attack them so often?

Ferris Fain, Bryn Mawr, PA

(Ed: Because they're there.)

Horseshoe Crabs

The recent cover showing horseshoe crab eggs was striking. Thank you for letting us see these wonderful creatures peacefully floating in their watery world.

Bea Thornton, Salvo, NC

Fishing Kids

It's good to see your story about taking kids fishing. There is a similar program in Ocean Grove, NJ, where the local fishing club takes youngsters out on their ocean pier where they learn to bait hooks, catch fish, and then let them go. And I recall once in Florida where a class was rewarded for its good deportment, with a fishing trip offshore. Lots of fish and lots of squealing.

Maybe that's the answer to kid upbringing. Put fishing rods in their hands and stand back.

William Gossen, New York, NY

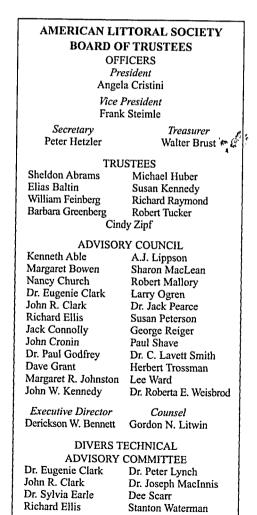
Recreational/Commercial

I read your review of David Dobbs's book on the fishing question, commercial vs. recreational (*The Great Gulf*). I've done both kinds of fishing, for snapper to make a living and for redfish for sport and to cook. And I have argued about the issue with friends who fish for a living and those who fish for fun. We've got a problem. To over-simplify it: recreational fishermen believe they deserve the fish because they don't catch many and because they put a lot of money into the economy when they go

fishing. The commercials say they are making a living and also providing food for the majority of people who don't fish for fun. So then it gets down to how to allocate the resource. And each side says the other side is trying to put them out of the business.

I don't know what the answer is, but I do think that the terms of the argument need to change or else we will continue to have the two sides screaming at each other with no solution in sight.

Ken Byrne, Galveston, TX



Leks, Larks, and the Crane River

by DAVE GRANT



Sandhill cranes navigating a Nebraska cornfield.

And so they live and have their being -these cranes -- not in the present but in the wider reaches of evolutionary time. Their annual return is the ticking of the geologic clock. Upon the place of their return they confer a peculiar distinction...a paleontological patent of nobility, won in the march of aeons.

Aldo Leopold: A Sand County Almanac

The Platte. It is a waterway of reptilian shape that bewildered pioneers making the long trek west along the Oregon Trail. To the geographer it's a braided river, splitting and creeping across terrain so level that mid-westerners like to say it's pancake

Dave Grant is the Society's chief naturalist and a world traveler. You can find him at the Ocean Institute on Sandy Hook. All photographs and artwork are by the author. flat. To the Omaha Indians, this place was *Ne-brath-ka* the "land of flat water" which the French fur traders transformed into *platte*.

For the sandhill crane, the Platte River is their great refuge; the crucial stop in the middle of their trek thousands of miles across the continent. Here they have the security of the wide, shallow waters for roosting at night and thousands of acres of open farmland to feed, socialize, and dance -- an oasis where they can gorge themselves on insects, worms, snails, and especially grain spilled during the fall harvest. During the crane season, in March and April, this area is nicknamed in the tourist brochures "the biggest singles bar in the world."

For birders, this is the "Crane River," identified by naturalists as the greatest wildlife spectacle in the drive across North America and one of the dozen top birding experiences in the world. For me it is more than just a birding destination, it's a shrine for any pilgrim interested in birds and wetlands. Exploring this region also presents a great opportunity to see the contrast between arid and wet ecosystems. The prairie and Sandhills region to the north of the river is dry but strewn with ponds. which, where they haven't been filled by farmers, are major "duck factories" for the rest of the continent. South of the Platte, although diminished from agricultural expansion, significant wetland areas survive along the river course and the Rainwater Basin. As an extra bonus to birdwatchers and botanists, the region is also the transition zone for plant and animal communities from across the breadth of the continent. Arguably, this is where the West begins.

I'm most interested in watching birds when they're on their best behavior, on the breeding ground and in their best plumage. But a few, like cranes, are exceptional in their behavior at other times, and perhaps 90% of the world's population of sandhills congregates here in the spring. Because of the geographic setting and the river bend, but also because of habitat loss elsewhere. vast numbers, almost half a million, funnel through here, along with 10 million ducks and geese. The great flight of migrating water-dependent birds spilling north across mid-America's Central Flyway has been compared to sand streaming through an hourglass. Its base rests on the Gulf coast, its top in Canada, and its waist is at the 80-mile dip the river takes in central Nebraska -- the big, bend of the Platte. It's an irresistible lure to birds and birders.

My first experience with cranes was with a captive bird at a zoo. During a behind-the-scenes tour of the bird pens with an acquaintance, I was encouraged to jump and flap my arms like a bird. The crane's response was instantaneous and marvelous. It charged us with six feet of outstretched wings -- faster than I could ever do the 50-yard dash -- to display, dance, and bugle. I had read of Audubon's being chased by a wounded and enraged whooping crane he was attempting to secure as a specimen, and I now could understand why he was forced to retreat from "an exceedingly ugly antagonist (that was) defending himself." I was stunned, but immediately addicted to them. My unflappable host merely shrugged and said, "I gotta' get that guy a mate."

Decades later, an invitation from the Chicago Audubon Society dragged me away from my usual spring haunts at the coast, and here I was, disregarding all those warnings about the Midwest's rowdy weather, heading west from Omaha on the Corn Husker Highway, into the prairie night. March had really gone out like a lamb and it was in the 80s -- the warmest spot in the country and pleasant weather for any place you might want to find yourself in the spring. I was regretting being away from the beach and not having packed shorts, but it was a delightful start to the adventure.

If you're not a trucker, locals usually guess why a stranger is out here off Interstate 80 in the spring; you get some noteworthy inquiries from hotel receptionists, pump jockeys, and waitresses once you hit the stretch between Grand Island and Kearney (and I'm not the type that wears my binoculars into restaurants.) "Are you here to see the cranes?" Many offer advice: "They're up early to eat the corn. I like to go out before sun-up and hear them fly out of the river. Better get going early in the morning." I tried to be nonchalant, mentioning that I'd seen a few cranes on winter trips to Florida and Texas, but was informed that this would be "quite different."

These glamorous creatures that attracted me here are wetland dependent, but the first order of business, now that I was approaching the 100th meridian that Roger Tory Peterson identified as the transition line for western birds, was to head out on the north side of the Platte to another, drier ecological zone, the grasslands of central Nebraska.

Prairie comes from the Latin *pratum* (meadow), and this biome, the greatest

grassland on earth, once covered a quarter of the lower 48 states. I had been to its four corners, but never to its geographic center. Because of limited rainfall and frequent fires, grasses once dominated the landscape -- 1,000 miles between Chicago and Denver and 2,000 miles from the Texas coast to the Saskatchewan River in Alberta -- one-ninth of North America. Nebraska was the center of this sea of grass, but today, as with most of the original landscapes that are habitable or tillable, only about one percent of it remains intact.

When Lewis and Clark passed through the West, they reported great herds of game, sustained by an ecologically diverse community of plants and animals. Some ecologists speculate that this area was something of a sanctuary for bison and elk that were pressed on all sides by competing Indian tribes.

The introduction of the steel plow by John Deere in 1837 finally gave "sodbusters" the technology they needed to turn over the deep, dense roots of bluestem, needlegrass, blue grama, and a great variety of other prairie plants, and convert this into a more manageable and profitable monoculture of breadbasket crops like corn and wheat. Once the transformation of the plains had begun, it was so rapid that in 1878, General William Tecumseh Sherman remarked that "western America had changed more in ten years than any other place on earth in fifty."

The north side of the Platte is also the site of the Mormon Trail, where the breadth of the river gave those refugees an added sense of security while hauling their 600-pound wagons across the treeless track that, in 1820, explorer Major Stephen Long erroneously labeled "The Great American Desert." The Mormons were happy to segregate themselves from the rest of the throng heading West on the Oregon and California trails looking for rich cropland, and like other settlers, mistakenly assumed that trees were the prime indicator of good soil. Ironically, everyone was racing to cross a grassland that, irrigated by the Platte and the Ogallala aquifer (the world's largest), was to become the most productive farmland in North America.

After a delightfully awkward moment being enlightened by a local about the difference between a farm and a ranch, and a farmer and a rancher (later, I noticed that it has as much to do with foot gear as to what they harvest), I was directed down the "Old Potash Highway." (After Germany cut off exports to the U.S. from their mines, California kelp and the chemistry of prairie ponds helped supply potash for gunpowder to win World War I.)

"Look out on the Taylor ranch," where I had been informed that both the greater prairie chicken and the sharp-tailed grouse perform their spring nuptials. Over the years I have led a number of wild goose chases in Texas, looking for *leks* -- the stomping grounds of prairie fowl; so this was a required stop for me.

Leks (from the Swedish word play) are mating arenas where male birds congregate to display their wares on an otherwise featureless terrain. These "booming grounds" or "strutting stages" may be a social response to the lack of cover, as well as a means to overwhelm the ability of the broad expanse of the prairie to soak up the noise from isolated males broadcasting their mating calls. It must work well because the three grouse species of the plains -- the prairie chickens of the Eastern tall-grass, the sharp-tailed grouse of the mixed grass, and the sage grouse of the Western short-grass prairies, all do it, and some of the same sites have been used as long as anyone can remember.

Unlike many of my birding forays, this one had a good chance of success. Following precise directions ("Go north on 60th Road to the stop sign, then left on One-R Road and go exactly one mile."), I headed out early to arrive, as instructed, one hour before dawn. My headlights illuminated highway advertisements confirming that I was in the right neighborhood:

Platte River By-Products: Prompt Removal of Dead Livestock

Conditions were ideal: no wind, no traffic, no distractions for me or the birds. I proceeded as directed ("Turn your vehicle around to face the sunrise and look north to see the chickens and south to see the sharp-tails."), easy enough.

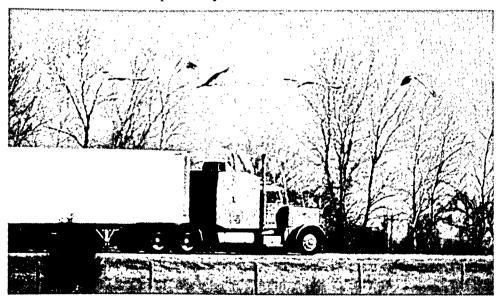
I settled on the warm engine hood and waited with about 17 pounds of camera paraphernalia in my lap (as much personal gear as each Mormon was allowed on their 1400-mile cross-country migration through this region).

Two things were conspicuous. First, the dryness of the place. You can see it in the plants and feel it in the air and soil. Drought is the worst menace of the prairie and the potential is always there. Here you begin to enter the famous Sandhills region, the largest dune field in North America --20,000 square miles of grassland spread across Nebraska and Kansas, just waiting for the right Dust Bowl conditions to become an American Sahara. Second, there was the stillness. No planes, cars, or barking dogs -- a peculiar, exhilarating feeling that takes a while to permeate you. Settlers were sometimes disturbed by what William Quayle (1905) called this "vastness and nauseating loneliness; loneliness, thy other name, thy one true synonym, is prairie." Before long I realized this is the first weekend in months, that I won't be listening to another eight-hour lawn offensive by my neighbor's leaf blower.

At first I wasn't sure if I was imagining things or hearing the sound of a freshening breeze -- but to my left they began to sound-off, a triple syllable whoom or boom -- something you can imitate by blowing across the top of a jug. It was the prairie chicken, *Tympanuchus cupido* (*Tympanachus* -- having a drum and *cupido* -- Cupid's little wings, a reference to the upright feathers on the dancing bird's neck).

John Madson describes the sound best in *Where the Sky Began*:

"Someone wrote that the prairie chicken's booming was of great comfort to the pioneer. I can't imagine why...by no measure is it a comforting, civilized sound. It is a lonely, wild sound made



Cranes and an 18-wheeler as they cruise across the flat Nebraska landscape.

by a lonely, wild bird. It has the quality of an ancient wind blowing across the smoke flap of a wickiup...In all of modern America there is no more lost, plaintive, old-time sound than the booming of a native prairie chicken."

Well, it was of great comfort to me to finally be observing males patrolling their little territories, bowing, strutting, and charging each other as the sunrise brightened the hilltop strutting arena. As the brightening daylight tinted the bluestem grass from reddish to yellow, I began to identify females passing between the males, stirring them to raise their tails and feather "horns," droop their wings and heads, inflate their orange neck sacks, and dance.

What a great show it is. The flamboyant performances on leks are legendary among behaviorists and bird watchers. Colonel N.S. Goss (1891) wrote of them:

> "They run about much like our domestic fowls, but with a more stately carriage ... the warmth of spring quickens their blood and awakes the passions of love; then, as with a view to fairness and the survival of the fittest, they select a smooth open courtship ground (usually called a 'scratching ground'), where the males assemble at the early dawn to vie with each other in courage and pompous display, uttering at the same time their love call, a loud booming noise...as soon as this is heard by the hen birds desirous of mating, they quickly put in an appearance....apparently indifferent observers, until claimed by victorious rivals."

I can see why they had such an impression on Native Americans, and why Lewis and Clark were compelled to send a live pair of these birds back to President Jefferson.

We learn in school about the great buffalo hunts by Indians and settlers, but these two-pound "chickens" were more than just a local staple. In 1873 almost three quarters of a million birds (in barrels of 500 birds each) were shipped by rail to Chicago, to be served in fine restaurants, as far away as Europe. It was written, "The flavor of the prairie chicken's flesh is as wild as its prairie flight." Gerald Horak wrote in 1975, "Prairie chickens probably contributed more to homesteaders than the buffalo ever did."

Not surprising, there was a price to pay for the over-harvesting by hunters and habitat alteration by the plow. As early as 1878, at least one writer was associating these activities with the scourges of grasshoppers that had earlier been feasted upon by prairie chicken fledglings.

To my right I became aware of cooing. white flashes of tail feathers, and some commotion as another small group of birds began jousting at their lek like fighting cocks. Pedioecetes (prairie-inhabitant) phasianellus (pheasant), the sharp-tailed grouse, has a display that seems more choreographed than the other species, and when females appear, the males do a little synchronized shuffle. Stomping and stopping in unison, they mark time in little circles on their territory, following some unspoken commands. I imagined square dancers down at the Grange Hall obeying the caller to "Droop those wings, stretch that neck, stamp your feet, and dance about."

I'm embarrassed to admit my cultural ignorance and that it wasn't until that very moment that it dawned on me what the celebrated "chicken dance" of the Plains Indians is all about. In it, the human dancers honor the birds by imitation, right down to the bustle of tail feathers.

Dancing grouse and chickens are interesting in part because, in spite of all the excitement, not all of the males breed. On the lek, only the most vigorous individuals who have established and defended territories at the center (as few as 10 percent of the males each Spring) win the hearts of the ladies. I suppose in Darwinian terms, this gives the females a simple mechanism to quickly weed out those males that may need more conditioning or maturity. However, the success of these Lotharios of the lek is apparently short-lived, for only about half of the dominant males survive each year to return and defend their rightful spots at the center of the "scratching ground."

I measured the height of the rising sun with the spread of my hand -- 15 degrees. The sun had been up an hour and I'd hardly taken a picture. My eyes caught new movement -- a raptor gliding low over the grasses, harrier-like, but bigger....a ferruginous hawk -- the giant of the plains; our largest hawk and my first sighting. John May (1935) called them "prairie eagles... winnowing low over the ground with almost laborious movement."

It passed silently between the hills and was gone as quickly as it appeared. With it went the grouse and the chickens, and by breakfast-time, this birding adventure was over. Well, almost over. Leaving the area I slowed down to check out some movement near the road when I was ambushed by, of all things, a ringed-neck pheasant. In an uncanny act of bravado, a cock-bird rushed out and displayed to the car by puffing up and drumming his wings. Weird... whether hế was responding to his reflection in the shiny finish of the rental car, defending a territory, or trying to outperform his cousins, I'll never know.

Now it was off to Dannebrog, the Danish capital of Nebraska, (immortalized in Roger Welsch's *Postcards from Nebraska*) for a real home-cooked country breakfast at Harriet's Danish Restaurant, with "pancakes so thin, they only have one side." That is, if they were open -- "don't bother calling; they don't have a phone."

The elusive prairie fowl mastered, my next objective was to head south to the

Platte to find concentrations of cranes. To find the river it's only necessary to look across the plains for the "dam" trees, a term that sometimes crops up in descriptions of the riparian vegetation that has become established since the river was confined upstream by the Kingsley Dam to divert meltwater from Rocky Mountain snow packs for irrigation and hydropower. Three-quarters of the water is now drawn from the Platte, at the expense of wetlands and the species that depend on them, and most of these wet meadows are now farmland. Now that the flow of the river is diminished, the invading bottomland forests of cottonwood and willow trees have significantly altered the habitat for beach nesting birds like piping plovers and least terns, helping to send them into decline. The narrowing of the river also has reduced the safe roosting buffer for cranes, which need wide stretches of 500 vards or more to rest at night. In 1886 the channel was referred to as "mile-wide" but by the 1990s was closer to the length of a football field. Overall, Nebraska has lost more than 35% of its wetlands, but the figure in some important areas near the river and south of it may be closer to 90%.

The next morning I headed south for those trees -- again with more specific directions from the locals: "Get out there before sunrise; the cranes wait until it warms up a bit before they fly. Head south and cross the river to Doniphan. It's a nice little town; you'll like it, but that's too far. Before you get there turn down the River road and go out by the Martin Brothers memorial." More signs indicated I was approaching the river:

Minimum Maintained Road. Icy Roads Possible

The weather was playing an April Fool's trick this day. A front passed at night and the following morning it had dropped into the 20s, with wind chills near zero. ("It's nippy -- you betcha'!" "Out on the prairie there's nothing between you and the Arctic Circle but a barbed wire fence -- and that's broken.")

1

It is said of the plains: Don't set out "in any season of the year without an overcoat, a fan, a lightning rod, and an umbrella." I put on all my layers plus a liberated blanket from the motel, and feeling a bit like an Indian, headed out to the edge of grain fields along the rich bottomlands that hug the river.

I was cold and displeased by the change in the weather until I read the plaque at the memorial. In August, 1864, the Martin brothers, Nathanial (12) and Robert (15), fleeing a band of Sioux, were struck by arrows, one of which pinned them together on their horse. Left for dead, they actually lived to 79 and 47, respectively.

After reading this, I reasoned that I could endure a few hours outside and settled down to wait for the cranes to fly out of their river roost -- and to ponder the veracity of the tale of the misfortune of the Martin boys. In *Son of the Morning Star* - good reading about Custer's misfortunes out West, Evan Connell states, "Most plains Indians could put an arrow entirely through a buffalo...and one warrior bragged about killing three cows with a single arrow."

I was relieved to be exploring Nebraska in the 20th Century, and suddenly the conditions didn't seem so bad.

As the morning progressed, meadowlarks began to sound off with what David Costello wrote of as a "clear, plaintive whistle of unusual sweetness. If the gods were to choose a bird typical of the summer prairies they probably would designate the meadowlark." The eastern meadowlark can be found here in wet meadows, but most birds in the area are the more melodious western meadowlark. The way to differentiate the two is by their voice, since they are so similar in appearance.

Ernest Thompson describes this prairie lark:

"In richness of voice and modulation it equals or excels both the wood thrush and nightingale, and in the power and beauty of its articulation it has no superior in the whole world of feathered choristers with which I am acquainted."

In their short, gliding bursts of flight, both birds can be confused with the European starling; and coincidentally, the Cherokee Indian name for the bird is *nakwisi* which means *star*. The western was overlooked as a separate species by Lewis and Clark, and when it finally did attract the attention of Audubon, he dubbed it *Sturnella neglecta* (*Sturnella -*starling-like -- because of the star-like silhouette in flight, and *neglecta* -- for obvious reasons.). The birds have made up for lost time however. In 1929 the western meadowlark was declared Nebraska's state bird -- an honor shared in five other states.

The meadowlark has plenty of admirers, including the Indians. Legend has it, the meadowlark's call taught the Indians where to shoot an elk to kill it. And it is said that a meadowlark warned Sitting Bull he would be assassinated by his own people. General Custer, who wrote that he loved birds, once altered the regimental line-of-march to avoid a meadowlark's nest in the grass. (An odd statement from someone who, in the era of "old time" naturalists and collectors, also shot a white [whooping] crane simply to measure the spread of its wings.)

The meadowlark's song reminds me of the lyrics Army mothers (including my own) used to sing to their children to the melody of the first notes of Reveille (I hate to get up...I hate to get up... I hate to get up ...in the morning.) The meadowlark sometimes imitates the calls of other birds, and in that frigid meadow, as the early stages of hypothermia began to manifest themselves, I began to formulate one of my wacky theories about a connection here between Custer, the cavalry, meadowlarks, and Reveille. Who wrote that tune anyway? Did an army bugler borrow it from the birds, like much of our early music and dance? Something to ponder on a bone-chilling day.

I was better acquainted with the next bird to sound off. A kingfisher was rattling in a tall tree, out of place, but bold and evidently agitated by my presence near its evening roost. Indians carried a mummified specimen of this outspoken bird in a pouch as a lucky charm, because "neither arrows nor bullets intercept the kingfisher's darting flight," and the kingfisher is almost immune to predation. Their nesting burrow is dug deeper into a riverbank than my arm can reach, and I've observed them willingly splash down into the water to avoid a stooping hawk.

In the distance I saw groups of large birds beginning to rise over the trees, and like distant fireworks, their muffled sounds took a moment to reach me. I was puzzled because some looked like geese, but it only took an instant to figure out what was happening. On cold days, airborne cranes tuck their long legs up against the belly to maintain warmth. Also, their wing beats are slower than geese and have a distinctive rapid upstroke.

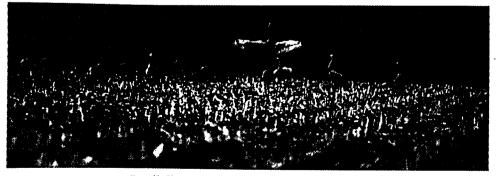
Once I could hear them clearly, there was no disputing that these were cranes. It is an ancient, haunting, and awe-inspiring call that, along with the howl of the wolf, evokes emotion like few other sounds in nature. Indeed, fossils of sandhill cranes are the oldest remains known from any living bird. They are a splendid link to the past. George Gladden wrote,

"The cry of the Sandhill Crane is a veritable voice of Nature, untamed and unterrified. It's uncanny quality is like that of the Loon...It's resonance is remarkable and its carrying power is increased by a distinct tremolo effect. Often for several minutes after the birds have vanished the unearthly sound drifts back to the listener, like a taunting trumpet from the underworld."

The Indian tribe that settlers called the Miami of Pennsylvania, were known to themselves as the *Twightwee* -- ono-matopoetic for the cry of the sandhill crane. Henry Collins called it "ringing trumpetings." Edwin Teale described it as a shrill, loud, far-carrying "Gar-oo-oo-oo-a-a."

The Latin word for the Genus *Grus*, imitates the grunt or low guttural call of the cranes. Our English word *crane* comes via the Dutch *kranny*, the Celtic *garan*, and the Greek *geranos*, after the mythological Pygmy leader, Gerania, who fought with, and was transformed into, a crane. All of these names are somewhat imitative of the voice of cranes. We also get from it the plant name *Geranium*, that family whose fruits end in a long "beak or cranesbill."

I acquired a crane caller after a wildlife biologist on one of my trips pointed out,



Sandhill cranes in a farm field. One dances.

much to my surprise, that cranes are hunted in Texas and the Central Flyway (with the exception of Nebraska), partly to appease the grain farmers. I speculated how they taste, awaiting the predictable "just-like-chicken" retort. To my astonishment, he responded enthusiastically, "Delicious! The best!", and quoting other naturalists: "Excellent for the table...Not strong like herons and other wading birds..." "In the old days in Florida, William Bartram, the botanist, wrote that

they make an excellent soup." I chose not to pursue the topic.

Although I keep it handy, I've yet to have an opportunity to use my caller on those rare cranes that irregularly pass through New Jersey in the fall migration. However, it certainly gets the attention of geese and birdwatchers.

Indian warriors fashioned whistles out of the

eight-inch leg and wing bones of sandhill cranes, but not to lure birds. Strung around the neck, the wearer used it to summon his *wyakin* or guardian spirit in battle. Amid the whiz of arrows at Little Big Horn, General Custer probably heard crane whistles (payback for shooting white cranes out of curiosity?).

The cranes spread out in all directions, but in loosely organized groups. Most seemed to be heading for nearby fields and were not flying too much higher than the tree tops, but others appeared to be searching out thermals to gain altitude for the long trip north. The next leg of the great Spring migration appeared to be underway for much of the multitude, and by mid-April they all would be gone and the river would fall silent.

Much of our early knowledge about birds was gathered by observing these conspicuous creatures. Aristotle, writing in the 3rd Century BC, began to unravel one of the earliest and greatest mysteries about the seasonal appearance of birds when he wrote:

> "In some cases they migrate from near at hand; in others they may be said to come from the ends of the world, as in the case of the (Eurasian) crane, for these birds migrate from the steppes of Scythia to the marshlands south

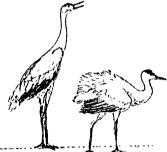
> > of Egypt, where the Nile has its source."

The cranes were wary of landing near me, so I headed for the best of bird blinds, the car. They gathered by the score in every open field, keeping a wary eye on farmers who were preparing the ground. It appears that any seed planting is delayed until the voracious cranes depart.

Being in the car was much more comfortable for

me and the birds. As they spiraled overhead, jockeying for position in loose flocks, I tried to imagine which Greek letters mythology tells us were invented by ancient crane-watchers like Palamedes and Mercury.... gamma? epsilon? zeta? pi? Everything about cranes seems unique or exaggerated when compared to most other birds, and for me this was like bird watching for the first time. However, it isn't until it's on the ground that the crane makes its biggest impression on you.

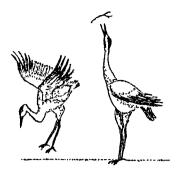
Each time a group landed, in fact at almost any moment, some birds would erupt in song and dance. "Their...antics at times are ludicrous in the extreme, bowing and leaping high in the air, hopping, skipping and circling about with drooping wings and croaking whoop, an almost indescribable dance and din...working themselves up into a fever of excitement only equaled by an Indian war dance."



The crane on the left is sounding its warning call; the other is in its threat display - raised tertial feathers.

(N.S. Goss, History of Birds in Kansas)

This behavior serves other purposes besides the obvious courtship ritual on the breeding grounds. Paired cranes sing duets -unison calls -- to strengthen bonds, but there are also distinctive flight calls, location calls to advertise good feeding areas, and of course, warning calls.



More displays: bowing on the left, stick tossing on the right.

which are deafening when a thousand birds panic. Some actions are non-verbal threats to maintain the crane's equivalent of personal space, and rather than directing a low-blow to a trespasser, as humans might, the crane may instead direct a *lowbow* -- stretching down to expose the red cap on it's head -- to send warnings. They also spar with their bill and leap in the air to kick at their opponent, but generally this is a non-contact sport to release tension in the flock.

Some actions may be training for juveniles. Often they will toss corn cobs and sticks into the air. Some crane watchers have speculated this is training for killing snakes and other prey, as well as displaying to other birds, but if you watch individuals away from the group, it's easy to imagine that sometimes, it's just plain fun.

There are many places to watch cranes along the river loop between Kearney and Grand Island, and although I wasn't tiring of watching them; I headed for Crane Meadows Nature Center for some background on the birds and other points of interest around Grand Island. I had a number of questions about what I was seeing, especially the size differences between the cranes. I found out "...there are greater. lesser, and intermediate races of sandhills and local populations out west, in Florida and in Mississippi. The lesser migrates the farthest, all the way to Siberia -- 7,000 miles a year." Also, I repeatedly saw several partial albinos in the same locations. which I learned is "...an important clue that

they may be loyal to some sites during migration, and an important feature to consider when you talk about habitat protection."

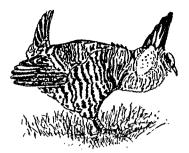
Besides hunting and the insidious backdrop of habitat loss, there are other human threats that inadvertently affect the cranes. Prior to my visit, a sudden, late season

blizzard drove the birds back to the river roosts, and in the blinding snow, hundreds were killed after colliding with telephone wires.

The naturalist asked, "Have you come to see THE crane?" THE crane turned out to be a Eurasian or common, Europe's only crane and the tenth North American sighting. It is the nearest relative to our whooping crane.

Nebraska is way off course on the route between the "steppes of Scythia and the marshlands south of Egypt." Is this bird a trail-blazing explorer from the Old World, or retracing ancient paths, or did it simply get swept up in the wrong flock of lesser sandhills across the Bering Strait? At what point in the great journey, amid the clamoring of a thousand sandhill cranes, did this bird say to itself, "Something just isn't right here."

There are a number of night roosts along the river where the gregarious cranes gather in groups of 15,000 or more. On my last afternoon in Grand Island, I staked out a place near one of the bridges to wait for the birds to come in for the night. Settlers described these western rivers as "too thin to plow and too thick to drink" and "a milewide and an inch deep." The water was cold and silty, but so shallow that I could see large fish swimming hard against the current. Could these be the ubiquitous white sucker (Catostomus commersonni suckleyi), the "typical prairie-water fish" I had been reading about? A beaver appeared from nowhere, worked its way



Greater prairie chicken.

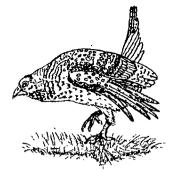
upstream towards the islands of sandbar willows, then disappeared with a slap of its tail when an eagle glided over the river.

About the time I was beginning to worry I had chosen the wrong location to watch the birds come in for the night, they began to arrive -- pick-up trucks, rental cars, and out-of-state vehicles. "Oh yes, you are in the right place. They'll fly in just before sunset." Crane watching is irresistible to locals and visitors.

The squawks of a few ducks and redwinged blackbirds staking out their territories had begun to die down when cranes began flying in from the fields. This was what I had wanted to experience before I left the Platte, the great river chorus of cranes. Many distinct voices can be heard, including the higher pitched juveniles, and the force of it is overwhelming to the senses.

Rather than attempt to describe the sound and its impact on the sentimental spectators at the bridge, I will defer to Thomas Nuttal's description of whooping cranes on the Mississippi in 1834, when they were much more abundant:

> "The whole continent seemed as if giving up its quota of the species to swell the mighty host... The clangor of these numerous legions passing high in the air seemed almost deafening; the confused cry of the vast army continued... nearly throughout the whole night without intermission."



Sharp-tailed grouse.

Satisfied that I had experienced the best remnants of wilderness that "the land of flat water" still has to offer, it was time to leave the peacefulness of the Platte and clangor of the cranes, and head home to the clamor of leaf blowers and car horns.

> Our appreciation of the crane grows with the slow unraveling of earthly history. His tribe, we now know, stems out of the remote Eocene. The other members of the fauna in which he originated are long since entombed with the hills. When we hear his call we hear no mere bird. He is a symbol of our untamable past.

> > Aldo Leopold A Sand County Almanac

For more information on Nebraska and birds:

Alfred Bailey. Birds of Colorado Lauren Brown. Grasslands Frank Chapman. Handbook of Birds of Eastern North America N. S. Goss . History of the Birds of Kansas Steve Grooms. The Cry of the Sandhill Crane William Least Heat-Moon. Prairy Erth Paul Johnsgard. Crane Music Gary Lingle. Birding Crane River Ernest Thompson. The Birds of Manitoba

Rays Cruising the Florida Beach

by BARNEY COLE

Recently I was fortunate to vacation for a week on Sanibel Island, on the southwest coast of Florida. One evening after a rough day watching birds in the Ding Darling Refuge and restoring my energy with a couple of cold ones, my wife and I took a walk down the beach to see the green flash at sunset. The beach was cluttered with the usual gangs of willets, turnstones, blackbellied plovers, sanderlings, royal terns, skimmers, pelicans, and various gulls that basically ignored us as we walked within feet of them and only grudgingly let us pass. Some of the gulls were doing a tap dance, or a fandango -- if you like -- at the surf's edge. They were paddling their feet up and down rapidly, sort of using their webbed feet to suck small critters out of the sand that they picked at and ate. This dance was very noisy, with a lot of splashing, and humorous to watch and did not stop until we were within a few feet of the dancer. But on to the other thing we observed that evening.

On our way back from the stroll (no green flash spotted), we saw a commotion in the fading light of the surf zone. When we investigated we saw that a cownosed ray (*Rhinoptera bonasus*, for those of you who keep taxonomic score) was apparent-

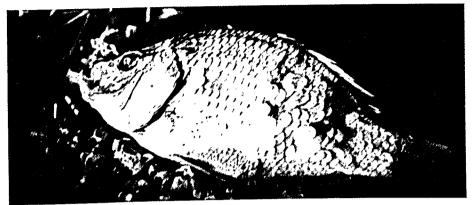
The author is an ex-lobsterman, former scuba diver, semi-retired marine science consultant and persistent fish-watcher who has lived most of his life within a mile or two of the beach in NJ and NY. ly feeding in the shallow surf a few feet from the tide line. The "surf" was a bare ripple of about 6 to 8 inches and tide was high. Pretty soon we noticed that it was not alone; there was a convoy of rays following each other along the surf zone. Some of the rays turned their noses to the land and were actually left out of water for a half a minute or so by receding waves. As we walked along and watched, there seemed to be at least fifty rays in this convoy, all slowly patrolling in almost a single line along the beach, with frequent splashing of their fins and momentary groundings. My close presence to watch them, and that of other dusk beach walkers doing the same thing, did not seem to bother the ravs in the least. This was the only time during our stay that we saw this ray patrolling.

The tide-washed beach in the area is used all day long by wading birds to feed, and I saw at least one fisherman use a small sieve to collect mole crabs as bait from the wave washed beach. Besides the mole crabs, I saw that the intertidal zone was also home to small donax clams and many other large and small shellfish. I have to assume that this rich shellfish delight was the target of the rays patrolling the surf edge and why they were acting as they did.

Keep your eyes open on the beach at all times because you never know which of nature's infinite plays will be enacted when and where you least expect it.

A New Kind of Sand

by MIKE O'REILLY



As a youngster I read about the Salton Sea, that great pool of salt water in the California desert, so salty you could almost walk on it, and if you dived in head first you would break your neck. A lake in a desert was intriguing; one almost like a salt cake was too good to miss. To no avail I would badger my parents to take me to see this magic place. Happily, I recently made a business trip to the west coast and could sneak a day off to visit this sodiumwracked body of water firsthand.

The Salton Sea is a two-hour drive northeast of San Diego. It's 30 miles long and about 10 miles wide. The area was a salt-covered depression known as the Salton Sink until 1905 when it was flooded with water from the Colorado River. Since then it has become a farming region, a gleam in the eye of developers, and a handy body of water into which California Fish and Game people dumped numbers of species of fish to try to establish a recreational fishery.

The day I made my visit was hot, clear, and dry. The road to the western lake

O'Reilly lives in Haddonfield, NJ, and says he has beeen on five ALS New Year's Day Beachwalks. shore went through a failed development of street curbs, solitary palm trees, and brown scrubland, downhill to an abandoned, crumbling yacht club, and then along the shore to a small beach. The air was fetid. Half a dozen black legged stilts waded in the shallows and white pelicans bobbed on the blackish scummy water. A light fishy breeze was in my face as I walked down a rocky path and on to the beach. It was soft and it crunched. I knelt down to sift some sand between my fingers. It was not sand, however, but rather the bones of fish. Indeed, as I dug down it was solid bones, mostly vertebrae with some finrays and gill plates. And then near the waterline, a windrow of dried up fish about 10 inches long. The whole mess of bones and fish were tilapia remains. I am told that these were among the most recent efforts of the fish biologists to get something — anything? — to survive in the tough environment of the Salton Sea.

I've walked many beaches -- the quartz sand of North Carolina, coral sand beaches of Florida, rocky Maine, and an almost solid cuttlefish bone beach on Sardinia. And now, Tilapia Beach of the California desert. Maybe the Society should do a New Year's Day beachwalk there someday.

Reds and Blacks

by JOHN CLARK

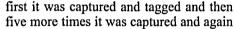
For several years we have been tagging grouper at a coral reef patch that averages 25 feet in depth. This patch is located 2.4 miles south of Ramrod Key, Florida, an island in the Florida Keys chain that is 27 miles from Key West. Our tropical tagging includes both red and black grouper -- mostly in the range of 12 to 20 inches long -- caught by bottom fishing with cut bait while at anchor. Grouper taken from this shallow reef are not bloated from pressure change and immediately descend back down to the patch reef.

The results are instructive, particularly the frequency of repeat returns from tagging. The number of repeaters from this year's operation (January to March) was surpris- release. Photo by John Clark. ing. For example, one particular

husky 18-inch red grouper (tag number 414296) was aboard our boat six times --



Tagged black grouper in live well ready for





Small black grouper ready to go back to the patch reef. Photo by Selwyn Malin.

Clark is a marine scientist, an ALS founder and former president who now lives on Ramrod Key.

released. All this in a period of two months.

Our experience from these recaptures leads to a number of conclusions: 1) the tags are safe for grouper (they survived well and no lesions were observed); 2) groupers are rather territorial, remaining on the same reef for months, particularly red groupers; 3) many groupers do not learn to avoid the agony of recapture, repeatedly taking the same bait offered using the same fishing technique (one cannot believe they enjoy the experience).



by DAVE BULLOCH

Chronic water-borne problems along the Gulf of Mexico coast persisted through the year 2000, although the "dead zone" off the Louisiana/Mississippi coast shrank somewhat in geographic extent compared to 1999. Red tide reappearred in northerm coastal locales but was less severe than the 1995 episodes. A few new phenomena popped up. Among them, the appearance of a new alien species made national news.

In the summer of 2000, along the coasts of Alabama and Mississippi, an astounding number of large jellyfish appeared and drifted into Mobile Bay and Mississippi Sound during the breeding season of several important fish species. This newcomer to the Gulf, the Australian spotted jellyfish, Phyllorhiza punctata, had been proliferating in the Caribbean Sea for the last four years. Weighing as much as twenty-five pounds, this large Scyphozoan has an appetite to match. Coastal scientists are worried that it has wiped out a good portion of fish eggs and fingerlings in the estuaries it has drifted into. It appeared in May in Mobile Bay and later into coastal areas off Texas and Mississippi. This species undergoes an alternation of generations, a floating medusa stage followed by an attached polyp stage. Scientists hypothesize the polyp stage will be found in profusion on oil rig structures and plan to have a look. Offshore it made shrimping nearly impossible in some areas.

Fishermen also saw large numbers of the moon jelly, *Aurelia aurita*, a common species. One or two reports of large num-

The author is director of the Society's southeast regional office. He is a frequent contributor to this journal. bers of *Cyanea sp.* offshore surfaced in October but little has been said about them since.

In 1999, another alien species appeared on power plant intake screens in Tampa Bay, the Asian green mussel, Perna viridis. It probably was introduced into the harbor via the bilge water of one of the many ships that visit the port. Because this mussel tolerates wide swings in temperature and salinity, its survival potential is high, much greater than its cousin, the common mussel, Mytlus edulis. Its main threat, thus far, is its effect on heat transfer in power plant intakes. To get rid of it requires constant chlorination. Unfortunately the level of chlorine needed is high enough to cause corrosion problems. Meanwhile, it continues to spread in Tampa Bay. Researchers anticipate it will become widespread in Tampa Bay and may rapidly spread to other areas. Although good eating, (they are a prized food in parts of Asia) they pick up metals and bacteria easily -- moot point right now because all of Tampa Bay is closed to shellfishing.

A record number of manatees were spotted in a recent aerial survey. Scientists attribute this to "perfect" weather over the two-day span (January 5, 6, 2001) when the photos were taken. The count was 3,275; 1726 on the Gulf Coast and 1520 on the east coast. From 1992 to 2000, total counts ranged from 1800 to 2200. The jump doesn't mean a real increase, simply better conditions for counting. Otherwise, manatees have been suffering heavy losses. The number of recorded deaths in 2000 totaled 273, of which 78 were caused by collisions with boats. To make matters worse, in early 2001, cold water temperatures (in the low



Right whale

50s) took another 43 lives. Manatees suffer cold stress, and head for warmer water when water temperatures fall below 68°F. On Florida's west coast, their chosen areas are either power plant effluent discharge sites or natural springs, such as exist in Crystal River.

The cold water (as low as 52°F in the Sarasota area) affected many other animals. Sarasota-Tampa is about the northern extent of the range of snook. These fish don't do well at such low temperatures and regularly turned up dead on local beaches.

Turtles are suffering from the cold water as well. Record numbers of strandings have been partially attributed to cold water. In St. Joe Bay in the Florida panhandle, between December 31 and January 11, 2001, 402 turtles have washed up on the beach "cold stunned." Mainly juvenile green turtles (388), a few loggerheads (4) and ridleys(10) have been rescued and taken to locations where warm seawater is available (Gulf World in Panama City, for one). Nevertheless, the cold water is just part of the problem. Over the year, total strandings on Gulf and Atlantic shores rose to an all time high of 3,136 turtles. That number is double the number of ten years ago. At least a quarter of the deaths have been attributed to human activity. Last year the Florida Gulf coast led the list. This may be an inadvertent result of increased nesting along Florida's west coast in recent years.

Right whales, the most endangered of all whales, are returning to their only known calving grounds off the Florida shores, from Jacksonville Beach to Ft. Pierce. Only 300 remain in existence. They give birth to their young between December and March and can be seen from shore. Florida officials are taking precautions to make sure none suffer a collision with passing ships.

Off Florida's coast, the term "red tide" usually means the causative organism is *Gymnodinium breve*. But other dinoflagellates also occasionally bloom creating a red tide. In Tampa Bay, both *Alexandrium monilatum* and *Pyrodinium bahamense* bloomed in 2000. Both are bioluminescent and literally lit up the Bay at night.

As for *G. breve*, the north coast of the Gulf of Mexico suffered the worst. The Texas coast, from Corpus Christi to Galveston Bay, was littered with dead fish. Oyster harvesting was prohibited. The Florida panhandle was also affected. *G. breve* appeared offshore along southwest Florida, but only on one or two brief occasions did it come close to shore. Very few dead fish were reported.

Catches of shrimp in Texas waters fell so drastically that the Texas Parks and Wildlife Department closed shrimping in state waters from December 1 to mid-July. When it resumes they will also require all shrimp nets be fitted with turtle excluder devices.

Much to the dismay of conservationists, the Gulf of Mexico Fishery Management Council did little or nothing about further. reducing the total harvests of red snapper and certain grouper. True, gag grouper fishing will be prohibited for one month at its offshore breeding grounds and some of those breeding grounds will be off limits, but that action doesn't appear to be enough considering the current status of the stocks.

Tales Taggers Tell II

by PAM CARLSEN

BASS...STRIPERS...ROCKFISH

Striped bass (Morone saxatilis) is the number one species tagged by our fishermen and women. In 2000, over 16,000 stripers were tagged. Many of these taggers have tales to tell.

Stuart Fries wrote, "Had a wonderful day yesterday. Took my boat 6 miles east of Rockaway Jetty, NY. There were so many striped bass in a very large area. We look for a boat that is stirring up the bottom dragging for skimmer clams, then we drift along fishing with whole or half skimmer clams. Great fun!"

Chris Peszka, who fishes in south Jersey, wrote, "Besides the terrific fluke and bluefishing this year, I think the highlight for me was catching two stripers under the Oregon Inlet Bridge on the Outer Banks, NC. It was a wonderful trip with my family and I hope to make it back again soon." Taggers take their tags on vacation.

John Dotsey, Long Beach, L.I., wrote about tagging 35- and 40-pound stripers in October of 2000. "Ron Paganini and I had great fishing over here. There were plenty of large bass fishing on schools of bunkers."

Returns of these and all fish tagged are of great interest to the taggers and to scientists, who request the data from NMFS, Woods Hole, MA, where we send all our data for storage and use.

In the winter months of 2001, North Carolina provided some interesting returns. Scientists onboard OREGON II during the SEAMAP Cooperative Winter Tagging Cruise, south of Oregon Inlet, recaptured Al D'Amato's 22" bass tagged 11/9/00, three miles SE of Cape May, NJ. Dr. Wilson

Pam Carlsen is the director of the ALS fish tagging program and has worked at ALS since 1985.

Laney wrote, "As of the present time, we have completed 110 sets of the nets. We have tagged and released 4 Atlantic sturgeon, over 2,000 striped bass, as well as red drum, spiny dogfish, summer flounder, and monkfish." From the NC Division of Marine Fisheries, we received two tag returns. Dennis Kelly's 29" striper tagged 8/22/00 at Fishers Island, NY, was recaptured in an anchor gill net in Roanoke Sound 2/15/01, and Tank Matraxia's 23" striper tagged 5/13/00 in Raritan Bay, NJ, was recaptured in an anchor gill net in Pamlico Sound on 2/20/01.

Raritan Bay, which lies in view of ALS headquarters, provided some insight on how fast striped bass can head north as summer approaches. Stan Jakubowski's 31" fish tagged at Old Orchard Light, on 5/16/01 was recaptured 7/16/01 at Westerly,



Chris Peszka with a freshly tagged Delaware striped bass.



Two keepers - John Dotsy with a 35pounder, left; Ron Paganini with a 40pounder, caught on the South Shore of Long Island.

RI. Richard Szellan's 36" fish tagged on the NY side was recaptured at Nantucket, MA, on 7/11/01, and Sean Torpey's 22" fish tagged at Keyport, NJ, on 4/18/01 was recaptured at the northeast end of Shelter Island, NY.

DOUBLES AND TRIPLES...

Two striped bass fagged in the ocean off Sandy Hook were recaptured by teenagers in Maine. Bill Perlman's 27 1/2" fish tagged 11/13/00 was recaptured by 14-year-old Michael McCourt in the Kennebec River, Bath, ME, on 8/30/01. Michael wrote, "We were fishing with cut herring for bait, in the evening. The fish was in very good health and looked to be about 8 pounds." On 5/6/01, Charlie Carroll tagged a 29" striped bass at Sea Bright, NJ. This fish was recaptured by 13-year-old Eddie Culhane on 8/29/01. He wrote, "I went fishing in Biddeford Pool, ME. The fish was 29", caught around noon on an eel."

Two striped bass tagged on the south shore of Long Island, NY, were recaptured at Bourne, MA, in the Cape Cod Canal. Fred Neuscheler's 43" fish tagged 10/25/00 at Fire Island, was recaptured 5/21/01 and Bill Perlman's 27 1/2" fish tagged 10/24/00 at Long Beach, was recaptured 5/30/01.

Two stripers tagged by Andy Brown at Block Island, RI, in June of 2001 were both recaptured in the end of July 2001 at the same place by George Stockley.

Three of Kevin Carrigan's striped bass tagged 6/22/00, 9/1/00, and 5/27/01, at Rockport, MA, were recaptured in the Merrimack River 6/27/01, 6/29/01, and 7/2/01.

SAME TAGGER...SAME PLACE...SAME DAY or ONE DAY LATER...

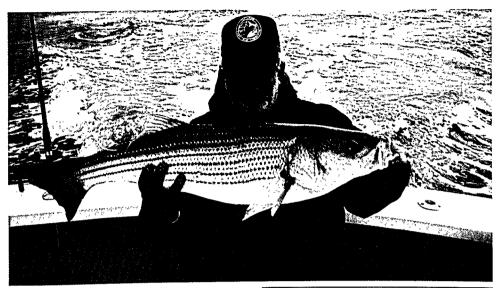
Sometimes a tagger recaptures his own fish. Art Schweithelm wrote, "Well, it's taken a very long time, but believe it or not I have finally recaptured a fish that I tagged. On 6/8/01, I tagged a 14", one pound bluefish at the U.S. Coast Guard station at Eatons Neck, NY. Tonight, 7/8/01, I recaptured and re-released the fish, tag intact, at Asharoken Beach, NY, about six miles from where I originally tagged it." This was particularly amazing as it was a bluefish.

George Horvath wrote, "While fishing on the partyboat, *Angler*, four miles east of Harvey Cedars, NJ, on 7/7/01, I tagged a 16", 1.5 pound fluke at 1:45 p.m.. At 7 p.m. I recaptured the same fish at the same place. I kept it because it swallowed the hook."

Another fluke, tagged 7/4/01 by Robert Anderson Jr. at Fire Island Inlet, NY, was recaptured 7/5/01 at the same place by John Padden. A striped bass tagged by Dennis Kelly, 6/26/01, at Fishers Island, NY, was recaptured 6/27/01 at Old Lyme, CT. Obviously, these fish are not traumatized by the tagging procedure.

YEARS of TAGGING STRIPERS....'92, '93, '94, '95.

Bill Perlman's, 19 1/2" fish tagged



Bucktail Willie before releasing this South Jersey striper. That looks like a White Owl stogie he's chewing on.

9/12/92 at Atlantic Beach, NY, was recaptured 4/15/01 in Jamaica Bay, NY, over 30", 18 lbs.

Fred Stunkel's, 20 1/4", 3 1/2 lb. fish tagged 10/25/93 at Stamford, CT, was recaptured 6/9/01 in the Connecticut River at Chicopee, MA. Unfortunately, no measurements were taken.

Bill Shillingford tagged a 12" fish 10/6/94 in Corson's Inlet, NJ, and caught it again 5/12/01 in the Intercoastal waterway at Strathmere, NJ, basically the same place. The fish was 25".

John Posh's 31", 11 lb. fish tagged 10/7/95 at Stratford, CT, was recaptured 7/13/01 in the same place, 34", 14.4 lbs.

These long time recaptures are a testament to the safe handling and good tagging procedures followed by our taggers. They also confirm the observation that striped bass often show up again and again where they were before

COD...From 1996

Tony Stanik fishes and tags cod on his annual trip to Stellwagen Bank, MA. On 7/2/96, he tagged a 16" fish. This fish was



recaptured by a University of Massachusetts student conducting cod research on 5/15/00 on the northwest side of Stellwagon Bank. It weighed 12 lbs. This is the longest cod return we have to date.

BLUEFISH...

"Dear Sir, Hello, my name is Chris Adams. I live in South Amboy, NJ, and fish the local beach every chance I get. Tonight my persistence paid off when I caught seven or eight large bluefish. The first fish I caught was 31" and it carried one of your tags. It was a very healthy fish and weighed eight or nine pounds. Unfortunately, it was gut hooked, so I kept it for the grill. Although I couldn't re-release the fish, I hope this information helps your studies. Thanks for making a great night fishing even more interesting and keep up the good work. Thank you, Chris Adams." This bluefish was tagged by Capt. Al Anderson, 10/15/00 at Block Island, RI, 29", 8.5 lbs.

DRUM....BLACK and RED...

Red and black drum are in the croaker family along with northern kingfish, spot, and weakfish. Black drum have short, deep bodies with highly arched backs, low mouth and barbels on their chins. They can reach 146 lbs. Red Drum, also known as redfish or channel bass, are a smaller fish. usually not larger then 40 lbs. They are known by the presence of a black spot or "ocellus" on the base of the tail. On May 16, 2000, Charlie Kennedy tagged a 50", 70 lb. black drum at Slaughter Beach, DE, in Delaware Bay. When asked about the experience, he wrote: "Here are a few pictures of a black drum about 65 lbs. to give you an idea what they look like. I kept this one to eat. He was 46" long. We had black drum on the New Jersey side of the bay this year. The first time in about eight years. About forty years ago, we caught a lot of drum on the New Jersey side from Villas to Reeds Beach. Next time you are down to check on the horseshoe crabs and red knots, ask some of the old timers about the drum fish in the late 1940s and 50s. Try to imagine two men

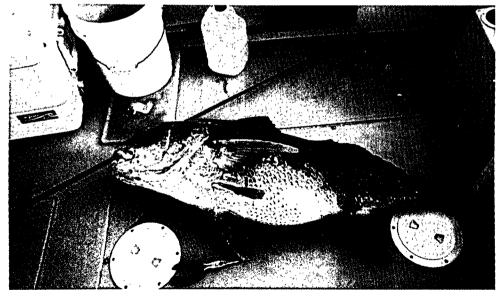
and four or five large black drum in a 16' wooden rowboat, rowing two miles into the beach at 2 a.m. and you have a good idea what it was like in the early days."

Meanwhile at Lynnhaven Inlet, VA, Linwood Gordon was tagging red drum in May and June of 2000. All were recaptured by Ron Stoops on rod and reel on 8/19/00. Linwood wrote, "Here are a few tagged red drum to replace Ron Stoops harvest of 8/19/00 at Lynnhaven Inlet, VA. He must be a lucky man or a good fisherman, probably both. I would like to talk to him to exchange more info. These mass returns raise new possibilities on red drum feeding patterns and tide stage travels."

Tom Lake, on a recent trip to Texas, tagged a few red drum and wrote, "It wasn't until the morning we were leaving, at first light, that I found schools of small red drum. Then we had to leave! They call them 'rat reds' down there, as well as 'redfish'. They are beautiful."

FLUKE or SUMMER FLOUNDER...

Mark Frawley Jr., who has tagged fish with ALS since the early 1970's had two interesting fluke returns. A 14 1/2" fish



A 65-pound Black drum, caught and eaten by Charlie Kennedy at Slaughter Beach, Delaware. That day he tagged a 70-pounder

tagged at Shinnecock Bay, NY, on 9/8/00 was recaptured at Half Moon Shoal in Nantucket Sound, 8/29/01, 16 1/2". We don't see our fluke travelling this far north too often. And a fly fished fluke (say that three time fast) was caught on a yellow and green hand tied clouser left too long on the bottom of Shinnecock Bay, 7/9/01. This fish was tagged by Frawley on 8/24/00 in the same bay.

Al D'Amato's 13" fluke, tagged 8/18/99, one mile SW of Cape May, NJ, was recaptured in a flounder trawl by the fishing vessel Litle Bit on 1/24/01, 12 -15 miles offshore of Currituck Beach, NC. The fish was 17" and sold.

The tag was found by the fish house worker and returned by the NC Dept. of Environment and Natural Resources.

TAGS COME FROM MANY SOURCES...

A tag from a 17" striped bass tagged by Bill Shillingford at Strathmere, NJ, 8/1/98, was returned by Geoff White of the Atlantic States Marine Fisheries Commission. Geoff wrote, "On Friday, April 6, 2001, I went grocery shopping at the Giant Food Store on Duke St. in Alexandria, VA. As I was purchasing some shrimp, I looked at the fish in the display case. Immediately, I noticed that the striped bass on top has an ALS tag behind the dorsal fin. I asked the employee behind the counter if I could have the tag, and write down other information about the fish. After a confused look and a little explaining, he was more than happy to help. So they cut off the tag and noted that the whole fish (before gutting) was very close to four pounds. Unfortunately, they did not have anything to measure the fish, so I estimated the fish to be 23 - 24". When striped bass are caught by commercial fishermen, they are required to place a plastic loop tag through the mouth and gills of each fish, to identify it as a legal capture and sale (and to keep track of allowable landings per person). Therefore, in addition to the ALS tag information, I recorded the color (usually coded for gear type), state designation, and commercial tag number as well. Now it was time to track down where the fish was caught and with what gear."

The fish was caught in a gillnet in Delaware Bay, just off Bowers Beach, 4/3/01. It was sold to a wholesale dealer in Secretary, MD, and then on to the Giant Supermarket.

JUST for FUN...

Joe Paschal wrote, "My only two stainless steel needles managed to jump out of the boat this morning. Please send me two more." I sent him two more "anti-jumping" needles and he wrote again, "Thanks for the two anti-jumping needles. However, they came through the mail looking more like bananas then needles. Even so, they will work fine."

Frank Casillo, Staten Island, NY wrote excitedly about the 31 1/2", 11 lb., bluefish he tagged in Raritan Bay, "This fish weighed more than my daughter when she was born."

I questioned Guy Buono about his business address on Staten Island, "T.A.G." He wrote, "Technical Auto Group a.k.a. T.A.G. Our motto, 'Practice T.A.G. and release'." They repair foreign and domestic cars.

New tagging charterboat captain, Adam Fox wrote, "Thanks for all the info you sent last time. Tagging has been a wonderful way to give my customers and clients the feeling of catching a striped bass and letting it go. It's also been great showing young children and my nephews a fish swimming off with a tag."

Mike Giampaolo wrote, "I was cleaning out the cellar and found these three tag cards (three striped bass tagged 9/27/92, 19 - 24"). I apologize for not sending them at the time. Those were good days for me I was just getting into it. The limit was 36" and it was my first time at Nauset Beach (Cape Cod, MA). The weather turned bad for most of the weekend and I caught these fish on the last day. I didn't go home 'skunked'. Much has changed since then, but some things haven't. I still chase the fish down the beach and I guess I always will."

TAGGING REPORT

compiled by PAM CARLSEN

As announced in the last issue of this journal, our policy from now on will be to publish results of ALS members' volunteer fish tag and release efforts once each year. Thus, all data for a calendar year will be gathered in one UNDERWATER NATURALIST number and more easily retrievable. In addition, all these data become part of the master tagging database at the National Marine Fisheries Service at Woods Hole, Massachusetts, available to marine scientists worldwide. Future journals will include a page or so of recent tagging information along with a broader selection articles and field notes on littoral topics; the data tables will be published about six months after the close of the calendar year.

Species	6						
Length	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
	••••••	Vand					
Atlantic	c Cod						
18	A Alosso	Offshr., Gloucester, MA	07/01/98	A Newman	10 mi. E Provincetown, MA		04/02/00
20	A Alosso	Offshr., Gloucester, MA	07/01/98	S MacKinnon	Offshr., Stellwagon Bk, MA		05/03/00
16	T Stanik	Offshr., Stellwagon Bank, MA		D Martins	Offshr., Stellwagon Bk., MA		05/15/00
20	A Alosso Jr	Offshr., Nantasket, MA	07/04/99	A Alosso	Offshr., Salem, MA	` 23	06/08/00
18	T Stanik	Offshr., Tillies Bank, MA	07/05/99	Yankee Patriot	Offshr., Tilleys Bk., MA	23	06/08/00
27	C Maxon	Offshr., Stellwagon Bk., MA	06/24/00	F/V Giannina G	Offshr., Stellwagon Bk., MA		12/13/00
		Onsin, Stenwagon DR., MA	00/24/00	17V Glatinnia G	Olishr., Stellwagon Bk., MI	•	12/13/00
	Sea Bass						
13	M Hawkins	18 mi. SE Ocean City, MD	04/28/00	M Hawkins	Offshr., Ocean City, MD	13	.05/11/00
10	M Hawkins	18.5 mi. SE Ocean City, MD	04/28/00	M Hawkins	18 mi. SE Ocean City, MD	10	05/12/00
11	M Hawkins	Offshr., Ocean City, MD	04/28/00	M Hawkins	Offshr., Ocean City, MD	11	06/11/00
10	C Kennedy	Offshr., Cape May Reef, NJ	07/01/00	B Bedilion	Offshr., Cape May Reef, NJ	10	07/04/00
13	T Matraxia	Ambrose Chan., NY	06/20/00	A Gotlieb	Gravesend Bay, NY		07/05/00
	M Hawkins	18 mi. SE Ocean City, MD	05/12/00	D Nottingham	Offshr., Ocean City, MD	11	07/07/00
	D Goodwin	Hempstead, NY	05/13/00	T Weiss	Hempstead Reef, NY		07/15/00
	D Goodwin	Hempstead, NY	05/13/00	T Weiss	Hempstead Reef, NY		07/15/00
	M Hawkins	16 mi. SE Ocean City, MD	06/15/00	M Hawkins	16 mi ESE Ocean City, MD	14	08/03/00
	M Hawkins	23 mi. SE Ocean City, MD	07/04/00	M Hawkins	22 mi. SE Ocean City, MD	11	08/03/00
	M Hawkins	23 mi. SE Ocean City, MD	07/04/00	M Hawkins	22 mi. SE Ocean City, MD	13	08/03/00
	L Lapetina	Ambrose Chan., NY	08/14/00	R Hoellger	Ambrose Chan., NY		08/15/00
	M Hawkins	18 mi. SE Ocean City, MD	04/28/00	M Hawkins	18 mi. ESE Ocean City, MD	12	08/16/00
10	C Kennedy	Cape MayRreef, NJ	07/01/00	M Laginestra	Off Cape May, NJ	10	09/09/00
	C Kennedy	Cape May Reef, NJ	07/01/00	C Sauer	Cape May Reef, NJ	11	09/10/00
11	M Hawkins	10 mi E Ocean City, MD	08/19/00	M Hawkins	9 mi. E Ocean City, MD	11	09/14/00
13	T Matraxia	Tin Can Grounds, NY	09/07/00	E Sedlak	West Bank Lt., NY		09/19/00
17	M Hawkins	23 mi. SE Ocean City, MD	07/04/00	M Hawkins	22 mi. SE Ocean City, MD	17	09/28/00
11	A Schweithelm	Montauk Pt., NY	06/28/00	C McConneli	Montauk Pt., NY	13	10/03/00
15	M Hawkins	18 mi. SE Ocean City, MD	04/28/00	M Hawkins	18 mi. SE Ocean City, MD	16	10/10/00
14	M Hawkins	23 mi. E Ocean City, MD	10/03/00	A Khachadorian	20 mi. E Ocean City, MD		10/18/00
Bluefis	sh						
	T McCandless	Jamestown, RI	10/07/99	NC Div. Mar. Fish	Offshr., Oregon Inlet,NC		02/15/00
-	B Finke	Norwalk, CT	10/22/98	V Grasso	Cape Hatteras, NC	22	03/15/00
	G Horvath	Barnegat Inlet, NJ	08/18/99	J Snider	Oregon Inlet, NC	34	03/13/00
	A Schweithelm	Asharoken, NY	09/14/99	E Borak	Fire Is. Inlet, NY	21	04/29/00
	R Dayton	Barnegat Inlet, NJ	06/03/99	A Francavilla	Breezy Pt., NY	21	06/02/00
	W Matuszak	Gilgo Bch., NY	06/02/00	E Gillespie	Great South Bay, NY	20	06/02/00
	A Schweithelm	Asharoken, NY	09/12/99	M Veduccio	Cape Cod Canal, MA	16	07/15/00
	H Bowman III	Fire Is. Inlet, NY	07/21/00	R Groh	Great South Bay, NY	10	08/30/00
	A Anderson	Block Is., RI	05/21/00	J Cerillo	Offshr., Mud Buoy, NJ	24	08/30/00
		10-0-00 10-9 104	05/21/00	· camo	Griant, Muu Buby, NJ	24	09/01/00

TAGGING RETURNS

Lengt	h Tagger	Place Tagged	Date	Recapturer	Location I	eng	th Date
••	D Di das	Norwalk, CT	10/25/99	P Dauk	Watch Hill, RI	22	9/01/00
22	B Finke	Ludlam Bay, NJ	05/27/00	R Guttadauro	Princess Bay, NJ	19	09/03/00
17 12	B Shillingford G Horvath	Barnegat Inlet, NJ	08/23/00	D Cassel	Bowers Beach, DE	.,	09/18/00
12	R Stasinos	Rye, NY	06/08/00	D Mann	Middle Ground, L.I. Sound	21	09/30/00
25	B Finke	Norwalk, CT	07/22/00	P Egley	Larchmont, NY		10/07/00
12	G Horvath	Barnegat Inlet, NJ	08/10/00	M Bailey	Island Beach St. Pk., NJ	16	10/07/00
15	B Shillingford	I.C.W., Strathmere, NJ	07/13/00	NJ Div. F.G. & W	Thomas Beach, DE Bay, NJ	16	10/07/00
17	G Horvath	Island Beach St. Pk., NJ	09/09/00	M Denniston	Manasquan, NJ		10/11/00
13	G Horvath	Barnegat Inlet, NJ	08/22/00	D Canova	Ocean City, NJ	13	10/12/00
9	A Sukul	NY Harbor	10/12/00	F Ayoubmerkheil	Liberty State Pk., NY		10/19/00
11	G Horvath	Barnegat Inlet, NJ	08/08/00	J Stone	Atlantic Beach, NC	13	10/31/00
Cobia 28	a J Wright	Venice, FL	11/14/99	D Blair	3 mi. E Bradenton, FL	30	07/15/00
 Dogfi							
40 40	F Como	Matinecock Pt., NY	06/05/00	R Hodge	Westport, CT	40	07/08/00
Fluke			08/20/00	W/ Econt	Jamas Inlat. NW		00/01/00
14	J Weber Jr.	Jones Inlet, NY	08/20/99	W Egert	Jones Inlet, NY Landed Cane May NI	14	09/01/99
14	W Stuven	Huntington, NY	07/04/99 08/09/99	J Rack J Rack	Landed, Cape May, NJ Landed, Cape May, NJ		01/07/00 01/07/00
	NJ Marine Sci. Cons.	Sandy Hook, NJ Stamford, CT	08/09/99	Seafood Unlimited	RI Waters	16	01/07/00
16	R Stasinos	Fire Is. Inlet, NY	11/08/99	B VanBarriger	Ni Walers	10	01/27/00
15	W Giebel	Sea Bright, NJ	08/05/99	B Cedarquist	Offshr., Cape Hatteras, NC		02/04/00
14	F Waltzinger III	Jersey City, NJ	05/22/99	NC Div. Mar. Fish	Offshr., Currituck Beach, NC		02/10/00
18	M Strober L Ruch Jr.	Long Branch, NJ	06/19/99	NC DIV. Mar. Fish	Offshr., Currituck Beach, NC		02/10/00
15 14	L Gonnello	Raritan Bay, NJ	08/25/98	J Alexander	Chincoteague, VA	15	02/21/00
26	G Bachert	Ambrose Chan., NY	08/15/99	F/V Siddie Golden	Offshr., Washington Canyon	27	02/22/00
14	J Weber Jr	Long Beach, NY	07/29/99	D Latham	Landed, Oregon Inlet, NC	15	03/03/00
13	C Kennedy	I.C.W. #453, NJ	06/18/99	G Gleiger	I.C.W., Avalon, NJ	15	04/28/00
16	A Perednia	East R., NJ	06/19/99	A Hoeverman	Union Beach, NJ	18	05/06/00
17	C Kennedy	I.C.W. #457, NJ	04/28/00	R DiBruno	North Wildwood, NJ	17	05/08/00
15	A D'Amato	Wildwood, NJ	09/29/99	J Shearer	Delaware Bay, DE	16	05/09/00
14	D Haines	Cape May Pt., NJ	07/17/99	J Weber Jr.	Swift Cr., Freeport, NY	15	05/10/00
12	F Waltzinger III	Long Branch, NJ	10/14/99	C Romano	Great South Bay, NY	15	05/12/00
18	C Kennedy	I.C.W. Marker #469, NJ	04/29/99	P Dunham	I.C.W., N. Wildwood, NJ	21	05/14/00
15	W Giebel	Fire Is. Inlet, NY	09/29/99	N Diolosa R Federoff	Jones Inlet, NY	18	05/15/00
13	D Goodwin	Merrick Bay, NY	07/03/99 07/30/99	R Sadler	Merrick, NY Ocean City, MD	15	05/15/00
22	S Keiper	Indian R. Inlet, DE	08/03/99	P Doll	Mt. Sinai Hbr., NY		05/15/00
15	W Stuven	Eaton's Neck, NY	06/28/99	E San Fanandre	Northport, NY	16	05/15/00
14	W Stuven	Huntington, NY I.C.W. #470, NJ	06/30/99	S Castilloneso	Swift Cr., Jones Inlet, NY	10	05/17/00
13	C Kennedy	I.C.W. #469, NJ	07/28/99	T Kershaw	I.C.W., Wildwood, NJ	16	05/24/00
14 14	C Kennedy J Weber Jr.	W. Reynold's Chan., NY	05/12/00	J Fanora 🗕	Lido Beach, NY	14	05/25/00
14	B Shillingford	Strathmere, NJ	09/27/98	L Ciriello	Baldwin, NY	16	05/25/00
14	J Weber Jr.	Reynold's Chan., NY	05/26/00	J Fanora	Lido Beach, NY	14	05/25/00
13	T Burden	Sandy Hook, NJ	09/12/99	C Jagodzinski	Captree St. Pk., L.I., NY	14	05/27/00
15	L Gordon Jr.	Ches. Bay Brdg. Tun., VA	05/06/00	K Hall	Ches. Bay Brdg. Tun., VA	15	05/27/00
14	A D'Amato	10 mi SE Cape May, NJ	09/24/98	T Fehrenbach	Jones Inlet, NY	17	05/28/00
15	F Waltzinger III	Deal, NJ	05/15/00	D Siegelman	Great Kills, NY		05/28/00
10	C Fiorillo	Avon, NJ	08/06/99	T Vega	Jamaica Bay, NY	15	05/28/00
15	W Giebel	Fire Is. Inlet, NY	11/08/99	R Couture	Middletown, RI	15	05/29/00
13	J Weber Jr.	Freeport, NY	06/24/99	J Lapi	Captree St Pk., NJ	16	
15	C Wilcox III	Moriches Inlet, NY	05/19/00	J Baulke	Moriches Bay, NY		05/30/00
13	J Gibbons	Atlantic Beach Brdg., NY	06/18/99	T Kelly	E. Rockaway Inlet, NY	13	06/01/00
13	C Kennedy	I.C.W. Marker #469, NJ	04/29/99	E Thorp	I.C.W., Wildwood, NJ		06/01/00
14	W Filce	Spring Lake, NJ	10/02/99	P Schildhorn	Robert Moses Brdg., NY	14	06/01/00
12	C Kennedy	I.C.W #457, NJ	05/19/00	N Morici	I.C.W., Wildwood, NJ		06/03/00
14	C Kennedy	I.C.W. #465, NJ Roosevelt Inlet, DE	05/10/00	T Beck N Apple Ir	I.C.W, Wildwood, NJ		06/04/00
14	M Willey	Roosevelt Inlet, DE	07/10/99 07/10/99	N Angle Jr. R Davis	Roosevelt Inlet, DE16 Ocean City, NJ	10	06/04/00
13	B Shillingford	Strathmere, NJ E. Remold's Chan. NV	05/12/00	M Zielin	• ·	16	
14	J Weber Jr.	E. Reynold's Chan., NY Cape May Inlet, NJ	07/15/99	R Coleman	Pt. Lookout, NY Ches. Bay Brdg. Tun., VA	10	06/06/00
17	A D'Amato	E. Reynold's Chan., NY	05/12/00	R Smith	Reynold's Chan., NY	19	06/07/00
11	J Weber Jr. B Filce	Mantoloking, NJ	05/12/00	J Leather	Manasquan R., NJ	11 15	06/07/00
15	B Filce	W. Reynold's Chan., NY				15	06/08/00
15	J Weber Jr.		05/12/00	E Gennusa	Jones Inlet, NY		06/09/00

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Leng	th Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Dat
13 10	J Weber Jr.	E. Reynold's Chan., NY	05/12/00	J Ladolcetta	Pt. Lookout, NY	13	06/10/0
16	A D'Amato	Wildwood, NJ	09/09/99	B Koluelie	Great Egg Harbor, NJ	14	06/13/0
10	C Kennedy B Russo	I.C.W., #444, NJ	04/24/00	K Glenn	I.C.W., #445, NJ	17	06/14/0
15	J Gibbons	E. Marion, NY	05/23/00	D Brennan	Greenport, NY	14	06/14/0
13	V Viola	Long Beach, NY	05/16/00	F Sgherzı	Island Pk., NY	15	06/15/0
12	C Fiorillo	Moriches Bay, NY	06/03/00	C Marra	Moriches Bay, NY		06/15/0
12	V Viola	Long Branch, NJ	07/26/99	A Cuva	Long Branch, NJ	14	06/16/0
15	V Viola V Viola	Moriches Bay, NY	06/01/00	J Makarewicz	Moriches Bay, NY	15	06/17/0
13	J Weber Jr.	Moriches Bay, NY	05/24/00	D Murphy	Moriches Bay, NY		06/17/0
14	S Reiss	Long Beach, NY Staten Ia NY	08/11/99	H Johnson	Rockaway Reef, NY	15	06/19/0
12	E Feret	Staten Is., NY	05/23/99	J Callan	Sandy Hook Bay, NJ	15	06/20/0
13	V Viola	Freeport, NY Morishes Islat, NV	05/09/99	P Hession	Island Pk., NY	17	06/22/0
13	C Kennedy	Moriches Inlet, NY	06/01/00	J Schultz	Moriches Bay, NY	13	06/23/0
16	C Kennedy	LC.W. #469, NJ	07/28/99	J Hudack	Tuckerton, NJ	17	06/23/0
11	S Carlsen	I.C.W., Marker #469, NJ	05/04/00	Jackson	Wildwood, NJ	16	06/24/0
15	J Weber Jr.	Deal, NJ Bermold's Chan NV	08/07/99	J Behrens	Elberon, NJ	13	06/24/0
13	B Shillingford	Reynold's Chan., NY	05/26/00	M Sohm	Reynold's Chan., NY	15	06/24/0
15	J Gibbons	Ocean City, NJ	05/30/99	D DiDato	Somers Pt., NJ	16	
14	B Russo	Offshr., Atlantic Beach, NY	06/10/00	M Beanbian	Rockaway Inlet, NY		06/25/0
15	S Carlsen	E. Marion, NY	05/22/00	A Lalicata	Cutchogue, NY		06/26/0
15	R Notine	Shark R., NJ	09/24/99	A Strassburger	Asbury Pk., NJ	15	06/29/0
15	A Gano	Ambrose Chan., NY Fire Is., NY	08/28/99	M Higgins	Captree St. Pk., NY	16	06/30/0
4	C Kennedy		05/28/00	V Mennella	Fire Is., NY	16	06/30/0
13	B Filce	I.C.W. #444, NJ	05/24/00	T Kincade	N. Wildwood, NJ	16	06/30/0
4		Asbury Park, NJ	06/15/96	N Zigo	Fire Is. Inlet, NY	16	07/01/0
20	F Waltzinger III	Deal, NJ	06/02/00	R Braen	Monmouth Beach, NJ	15	07/02/0
	G Bachert	Romer Shoal, NJ	06/02/00	J Longberg	SE Romer Shoal, NJ	20	07/02/0
5	J White	Fire Island Inlet, NY	09/04/99	L Scheuermann	Fire Is. Inlet, NY	15	07/02/0
5	J Weber Jr.	Jones Beach, NY	07/18/99	T Veljacic	Jones Beach, NY	16	07/04/0
4	B Shillingford	I.C.W., Ocean City, NJ	05/28/00	J Gillian	I.C.W., #296, NJ	16	07/04/0
5	A Schweithelm	Montauk, NY	08/13/99	J Simons	Montauk Pt., NY	16	07/04/0
5	V Viola	Moriches Inlet, NY	05/24/00	V Caldwell	E. Moriches, NY		07/04/0
2	C Kennedy	I.C.W., #466, NJ	06/15/00	W Boston	Hereford Inlet, NJ	12	07/05/0
2	J Beck	Cape May Pt., NJ	07/02/00	T Suda	Cape May, NJ	12	07/05/0
2	G Horvath	Island Beach St. Pk., NJ	07/04/99	L Jannetty	Charlestown, RI	13	07/05/0
8	J Tirpak	Rumson, NJ	06/16/00	R Staubach	Navesink R., NJ	18	07/05/0
5	S Fries	S of Rockaway Inlet, NY	07/02/00	A Astone	Tin Can Grounds, NY		07/06/0
0	G Buono	Staten Is., NY	06/04/00	W Kruse	Ambrose Chan., NY	21	07/06/0
3	J Weber Jr.	Long Beach, NY	08/11/99	C Spoto	3 mi. E Jones Inlet, NY	15	07/06/0
5	S Fries	S of Rockaway Inlet, NY	07/01/00	M Koschitz	1 mi. off Riis Pk., NY		07/07/0
3	A Teal	Rantan Bay, NJ	06/17/00	B DeLuccia	Raritan Bay, NJ	14	07/08/0
4	A Malheiros	Sandy Hook, NJ	07/02/00	W Hurley	Sandy Hook, NJ	17	07/08/0
5	W Stuven	Huntington, NY	05/27/00	J Holthusen	Huntington, NY	16	07/09/0
7	C Kennedy	I.C.W., #469, NJ	04/28/00	A Bennett	I.C.W., Wildwood, NJ	18	07/10/0
5	S Knapik	Jones Inlet, NY	10/02/99	A dePieterman	Jones Inlet, NY	15	07/10/0
7	A D'Amato	I.C.W., Wildwood, NJ	04/28/00	A Bennett	I.C.W., Wildwood, NJ	18	07/10/0
4	W Doan	🚚 I.C.W., Stone Harbor, NJ	06/30/00	F Dietrich	Grassy Sound, NJ		07/11/0
5	J Weber Jr.	Long Beach, NY	10/15/99	A Montague	Rockaway Reef, NY	16	07/12/0
2	J Weber Jr.	Jones Beach, NY	07/29/99	J Nemyo	Provincetown, MA	16	07/12/0
4	S Fries	Rockaway Inlet, NY	07/01/00	L Lapetina	Rockaway Inlet, NY	15	07/12/0
4	L Velsor	5 mi. SW Jones Inlet, NY	06/20/00	G Armstrong	Long Beach, NY	15	07/13/0
5	F Waltzinger III	Deal, NJ	05/15/00	C Benson	Long Branch, NJ		07/13/0
4	W Filce	Mantoloking, NJ	06/25/98	A Douglas	Manasquan R., NJ	20	07/14/0
3	R Anderson Jr.	Fire Island Inlet, NY	06/06/98	R Newallis Jr.	Sandy Hook, NJ		07/14/0
3	A D'Amato	Cape May, NJ	04/21/99	Unknown Fisherman	Delaware Bay		07/15/0
5	J Weber Jr.	E. Reynold's Chan., NY	05/12/00	A Tarantino	Jones Inlet, NY	15	07/17/0
2	G Bachert	Romer Shoal, NJ	06/02/00	K Brown	Ambrose Chan., NY		07/18/0
\$	A Gano	Fire Is., NY	06/08/00	P Caputo	Fire Is. Inlet, NY		07/18/0
\$	J Gibbons	Atlantic Beach, NY	06/04/00	T Pellegrino	Atlantic Beach Brdg., NY		07/19/0
8	T Matraxia	Pt. Judith, RI	07/11/00	J Iaciofano	Matunuck, RI		07/19/0
3	P Migliaccio	Long Branch, NJ	06/03/00	C Hester	Tottenville, S.I., NY		07/21/0
5	J Gibbons	Lido Beach, NY	05/06/00	A Zimmer	Swift Cr., NY		07/21/0
\$	W Stuven	Huntington, NY	06/01/00	J Matzinger	Cold Spring Hbr., NY		
2	L Ruch Jr.	Long Branch, NJ	06/19/99	N Leszczak	Sea Bright, NJ		07/22/0
1	W Filce	Manasquan R., NJ	06/28/00	J Swift	•		07/22/0
		- ·		D Sokolowski	Manasquan R., NJ		07/22/0
3	S Eries						
3 5	S Fries A Gano	Rockaway Inlet, NY Fire Is., NY	06/24/00 07/02/00	A Postiglione	Coney Is., NY Fire Is. Inlet, NY		07/23/00

Specie Length	_	Place Tagged	Date	Recapturer	Location L	eng	th Date
14	V Viola	Moriches Bay, NY	05/13/00	S Needelman	Moriches Bay, NY	17	07/24/00
14	S Bomersbach	Sandy Hook Chan., NJ	07/19/00	R Koeppen	Sandy Hook, NJ	14	07/25/00
14	S Fries	Brighton Beach, NY	06/07/00	J Maffai	Manhattan Beach, NY	15	07/26/00
13	S Fries	Hoffman Is., NY	07/12/00	C Dubis	Hoffman & Swinburne Is., NY	7 14	07/28/00
11	D Reiss	Staten Island, NY	05/29/99	G Bachert	Flynn's Knoll, NJ	15	07/28/00
15	J Hickey Jr.	Sea Girt, NJ	07/07/00	F Rimmele Jr.	Manasquan, NJ	15	07/29/00
14	C Wilcox III	Moriches Inlet, NY	05/31/99	L Phillips	Shinnecock Bay, NY	17	07/29/00
13	L Velsor	Jones Inlet, NY	05/26/00	J Kanzler	Fire Is., NY	13	07/29/00
16	W Filce	Manasquan, NJ	10/20/98	A DiBiasio	Newport, RI	20	07/29/00
14	D Goodwin	Jones Inlet, NY	07/10/99	N Cardone	Holgate, NJ	16	07/30/00
13	N Fiorillo Jr.	Raritan Bay, NJ	06/19/99	F Decker F Bassı	Navesink R , NJ Jamestown, RI	17	07/30/00
13	E Feret	Freeport, NY	05/09/99 06/02/00	R Smith Jr.	Delaware Bay, DE	18 16	07/30/00
16	C Kennedy	Delaware Bay, NJ	09/14/99	M Dowling	Zachs Bay, NY	16	08/01/00 08/02/00
14	S Fries	Fire Is. Inlet, NY Rockaway Inlet, NY	07/23/00	D Schulz	Breezy Pt., NY	15	08/02/00
15	S Fries	Manasquan, NJ	10/09/99	D Gorneau	Westbrook, CT	16	08/04/00
15	W Filce	SE Rockaway Inlet, NY	06/28/00	J Johnson	Coney Is. Flats, NY	16	08/04/00
15	S Fries	Ambrose Chan., NY	07/30/99	R Tondorf	Westport R., MA		08/05/00
14	R Notine J Weber Jr.	Long Beach, NY	06/23/00	L Giebfried	Jones Inlet, NY	14	08/06/00
14 15	W Filce	Mantoloking, NJ	08/09/99	J Warren	Garden State N. Reef, NJ	17	08/06/00
13	J Weber Jr.	W. Reynold's Chan., NY	05/12/00	F Ennis	Long Beach, NY	14	08/06/00
15	J Weber Jr.	Long Beach, NY	07/09/99	F Signoriello	3 mi. S Fire Is. Inlet, NY		08/06/00
13	J Hickey Jr.	Offshr., Klondske, NJ	07/02/00	B Stromko	Spring Lake, NJ	14	08/06/00
14	J Weber Jr.	Long Beach, NY	06/23/00	L Giebfried	Jones Inlet, NY	14	08/06/00
14	C Kennedy	14' Lt, DE Bay	05/27/00	J Smailer	Lower DE Bay	15	08/08/00
13	J Gibbons	Atlantic Beach, NY	06/04/00	P Moquin	Atlantic Beach, NY	14	08/08/00
11	J Weber Jr.	Reynold's Chan., NY	05/26/00	M Harbater	Jones Beach, NY	14	08/09/00
13	R Charlton	Raritan Bay, NJ	06/27/99	J Gemmell	Sandy Hook Chan., NJ	15	08/09/00
14	C Kennedy	Cape May Hbr., NJ	07/12/00	K Sullivan	Cape May Hbr., NJ	14	08/12/00
16	B Goodman	S of Jones Inlet, NY	06/24/00	E Mautschke	Jones Beach, NY		08/13/00
13	J Weber Jr.	E. Reynold's Chan., NY	05/12/00	G Poll	Jones Inlet, NY		08/14/00
13	L Gonnello	Sandy Hook Bay, NJ	05/27/00	D Grant	Romer Shoal, NJ	14	08/15/00
12	O Ruiz	Fire Is. Inlet, NY	05/11/97	B Wallace	Long Beach, NY	18	08/15/00
21	S Bomersbach	Sandy Hook Chan., NJ	05/05/99	V Fulgoni	Raritan Bay, NJ	21	08/16/00
13	C Kennedy	Cape May, NJ	07/14/99	J Zaremba	Jamaica Bay, NY	17	08/16/00
15	J Tirpak	Raritan Bay, NJ	06/04/00	A Hoff	Earle Pier, NJ	16	08/16/00
13	L Velsor	4 1/2 mi.SW Jones Inlet, NY	07/05/00	S Haglich	Off Jones Inlet, NY		08/17/00
16	T Matraxia	Pt. Judith, RI	07/11/00	R Ashwell	Charlestown, RI	16	08/18/00
17	C Kennedy	14° Lt., DE Bay, NJ	06/02/00	E Lesniczak F Zatz	Bowers Beach, DE	1.0	08/18/00
15	S Fries	Rockaway Inlet, NY	08/02/00	D Kline	Rockaway Inlet, NY Ocean City, MD	15	08/18/00
19	A D'Amato	Cape May, NJ	08/12/99 06/09/00	B Eckhoff	Jones Inlet, NY	20	08/19/00
14	J Weber Jr.	Long Beach, NY	08/17/00	P Wilcox	Shark R , NJ	14 09	08/19/00
9	B Carlsen	Shark R., NJ Rockaway Inlet, NY	07/23/00	A DuJat	Marine Pkwy. Brdg., NY	15	08/19/00 08/19/00
15	S Fries	Long Branch, NJ	10/04/99	J Turner	Tottenville, NY	16	08/19/00
14	F Waltzinger III	Raritan Bay, NJ	06/17/00	N Fionllo	Sandy Hook Bay, NJ	14	08/20/00
13 12	A Teal J Gibbons	Atlantic Beach, NY	06/04/00	K Badger Jr.	Atlantic Beach, NY	13	08/25/00
12	R Notine	Ambrose Chan., NY	06/28/00	G Bachert	Highlands, NJ	14	08/25/00
14	C Kennedy	Cape May, NJ	07/14/99	T Hall	Townsend's Inlet, NJ	15	08/26/00
15	S Fries	Rockaway Inlet, NY	07/30/00	F Zatz	Scallop ridge, NY	16	08/26/00
13	J Weber Jr.	Long Beach, NY	06/30/00	J Connelly	S of Jones Inlet, NY		08/26/00
14	G Blank	NY Harbor	05/15/00	P Chowanec	Staten Is., NY		08/26/00
16	B Goodman	S Fire Is. Inlet, NY	08/05/00	B Ramirez	Landed, Hewhitt Fish Mkt., NY	7 16	08/28/00
12	C Kennedy	Cape May Hbr., NJ	06/22/99	J Falcone	Cape May Hbr., NJ	20	08/30/00
14	A D'Amato	I.C.W., Wildwood, NJ	08/16/00	J Woods	I.C.W., Wildwood, NJ	14	08/31/00
14	J Weber Jr.	Middle Bay, NY	07/02/99	A Shoot	Jones Beach, NY	17	08/31/00
13	C Fiorillo	Avon, NJ	06/26/00	B Cannizzavo	U.S.C.G., Shark R., NJ	15	09/03/00
13	S Fries	Jones Inlet, NY	08/15/00	M Bogen	Jones Inlet, NY	13	09/04/00
14	F Waltzinger III	Deal, NJ	06/02/00	P Mulligan	Ambrose Chan., NY	16	09/04/00
14	J Weber Jr.	Reynold's Chan., NY	05/12/00	J Nealon	Jones Inlet, NY	16	09/05/00
20	A Douglas	Manasquan R., NJ	07/14/00	R Syseskey	Manasquan R., NJ	20	09/07/00
14	L Velsor	5 mi. S Jones Inlet, NY	06/20/00	J Gennaro	8 1/2 mi. E Manasquan, NJ	14	09/09/00
18	C Kennedy	14' Lt., DE Bay, NJ	05/27/00	S Ragonese	Cross Ledge Lt., NJ	18	09/09/00
19	K Carson	Bay Ridge flats, NY	06/01/00	D Gladystewicz	South Amboy, NJ		09/09/00
15	J Gibbons	Rockaway Reef, NY	06/08/00	B Longstreet	Atlantic Beach Reef, NY	16	09/09/00
	A D'Amato	3 mi. SE Cape May, NJ	08/17/00	D Nelson	Cape May Inlet, NJ	14	09/10/00
13 14	C Fiorillo	Long Branch, NJ	07/26/99	D Marrazzo	Monmouth Beach, NJ		09/11/00

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Length	n Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
15	W Spall	Sandy Hook, NJ	06/08/00	D Weldon	1 mi. E Highland Brdg., NJ	15	09/14/00
14 13	J Woods K Carson	I.C.W., Wildwood, NJ	08/31/00	R Della Motta	I.C.W., Wildwood, NJ	15	09/15/00
13	R Anderson Jr.	Bay Ridge Flats, NY	07/10/00	E Foglia	Verrazano Brdg., NY	15	09/15/0
13	J Hickey Jr.	Fire Is. Inlet, NY Sea Gırt, NJ	09/02/00	Unknown Fisherman	Robert Moses Brdg., NY	13	09/19/0
14	S Fries	2 mi. S Jones Inlet, NY	07/08/00 07/14/00	D Lederman L Luzzı	4 mi. E Manasquan, NJ	14	09/21/0
14	D Hepner	Manasquan, NJ	07/06/99	A Cito	Offshr., Pt. Pleasant, NJ	15	09/22/0
14	B Carlsen	Shark R., NJ	08/11/00	K Henn	Sandy Hook, NJ Shark R. Inlet, NJ	16 15	09/23/00
15	F Waltzinger III	Spring Lake, NJ	06/10/00	T Dooley	1 mi. off Manasquan, NJ	16	09/25/0
13	C Gibbons	Atlantic Beach, NY	06/02/00	H Armendinger	Atlantic Beach, NY	14	09/26/0
13	L Gordon Jr.	Lynnhaven R., VA	08/26/00	H Lee	Lynnhaven Brdg., VA	13	09/27/0
14	W Doan	Stone Harbor, NJ	06/25/00	K Glenn	Stone Harbor, NJ	16	09/30/0
14	C Kennedy	I.C.W. #457, NJ	06/10/00	R Bucsek	Wildwood, NJ	17	09/30/0
12	L Bleiler	Sinepuxent Bay, MD	07/05/00	B Gowar	Sinepuxent Bay, MD	13	10/01/0
15	J Gibbons	Long Beach, NY	06/11/00	G Bachert	Offshr., Sandy Hook, NJ	16	10/01/00
15	L Bleiler	Leonardo, NJ	07/23/00	S Ventura	Sea Bright, NJ		10/02/0
14	S Carlsen	Shark R., NJ	09/21/00	D Mathews Sr.	Shark R., NJ	14	10/02/0
19	G Buono	Great Kills, NY	08/13/99	G Bachert	Ocean off Sandy Hook, NJ	21	10/09/00
12	T Stanik	Hatteras Inlet, NC	10/21/00	C Israel	Hatteras Inlet, NC		11/01/00
13	J Weber Jr.	Long Beach, NY	06/09/00	R Delgado	Offshr., Cape May, NJ	15	11/16/00
Great	Barracuda						
30	T Matraxia	8 mi. off Key Largo, FL	02/10/00	M Dettmann	12 mi. off Key Largo, FL		03/01/00
28	T Matraxia	3 mi. off Islamorada, FL	02/11/00	D Clark	Islamorada, FL		03/22/00
32	C Wilcox III	Marathon, FL	02/28/00	B Maddox	Marathon, FL	32	05/10/00
Greate	er Amberjack						
47	JC Wright	Offshr., VA Beach, VA	07/23/98	D Dreifort	8 mi. S of Sugarloaf Key, FL	48	02/12/99
32	T Matraxia	6 mi. off Key Largo, FL	02/10/00	E Rogers	6 mi. off Key Largo, FL	32	
32	T Matraxia	6 mi. off Key Largo, FL	02/13/00	J Nash	Off Key Largo, FL	32	02/13/00 03/12/00
51	JC Wright	50 mi. SE Rudee Inlet, VA	07/27/00	J Delcampo	50 mi. SE Rudee Inlet, VA	51	08/15/00
54	JC Wright	Offshr., VA Beach, VA	07/23/98	C Dawsey	60 mi. S Destin, FL	58	10/29/00
Kina N	Aackeral			-	-		
27	T Matraxia	Tavernier, FL	02/11/00	J Sanchez	I mi. E Ft. Lauderdale, FL	27	03/04/00
Permi					· · · · · · · · · · · · · · · · · · ·	-	
renna 14	A Schweithelm	Tomas Carlana II	02/05/00	F. 7			
		Tarpon Springs, FL	02/05/00	E Trotter	Offshr., Melbourne, FL		06/23/00
Red D							
	L Gordon Jr.	Elizabeth R., VA	02/06/00	F Porter	Elizabeth R., VA		02/11/00
	L Gordon Jr	Lynnhaven R., VA	06/03/00	J Pratts	Lynnhaven R., VA	20	07/12/00
	L Gordon Jr.	Lynnhaven Inlet, VA	07/02/00	M Brindley	Lynnhaven Inlet, VA	19	07/13/00
	L Gordon Jr	Lynnhaven R., VA	05/21/00	R Stoops	Lynnhaven Inlet, VA	20	08/19/00
	L Gordon Jr.	Lynnhaven R., VA	06/17/00	R Stoops	Lynnhaven Inlet, VA	20	08/19/00
	L Gordon Jr.	Lynnhaven R., VA	06/17/00	R Stoops	Lynnhaven Inlet, VA	20	08/19/00
	L Gordon Jr.	Lynnhaven R., VA	06/17/00	A Villarrval	VA Beach, VA	21	10/21/00
	L Gordon Jr.	Lynnhaven R., VA	09/02/00	G Meredith	VA Beach, VA	22	11/23/00
20	L Gordon Jr.	Lynnhaven R., VA	08/26/00	T Atherton	Ocracoke, NC	22	12/22/00
	rouper						
10	F Waltzinger III	Ohio Key, FL	01/09/00	T Dexter	Bahia Honda St. Pk., FL	12	01/30/00
Scup							
-	R Stasinos	Rye, NY	08/26/00	E Sanchez	Mid L.I Sound	11	10/21/00
Snook							•
27	J O'Keeffe	St. Lucie Inlet, FL	06/27/99	J Mitchell	St. Lucie Inlet, FL	27	09/04/00
Striper	i Bass						
•	R Leeds	Ocean City, NJ	03/29/95	M Costa	Westport R., MA	36	07/01/98
	A Anderson	Block Is., RI	10/21/98	C Charnock	Tangier Sound, VA	20	05/20/99
	D Zurheide	Bay Ridge, NY	06/25/98	C Leppin	Bay Ridge, NY	24	05/20/99
	S Jakubowski	Raritan Reach, NJ	05/10/99	C McClure	Block Is., RI	32	07/10/99
	G Drago	Montauk Pt., NY	06/17/98	V Romano	Long Beach, NY	30	10/25/99
	M Berger	Atlantic Beach Brdg., NY	06/09/97	T Leggett	York R., VA	33	12/15/99
	A Anderson	Thames R., CT	12/05/98	D Pickering	Providence R., RI	25	01/01/00
	R Leja	Bridgeport, CT	08/08/98	A Anderson	Norwich, CT	25	01/02/00
	M Heffernan	Provincetown, MA	06/09/99	A Anderson	Norwich, CT	16	01/02/00

Specie Lengti		Place Tagged	Date	Recapturer	Location	Leng	th Date
		N. J NTV	04/17/00	The	Marthurset MR		
26	A Schweithelm	Northport, NY	04/17/99 08/30/97	T Marburger D Ashley	Northport, NY Rock Hall, MD	26	01/04/00
21 22	A Pisczatowski	Glen Cove, NY 2 mi. SE Cape May, NJ	12/16/99	F/V Second Wind	5 mi. S Ocean City, MD	24	01/05/00 01/06/00
22	C Kennedy A Anderson	Block Island, RI	05/15/98	M Albright	Cape Henry, VA	31	01/06/00
24	J Della Porta	Swampscott, MA	08/30/99	T Callan	Oyster Creek, NJ	25	01/06/00
17	D Hoxsie	Charlestown, RI	06/26/98	L Lauver	Lewes, DE	21	01/07/00
29	A LoCascio	Execution Lt., NY	05/31/99	J Gomez	Seafood Mkt., Chester, MD		01/07/00
24	A Anderson	Montauk Pt., NY	05/30/99	J Baker	Indian R. Inlet, DE	25	
20	R Leja	Bridgeport, CT	07/25/96	J Murphy J Gomez	Scarborough, NY		01/18/00
30	B Semasek	Indian R., DE	12/02/94 12/15/98	M Cinone	Seafood Mkt., Chester, MD Northport, NY	23	01/21/00
23	T Marburger	Northport, NY Westport River, MA	04/29/99	D Morris	6 mi. N Uncasville, CT	18	01/30/00 02/01/00
15 13	A Anderson A Anderson	Thames R., CT	11/28/98	D Morris	6 mi. N Uncasville, CT	18	02/01/00
26	S Hartmann	Eatons Neck, NY	10/11/99	B Cedarquist	2 mi. off Cape Hatteras, NC		02/04/00
24	G O'Driscoll	Sea Isle City, NJ	10/06/98	J Gomez	Seafood Mkt., Chester, MD		02/10/00
27	J Ryan	Rodanthe, NC	12/28/99	V Diaz	Oregon Inlet, NC	27	02/14/00
30	C Chechoski Jr.	Housatonic R., CT	10/08/99	NC Div. Mar. Fish	Offshr., Oregon Inlet,NC		02/15/00
18	B Shillingford	Strathmere, NJ	07/15/99	D Ashley	Rock Hall, MD	• •	02/16/00
28	A Anderson	Block Island, RI	05/24/98 10/10/96	L Thrift J Hundley	Sandy Pt., VA Potomac R., VA	31	
27	A Dangelo	Montauk, NY Block Is., RI	05/26/99	M Waterfield Jr.	2.5 mi. off Rudee Inlet, VA		02/23/00 02/25/00
24	A Anderson L Gonnello	Belford, NJ	10/27/99	B Arnold	Newport News, VA		02/25/00
25 22	A Anderson	Thames R., CT	01/23/99	J Holloway	Newport News, VA	23	02/27/00
13	A Perednia	East R., NYC	10/31/98	J Johnsen	Bayonne, NJ	18	03/01/00
23	C Carroll Jr	Monmouth Beach, NJ	05/13/99	S.N. Norris Seafood	Landed, Cobb Is, MD		03/02/00
24	S Jakubowski	Hoffman Is., NY	11/10/98	W Leager	Lower DE Bay, DE		03/02/00
27	D Kelly	Orient Pt., NY	10/25/98	F Maddox	Shelltown, MD		03/04/00
25	R Templeton	Block Island, RI	07/05/99	R Lombardı Jr.	Piermont, NY	28	03/06/00
21	J Della Porta	Lynn, MA	08/16/99	G O'Driscoll NJ Div. Fısh & Wıld.	Penns Grove, NJ	23	03/06/00
20	A Messina	Little Neck Bay, NY	08/29/99 10/31/98	Martin Fish Co.	Delaware Bay, NJ Mouth of DE Bay	21 25	03/08/00
23	R Conklin	Moriches Inlet, NY Ocean City, NJ	04/22/97	W Kowalski	Hackensack R., NJ	25	03/08/00 03/08/00
17 25	R Leeds A Anderson	Block Is., RI	05/17/98	E Harper	Chesapeake Bay, MD		03/09/00
20	H Sweet	Warren, RI	10/20/99	S McKenna	Providence, RI	22	
18	B Dalton	Deal, NJ	12/15/99	M Morse	Cohansey Cove, DE Bay		03/12/00
18	M Simmons	Barnegat Lt., NJ	05/27/98	R Stevens	Quantico, VA	24	03/12/00
21	A Schweithelm	Eatons Neck, NY	05/29/99	NJ Div. Fish & Wild.	Delaware Bay, NJ	22	
24	A Anderson	Block Is., RI	06/19/99 11/28/99	B Arnold A Martin	Newport News, VA Norwich, CT		03/14/00
17	A Anderson	Thames R., CT East R., NYC	11/22/99	D Milne	Croton Pt., NY		03/15/00 03/17/00
23	G Blank	Providence, RI	07/30/99	J Fantoli	Norwich, CT	18	03/18/00
18 16	H Sweet C Carroll Jr.	Keyport, NJ	04/10/99	N Hermann	Providence, RI	20	03/22/00
15	J Mulkerin	Union Beach, NJ	03/22/99	J Schiavone	Croton Pt., NY	20	03/25/00
25	D Kelly	Orient Pt, NY	07/16/99	J Schlessman	Delaware Bay, NJ	27	03/25/00
15	A Schweithelm	Asharoken, NY	06/23/99	R Pearson Jr.	Croton Bay, NY	18	03/25/00
17	H Sweet	Warren, RI	10/24/98	N Hermann	Providence, RI	21	03/26/00
18	D Taft	Rockaway Inlet, NY	10/22/99 01/10/99	R Vargo Sr. J Carr	Croton on Hudson, NY Nonvice CT	18	03/26/00
14	A Anderson	Thames R., CT Bridgeport, CT	01/10/99 08/09/97	J Carr J Disibio Jr.	Norwich, CT Derby dam, CT	16 29	03/26/00 03/26/00
20	R Nystrom	Sea Bright, NJ	05/03/98	R Vargo Sr.	Croton on Hudson, NY	29	03/26/00
22	P Lowcher R Guttadauro	Little Neck Bay, NY	04/08/99	J Mulligan	Piermont, NY	21	03/31/00
19	H Sweet	Barrington, RI	07/07/98	A Hoff	Nyack, NY	19	03/31/00
17	M Strober	Jersey City, NJ	11/26/99	G Grieb	Tappan Zee Brdg., NJ	18	04/01/00
29	G Kerkhan	Provincetown, MA	06/16/99	R Covey	Delaware Bay, NJ	31	04/02/00
17	A Messina Jr	Little Neck Bay, NY	10/12/99	T Puzino	Great Bay, NJ	19	04/02/00
15	A Schweithelm	Northport, NY	03/12/00	P Hoang	Hudson River, NYC		04/04/00
21	W Perlman	Atlantic Beach, NY	06/28/97	W Marshall P. Buska	Trenton, NJ	31	04/05/00
33	P Johnson Sr.	South Shore, RI Riis Pk., NY	11/13/99 11/11/99	R Burke B Barry	Fredericksburg, VA Piermont, NY	36	04/06/00
20	W Woodroffe Sr.	Cape May, NJ	01/01/00	NJ Div. Fish & Wild.	Delaware Bay, NJ	21 25	04/07/00 04/07/00
25 21	A D'Amato E Kneski	Riverhead, NY	10/27/96	T Phillips	Townsends Inlet, NJ	25	04/07/00
21	R Grobarz	Sandy Hook, NJ	10/11/98	T LaFemina	Cliffwood Beach, NJ	26	04/08/00
18	R Pearson Jr.	Croton Bay, NY	03/26/00	R Lombardı Jr.	Piermont, NY		04/10/00
23	T Sawyer Jr.	Cape May Inlet, NJ	10/31/98	J Scrocca	I.C.W., Wildwood, NJ	25	04/11/00
21	R Kyker	Westport, CT	10/11/98	J Rivas	Riverside Dr., NYC	24	04/13/00
22	J Della Porta	Swampscott, MA	08/25/98	R Matteau	Norwich, CT	24	04/14/00
25	A Anderson	Block Island, RI	06/22/98	M Yoshida	Battery Park, NY	26	04/14/00

Specie		Diago Toward	Data	D			
Length	n Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
10	T Markenson	Marthur MM		6 .5			
18 14	T Marburger J Mahan	Northport, NY Jersey Cıty, NJ	03/07/00 04/02/99	C Fusaro D Talerico	Smithtown, NY Secaucus, NJ	18	04/14/00 04/14/00
23	J Lutz	Cape May, NJ	10/17/98	K Poloff	DE Bay, NJ	10	04/15/00
15	A Schweithelm	Eatons Neck, NY	06/14/99	S Asselta	Little Neck Bay, NY		04/15/00
19	A Anderson	Thames R., CT	11/28/98	W Piasick	Norwich, CT	20	04/15/00
22	R Nystrom	Fairfield, CT	08/18/99	J Jordan	Croton Pt., NY		04/15/00
20 27	A Anderson D Mann	Thames R., CT Montauk Pt., NY	03/21/99 11/16/97	R Matteau K Hernandez	Norwich, CT N. Croton, NY	21	04/16/00 04/16/00
24	T Lynch	Greenwich, CT	08/07/95	R Dowzycki	Laurence Hbr., NJ	35	04/16/00
23	R Conklin	Moriches Inlet, NY	08/04/98	R Arnold	Newport News, VA		04/16/00
23	R Leja	Bridgeport, CT	10/28/98	S Bell	Chesapeake Beach, MD	28	04/16/00
16	R Hurley	Cambridge, MD	11/21/99	VIMS	Rappahannock R., VA		04/17/00
12 22	G Horvath A Anderson	Trenton, NJ Thames R., CT	04/30/98 12/26/97	P Ostrom G Hendrickson	Cinnaminson, NJ Montville, CT	18 25	04/17/00 04/19/00
23	R Leja	Bridgeport, CT	10/27/98	P Dauk	Aberdeen, MD	23 27	04/19/00
22	M Vargas	Milford, CT	11/10/98	K Letherer	Newport, RI	28	04/20/00
24	R Conklin	Moriches Inlet, NY	10/08/99	D Brown	Chesapeake Beach, MD		04/22/00
25	D Kelly	Orient Pt., NY	09/29/99	G O'Driscoll	Penns Grove, NJ	28	04/24/00
25 29	B Finke	Norwalk, CT	08/11/99	NJ Div. Fish & Wild.	Delaware Bay, NJ	31	04/24/00
29	C Wilcox III R Kress	Moriches Inlet, NY Sandy Hook, NJ	11/04/98 11/20/99	G Provost K Letherer	Saugerties, NY	33	04/24/00
27	L Gonnello	Sandy Hook Chan., NJ	10/17/98	T Leite	Newport, RI Ocean City, MD	28	04/25/00 04/25/00
23	B White	Princess Bay, NY	05/06/96	K Seitz	Troy, NY	34	04/26/00
	P Lowcher	Sea Bright, NJ	06/13/98	T Carter	Elk R., MD	27	04/27/00
	P Lowcher	Sea Bright, NJ	06/01/98	F Miller	Trenton, NJ	29	04/27/00
35	W Periman	Rockaway, NY	06/27/99	C Tice	Hudson R., NYC	37	04/27/00
26 26	R Leja R Conklin	Bridgport, CT Morrohan Inlat, NV	10/15/99	D Ford	Hempstead Hbr, NY	28	04/28/00
19	R Conklin J Ragusa	Moriches Inlet, NY Fire Is., NY	06/09/99 11/05/98	A Adkins J Alese	Annapolis, MD Quogue, NY	31	04/28/00 04/28/00
27	D Kelly	Sag Harbor, NY	06/11/97	M Blair	2 mi. S Plum Pt., MD	33	04/28/00
15	H Sweet	Warren, RI	10/22/98	S Van Buren	Hoboken, NJ		04/28/00
29	G Blank	Hell Gate, NY	11/13/99	W Smiley	New Castle, DE	29	04/28/00
26	A Anderson	Block Is., RI	07/11/99	Commercial trawl	3 mi. E Wildwood Cr., NJ	28	04/28/00
26 30	A Schweithelm M Brookung	Montauk Pt., NY	06/05/98	F Roca	Jamaica Bay, NY	27	04/28/00
17	M Brooking M LeBlanc	Troy, NY E. Providence, RI	04/18/00 09/20/95	J Palmateer K Hernandez	Troy Dam, NY N. Croton, NY		04/28/00 04/29/00
22	F Coronato	Oakwood, S.I., NY	11/24/99	B Faux	Ship Bottom, NJ	23	04/30/00
17	G Blank	Govenor's Is., NY	11/13/99	S Delgado	New Windsor, NY		04/30/00
26	D Kelly	Orient Pt., NY	08/24/99	R Ostroha	Esopus, NY	26	04/30/00
24 20	B Shillingford	Strathmere, NJ	05/02/99	D Holmes	DE Memorial Brdg., NJ	27	04/30/00
20	A Anderson A Perednia	Block Is., RI East R., NYC	06/13/99 04/27/99	J Francesconi J Overton	Piermont, NY	24 24	04/30/00
26	A Anderson	Block Is., RI	07/03/99	R Ferrill	Long Branch, NJ Block Is., RI	24	05/01/00 05/01/00
20	R Chmiel	Stonington, CT	07/10/98	R LoCastro	Island Beach St. Pk., NJ	22	05/02/00
25	T Marburger	Shinnecock Inlet, NY	06/19/97	R Thomas	Staten Is., NY	32	05/03/00
17	A Perednia	East R., NYC	05/26/98	J Maldonado	East R., NYC	23	05/03/00
25 24	A Anderson 🖉	Block Is., RI	06/14/99	D Sassaman	Fieldsboro, NJ	28	05/03/00
24	J Posh	Ambrose Channel, NY Stratford, CT	10/30/99 08/26/97	T Pastick G Murphy	Derby, CT Saugerties, NY	25 33	05/03/00 05/04/00
21	G White	Piscataqua R., NH	09/03/98	R Geras	Lowell, MA	55	05/06/00
20	R Conklin	Westport, CT	11/08/98	M Strober	Governor's Is., NY	22	05/06/00
21	M Simmons	Barnegat Light, NJ	06/06/97	G Harris	Raritan Bay, NJ	30	05/06/00
38	G Buono	Staten Is., NY	05/03/98	D O'Brien	Keyport, NJ	40	05/06/00
20	G Buono	Oakwood, S.I., NY Northport, NY	10/07/96	D Camerada	New Dorp, S.I., NY	32	05/06/00
24 23	T Marburger F Stunkel	Stamford, CT	05/14/96 09/02/99	M Brooking C Day	Troy, NY Kingston, NY	34 23	05/06/00
18	A Schweithelm	Northport, NY	04/14/00	M Landa	Northport, NY	23	05/07/00 05/08/00
15	A Messina	Little Neck Bay, NY	08/15/99	J Dotsey	Long Beach, NY	17	05/08/00
17	A Messina	Little Neck Bay, NY	08/15/99	E Morales	City Is., NY		05/08/00
31	R Wolfskeil	Keansburg, NJ	05/05/99	T Hawk	14 ft. Lt., DE Bay		05/08/00
18	R Pearson Jr.	Croton Bay, NY	03/26/00	T Lake	Chelsea, NY	18	05/08/00
25 23	D Kelly A Schweithelm	Orient Pt, NY Eatons Neck, NV	10/25/99 05/26/99	A Daniels I Posluk	Sag Harbor, NY Sheensheed Bay, NV		05/09/00
23 15	J O'Keeffe	Eatons Neck, NY Stratford, CT	05/26/99	J Dotsey	Sheepshead Bay, NY Long Beach, NY	27 19	05/09/00 05/10/00
13	B Shillingford	Corson's Inlet, NJ	10/05/94	R Massey	Mays Landing, NJ	27	05/10/00
26	L Gonnello	Breezy Pt., NY	07/16/99	R Murray	Barnegat Lt, NJ	29	05/11/00
35	B Shillingford	Cape May, NJ	11/07/98	D Miko/PA Fish & Boat	Philadelphia, PA	38	05/11/00

Specie	S						
Length	Tagger	Place Tagged	Date	Recapturer	Location L	engt	h Date
18	J Balicki	Union Beach, NJ	04/20/00	J Dotsey	Long Beach, NY		05/11/00
26	B Waas	Cape Cod Bay, MA	09/06/99	L Clayton Jr.	Island Beach St. Pk., NJ	26	05/11/00
27	G Ministeri	Cape Cod Bay, MA	06/23/99	D Blondin	Vineyard Sound, MA	30	05/12/00
25	A Schweithelm	Crab Meadow Beach, NY	07/31/99	W Rossler	Smithtown, NY	28	05/12/00 05/12/00
28	S Jakubowski	West Bank Lt, NY	10/22/99	J Whatmough	Narrow R., RI	31	05/12/00
17	R Chmiel	Stonington, CT	05/14/99	R Colagiovanni	Prudence Is., RI	29	05/13/00
25	C Carroll Jr.	Sandy Hook, NJ	11/26/99	B Stone T Miller	Mashpee, MA	2)	05/13/00
26	G Ottavio	Cape May, NJ Moriches Inlet, NY	12/03/99 10/06/98	D Finnegan	Kingston, NY Moriches Bay, NY	26	05/13/00
22	C Wilcox III	Northport, NY	06/05/99	R Sullivan	Ship Bottom, NJ	22	05/13/00
18 28	A Schweithelm G Kerkhan	Monmouth Beach, NJ	05/31/98	N Wagenheim	Cape May, NJ	32	05/13/00
28 16	N Kittredge	Westport R., MA	05/01/99	T McCue	Hastings-on-Hudson, NY	18	05/13/00
40	J Gibbons	Shrewsbury R., NJ	06/15/99	D Sienonsna	Reach Chan. buoy #20, NY		05/13/00
32	C Kennedy	Hereford Inlet, NJ	12/04/98	H Espinal	Far Rockaway, NY		05/13/00
25	R Conklin	Moriches Inlet, NY	11/21/99	G Edwards	Moriches Inlet, NY	28	05/14/00
18	W Woodroffe	Riss Park, NY	10/23/97	M Gnad	Tin Can Grounds, Bklyn, NY	27	05/15/00
31	D Kelly	Orient Pt., NY	10/25/99	K Devlin	Nissequogue R., NY	33	05/15/00
23	M Simmons	Barnegat Lt., NJ	11/10/99	P Dempsey	Provincetown, MA	24	05/15/00
16	R Kyker	Norwalk, CT	09/12/95	J Zekus Jr.	Marlboro, NY	34	05/15/00
25	G Nigro	Sandy Hook, NJ	11/06/99	H Wells	Baiting Hollow, NY	29	05/15/00
22	T Lake	Croton Pt., NY	09/26/99	J Wight	Normandy Beach, NJ	23	05/15/00
22	R Leja	Bridgeport, CT	10/24/97	E Diggs	Back R., VA		05/15/00
21	E Petronio Jr.	Pt. Judith, RI	05/21/98	F Bogue	Barnegat Inlet, NJ	27	05/15/00
17	D Hoxsie	Charlestown, RI	06/23/99	M Tappero	Pawcatuck R., RI	25	05/15/00
17	T Marburger	Northport, NY	05/25/99	J Dotsey	Long Beach, NY	17	05/15/00
30	A Anderson	Thames R., CT	12/19/99	D Gilmartin	Waquoit, MA	32	05/16/00
16	A Anderson	Thames R., CT	12/21/97	D VonMalder	Wareham, MA		05/16/00
29	D Kelly	Orient Pt., NY	10/21/99	PA Fish & Boat	Philadelphia, PA	29	05/16/00
25	R Chmiel	Fishers Is., NY	07/02/98	PA Fish & Boat	Philadelphia, PA	28	05/17/00
21	G Kerkhan	Sea Bright Brdg., NJ	06/05/99	B Biedinger	Rumson, NJ	25	05/17/00
24	P Grippo	Haunts Cr., NY	06/03/99	J McCabe	3rd Wantagh Brdg., NY	28	05/17/00
20	J Ragusa	Fire Is. Lt., NY	12/09/99	J Beck	Wellfleet, MA	20 27	05/18/00 05/18/00
22	R Nystrom	Devon, CT	10/05/99	J Verbanic	Derby, CT	26	05/18/00
26	J Miller	Absecon Inlet, NJ	11/07/99	C Acosta	Derby, CT	32	05/18/00
30	A D'Amato	5 mi. S Cape May, NJ	12/03/99	D Joslin E Woodman	Fortesque, NJ Truro, MA	52	05/18/00
18	T Galletta	Staten Is., NY	11/08/99	F Woodman C Kenyon	Norwich, CT	32	05/19/00
29	A Anderson	Thames River, CT	12/27/98 04/29/00	G Schneider Sr.	Island Beach St. Pk., NJ	26	05/19/00
26 17	B Cantz S North	Stone Harbor, NJ Island Bch. St. Pk., NJ	11/23/96	Unknown Fisherman	Kiptopeke St., Pk., VA		05/19/00
26	W Perlman	Rockaway Beach, NY	06/10/99	F Francavilla Jr.	Marine Pkwy. Brdg., NY	30	05/19/00
29	R Kyker	Norwalk, CT	11/08/98	Unknown Fisherman	Kiptopeke St., Pk., VA		05/19/00
19	H Sweet	Barrington, RI	06/07/99	B Saunders	Moriches Inlet, NY	22	05/20/00
14	S Keiper	Indian R. Inlet, DE	06/17/99	B Tyson	Deale, MD	19	05/21/00
23	R Conklin	Moriches Inlet, NY	11/21/98	M Pedone	Raritan Bay, NJ	30	05/21/00
22	D Kelly	Sag Harbor, NY	05/09/99	D Smith -	Nyack, NY		05/21/00
29	Р Спрро	Merrick Bay, NY	10/28/99	A Anderson	Montauk Pt., NY	31	05/21/00
33	R Grobarz	Sandy Hook, NJ	06/12/96	C Kapetanakis	Great Kills, NY	40	05/21/00
27	C Silva	Middletown, RI	08/02/99	E Neronha	Little Compton, RI	27	05/21/00
35	A Anderson	Montauk Pt., NY	10/03/97	P Goldsborough	Hoopers Is., MD	31	05/21/00
22	F Stunkel	Stamford, CT	10/05/97	G Harlusch	Allenhurst, NJ	26	05/21/00
24	G Nigro	Sandy Hook, NJ	06/24/97	K Reber	Flynn's Knoll, NJ	27	05/22/00
24	T Rinaldi	New Suffolk, NY	05/29/99	T Beebe	Great Peconic Bay, NY	27	05/22/00
32	H Schauer	Martha's Vineyard, MA	05/11/99	T Huebner	Gilgo Beach, NY	32	05/22/00
27	A D'Amato	4 mi. SE Cape May, NJ	11/19/99	A Anderson	Block Is., RI	27	05/23/00
24	L Gonnello	Sandy Hook, NJ	06/09/97	J Jakubik	Flynn's Knoll, NJ	31	05/23/00
27	C Kennedy	Cape May, NJ	12/09/99	T Pozzi	Cape Cod Canal, MA	28	05/24/00
28	A Anderson	Thames R., CT	12/19/99	M Blanko	Derby, CT	30	05/24/00
14	H Sweet	Warren R., RI	11/04/97	V Corolla	Moody Pt., Wells, ME		05/24/00
25	J Caville	Cape May Rips, NJ	11/19/97	S Steinberg	Ship Bottom, NJ	31	05/24/00
23	A Anderson	Block Is., RI	07/08/98	R Barbour	Windsor, CT		05/24/00
16	G Ottavio	Cape May, NJ	10/11/98	C Shirey	Chester, PA	18	05/24/00
29	R Conklin	Moriches Inlet, NY	10/16/98	G High	Seaside Pk., NJ	33	05/25/00
31	W Perlman	Rockaway, NY	11/29/99	B Braccia	Atlantic Beach Brdg., NY	31	05/26/00
19	M Simmons	Barnegat Light, NJ	07/16/98	C Dalton	Allenhurst, NJ Charlestown, BI	24 19	05/26/00
16	A Drew Jr.	Charlestown, RI	08/12/99	GR Gray A Ronquillo	Charlestown, RI Flynn's Knoll, NJ	28	05/26/00 05/27/00
22	T Shaheen	Sandy Hook, NJ	09/07/97 05/03/00	G Horvath	Trenton, NJ	20 09	05/27/00
8	G Horvath	Trenton, NJ	00,00,00	G 1101 Your		0)	00.21100

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Leng	th Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
27	S Klaumenzer	Great Bay, NJ	04/07/99	R Newallıs Jr.	Flynn's Knoll, NJ	29	05/27/00
32	A LoCascio	Manhasset Bay, NY	06/08/99	P Beal	Execution Lt., NY		05/27/00
29	F Heal	Verrazano Brdg., NY	11/10/99	A Rodrigues	South Beach, S.I., NY	33	05/27/00
22	M Berger	E. Rockaway Inlet, NY	09/12/98	F Steppachus	Barnegat Bay, NJ		05/27/00
34	R Kyker	Stamford, CT	08/21/99	P Straub	Cornwall, NY	35	05/27/00
24	T Marburger	Shinnecock Inlet, NY	07/21/96	D Lawrence	The Race, L.I. Sound	33	05/28/0
17 22	A Anderson G Blank	Thames R., CT	01/02/00	G Marceau Jr.	Cape Cod Canal, MA	17	05/28/0
26	S Jakubowski	East R., NY Hoffman Is., NY	10/12/99	R Pearson Jr.	Upper Croton R., NY	22	05/28/0
27	S Jakubowski	Hoffman Is., NY	11/09/99	R Falardeau J Hanatow	Block Is., RI	32	05/28/0
23	R Leja	Bridgeport, CT	11/29/99 05/31/99	J Verbanic	Little Gull Is., NY Derby, CT	31 26	05/28/0
19	A Anderson	Thames R., CT	01/02/00	G Kerkhan	Provincetown, MA	19	05/28/0
25	G Ottavio	Cape May, NJ	12/03/99	R Stevens	Somers Pt., NJ	28	05/29/0
26	A LoCascio	Throgs Neck Brdg., NY	11/21/99	E Kubec	Orient Pt., NY	29	05/29/0
33	A Anderson	Block Is., RI	06/06/98	J Shaffer Jr.	Kingston, NY	35	05/29/0
20	G Kerkhan	Provincetown, MA	10/05/98	E Geiger	Wellfleet, MA	23	05/29/0
16	H Sweet	Warren, RI	06/20/97	T Schumaker	Stratford, CT	28	05/29/00
29	S Jakubowski	Raritan Reach, NJ	10/17/99	J Tromp	Falmouth, MA	31	05/29/0
23	E Anderson	Flynn's Knoll, NJ	06/05/99	R Luik	Sandy Hook, NJ	27	05/30/0
23	P Grippo	Meadowbrook Brdg., NY	08/04/98	C Bellinzoni	Meadowbrook Brdg., NY	27	05/30/0
23	W Terrill	Provincetown, MA	10/06/99	R McGinley	Island Beach St. Pk., NJ	25	05/30/0
18	H Sweet	Warren, RI	05/21/99	J Dotsey	Long Beach, NY	19	05/30/0
21	G Nigro	Sandy Hook, NJ	11/22/98	M Amaral	Plum Is., MA	24	05/30/0
35	W Perlman	Oceanside, NY	12/10/99	R Patrick	VA Beach, VA	37	05/30/0
22 20	A Piszczatowski	Glen Cove, NY	09/12/99	M Amaral	Plum Is., MA	24	05/31/0
24	J Della Porta	Swampscott, MA	10/05/99	A Kouoplin	Sheepshead Bay, Bkln., NY		05/31/0
	G Ruest S Jakubowski	Quick's Hole, MA Bay Ridge, NY	10/13/98	J DeJesus	Hart Is., NY	31	05/31/0
6	P Chowansky	Sea Girt, NJ	12/02/99	C McSweeney	Mamaroneck, NY	34	05/31/0
7	H Sweet	Warren, RI	12/03/98 10/03/98	J Skillin W Prell	Portland, ME Barrington, BI	21	05/31/0
20	D Furtado	Mt. Hope Bay, MA	10/11/98	M McCaleb	Barrington, RI Prudence Is., RI	24	05/31/0
4	L Gonnello	Flynn's Knoll, NJ	06/04/99	D Lerch	Flynn's Knoll, NJ	26	06/01/0
7	A Messina	Manhasset Bay, NY	07/18/99	J Medina	Pier 16, East R., NYC	27	06/01/00
.6	S North	Sandy Hook, NJ	11/06/99	R Alacevich	Barnegat Lt., NJ	27	06/01/0
1	G Kerkhan	Sandy Hook, NJ	09/11/99	C Coughlin	Belford, NJ	32	06/01/00
0	G Ottavio	Cape May, NJ	11/28/98	A Farino	Jones Inlet, NY	34	06/01/0
.7	L Gonnello	Flynn's Knoll, NJ	06/02/99	M Fritze	Raritan Bay, NJ	29	06/01/0
7	T Marburger	Northport, NY	05/28/00	F Burban	East Haven, CT		06/01/0
2	P Kozak	Esopus, NY	05/16/99	V Sege	Hempstead, NY	34	06/02/00
9	W Woodroffe Sr.	Riıs Pk., NY	11/11/99	S Stollings	Broadkill R., DE	21	06/02/00
2	A Moore	Newburgh, NY	05/20/98	F Scheckenback	Fire Is. Inlet, NY	25	06/02/00
13 10	D Blue	Shrewsbury Rocks, NJ	11/27/99	T Stebbins	E. Greenwich, RI	23	06/02/00
2	B Bottino C Bassano	Deal, NJ	06/23/99	T Sereika	Sandy Hook, NJ	22	06/03/00
7	S Keiper	Tuckernuck Is., MA Annapolis, MD	07/18/99	P Rabidou B Luthaltz	Block Is., RI	33	06/03/00
4	A Anderson	Thames R., CT	08/08/98 01/02/00	R Lutholtz W Webb	Thomas Pt. Lt., MD Groton, CT	22 27	06/03/00
0	C Fiorillo	Avon, NJ	11/16/98	A Araullo Jr.	Jersey City, NJ	27	06/03/00
.6	G Blank	" Hell Gate, NY	10/29/99	M Strober	Hell Gate, NY	27	06/03/00
1	A Anderson	Old Lyme, CT	05/09/99	J Scherzinger	Westbrook, CT	27	06/03/00
1	M Simmons	Barnegat Lt., NJ	10/27/99	M Kulinski	Barnegat Inlet, NJ	25	06/03/00
8	R Conklin	Moriches Inlet, NY	06/11/99	K Falvey	Moriches Bay, NY		06/03/00
9	C Chechoski Jr.	Housatonic R., CT	04/19/00	K Boulerice	Derby, CT	29	06/04/00
2	S Jakubowski	Robins Reef Lt., NY	12/08/99	K Zick	Hewlitt Pt., NY	35	06/04/00
7	L Gonnello	Breezy Pt., NY	07/16/99	J Foti	Hoffman Is., NY	27	06/04/00
2	R Conklin	Moriches Inlet, NY	05/16/00	R Ranghelli	Moriches Inlet, NY		06/04/00
8	A Anderson	Block Is., RI	06/15/99	J Merrigan	Jones Inlet, NY	30	06/04/00
7	W Periman	Long Beach, NY	11/05/97	C Gerstner	Flynn's Knoll, NJ	31	06/04/00
0	D Goodwin	Debs Inlet, NY	12/05/99	B Davidson	New London, CT	22	06/04/00
2	R Ries	Cold Spring Harbor, NY	10/31/99	D Montville	Sandwich, MA	23	06/05/00
7	R Peck	Monomoy Is., MA	07/26/99	J Dymant	Rockaway, NY	27	06/05/00
6	N Fiorillo Jr.	Navesink River, NJ	05/10/97	R Koeppen	Highlands Brdg., NJ	25	06/05/00
4	T Marburger	Shinnecock Inlet, NY	06/08/99	P McCarthy	Offshr., Montauk Pt., NY	26	06/06/0
9	H Sweet	Bristol, RI	07/02/98	D Lasker	Warren, RI	20	06/06/0
1	D Dibblee	Esopus, NY	05/03/00	J Rivera	Connecticut R., CT	33	06/06/0
3 9	J Della Porta R Chmiel	Swampscott, MA Fishers Is., NY	08/26/99 06/30/99	F Parker S Etzel I	Isle of Shoals, NH sland Beach St. Pk., NJ	29 32	06/06/0

Specie	es						
Lengt		Place Tagged	Date	Recapturer	Location	Leng	th Date
		A.11. 15.1. 5117	00/06/000	D.G. S	Aslantia Daash Dada NV	28	06/07/00
25	W Perlman	Atlantic Bch, NY	09/06/99	B Sciacca B Bogdan	Atlantic Beach Brdg., NY Seaside Pk., NJ	25	06/07/00
20 14	A LoCascio	Pt. Washington, NY Northport, NY	11/05/98 04/13/97	S Herrick III	Shinnecock Inlet, NY	24	06/07/00
24	T Marburger R Romero	East R., NYC	08/27/99	L Chuen	East R., NYC	24	06/07/00
24	L Gonnello	Sandy Hook, NJ	07/20/98	R Clark	Flynn's Knoll, NJ	32	06/07/00
22	W Perlman	Atlantic Beach, NY	05/16/98	J Gemmell	Flynn's Knoll, NJ	29	06/07/00
26	D Kelly	Sag Harbor, NY	06/11/97	B Reichelt	Hempstead, NY	30	06/07/00
20	F Stunkel	Stamford, CT	11/09/95	R Gedney	Stonington, CT	25	06/08/00
17	A Messina Jr.	Little Neck Bay, NY	09/26/99	R Winston	Manhasset Bay, NY	20	06/08/00
38	A Anderson	Block Island, RI	06/20/97	P Schuh	Execution Rocks, NY	42	06/08/00
25	D Mann	Stony Brook, NY	06/03/99	B Kim	Atlantic City, NJ	30	06/08/00
24	B Garfield	Portland, ME	07/21/99	P Domenico	Truro, MA	25	06/08/00
25	C Carroll Jr	Sandy Hook, NJ	11/26/99	A Boardman	Deer Is., MA	25	06/08/00
29	G O'Driscoll	Penns Grove, NJ	04/19/00	S Kim	Atlantic City, NJ	29	06/08/00
29	R Szellan	Old Orchard Lt., NY	05/16/00	D Jabs	The Race, L.I Sound	31	06/09/00
27	R Chmiel	Stonington, CT	10/08/99	RI Saltwater Angler	Narragansett Bay, RI		06/09/00
22	A Anderson	Block Is., RI	07/18/99	A Anderson	Block Is., RI	24	06/09/00
16	E Petronio Jr.	Pt Judith, RI	07/08/99	A Caolo	Charlestown, RI	19	06/09/00
25	M Vargas	Milford, CT	11/09/99	J Buda	Newburyport, MA	27 24	06/09/00 06/10/00
20	J Mahan	Jersey City, NJ	03/20/99	M Benjamin	N. Truro, MA	29	06/10/00
19 25	G Horvath	Barnegat Inlet, NJ	07/24/98	A Marriott G Garofalo	Rye Beach, NH Ambrose Chan., NY	27	06/10/00
23 27	G Nigro T Matraxia	Keyport, NJ Flynn's Knoll, NJ	05/22/99 11/09/99	B Scott	Chatham, MA	28	06/10/00
17	T Marburger	Northport, NY	04/24/00	P Dube	E. Greenwich, RI	17	06/10/00
17	J Hovsepian	Biddeford, ME	08/16/99	M Draus	Northport, NY	20	06/10/00
23	B Shillingford	Strathmere, NJ	09/26/98	W Gilbert	Corson's Inlet Pk., NJ	25	06/11/00
21	R Nystrom	Stratford, CT	11/05/98	V Caldwell	Moriches Inlet, NY	24	06/11/00
27	A Messina	Little Neck Bay, NY	08/26/99	N Andreasen	Hell Gate, NY	30	06/11/00
20	T Shaheen	Locust, NJ	06/10/00	V Caldwell	Moriches Inlet, NY		06/11/00
18	T Marburger	Northport, NY	03/07/00	K White	Swansea, MA		06/11/00
23	M Simmons	Barnegat Lt., NJ	06/07/00	K Morse	Spring Lake, NJ	23	06/12/00
20	JC Wright	Ches. Bay Brdg. Tun., VA	05/11/99	A Smelgus	Bloody Pt., Kent Is., MD		06/13/00
24	J Lutz	Cape May, NJ	11/14/98	J Scott	Onset Bay, MA	31	06/13/00
28	R Wolfskeil	Flynn's Knoll, NJ	06/11/00	M Leide	Flynn's Knoll, NJ	28	06/13/00
22	M Berger	Atlantic Beach Brdg., NY	06/16/97	M Gounarides	Long Beach, NY	27	06/15/00
29	B Semasek	Indian R., DE	12/13/99	J Quigley	Indian R. Inlet, DE	27	06/15/00
19	D Taft	Fire Is., NY	05/23/97	A Seltzer	Rockaway Beach, NY	27 34	06/15/00
23	R Kyker	Norwalk, CT	11/11/97	J Tran	Jersey City, NJ Flynn's Knoll, NJ	28	06/15/00 06/15/00
26	P Cappuccio	Sandy Hook, NJ	06/23/99	A Hilliard R Fort	Shark R., NJ	18	06/15/00
16	J Casey	Sea Girt, NJ Sag Harbor, NY	05/31/00 05/05/98	A Henrich	Long Beach Is., NJ	29	06/15/00
23 26	D Kelly L Gonnello	Sandy Hook, NJ	10/13/98	D Beacham	Great Kills, NY	31	06/15/00
23	G Blank	East R., NY	10/13/99	T Staudenmaur	Montauk, NY	27	06/15/00
19	A Drew Jr.	Charlestown, RI	05/14/97	S Zima	Charlestown, RI	28	06/15/00
26	R Leeds	Ocean City, NJ	01/08/00	R Landau	Wellfleet, MA	26	06/15/00
24	F Tenore	Sandy Hook, NJ	11/23/95	L Kominske	"The Race" L.I. Sound	30	06/15/00
24	L Gonnello	Sandy Hook, NJ	06/19/97	G Graman	Sandy Hook, NJ	30	06/16/00
25	K Greenwood	Absecon Inlet, NJ	11/14/98	J Feltovich	Derby, CT	29	06/16/00
17	H Sweet	Warren, RI	09/28/97	V DeLisi	Warren R., RI	23	06/16/00
26	B Garfield	Portland, ME	07/27/99	B Garfield	Portland, ME	29	06/16/00
28	A Anderson	Montauk, NY	05/17/00	J Goodman	Topsham, ME		06/16/00
25	C Carroll Jr.	Sandy Hook, NJ	11/07/99	D McGee	Boston Lt., MA	28	
25	E Taylor	Cliffwood Beach, NJ	03/29/00	H Carter Jr.	Manhasset, NY		06/17/00
17	M Strober	Hoffman Is., NY	11/21/99	P Shepard	Rockport, MA	18	06/17/00
23	J Ragusa	Point O' Woods, NY	11/08/99	D Bourdeau	Barnstable Hbr., MA		06/17/00
26	J Posh	Watch Hill, RI	07/01/99	J Getz	"Gangway Rock", L.I. Soun		06/17/00
26	S Hartmann	Eatons Neck, NY	10/31/99	A Lehmann	Boston, MA	27	06/18/00
28	A D'Amato	McCrie Shoal, NJ	11/19/99	B Altiery G Bakos	Snug Harbor, RI	34	06/18/00
24	R Conklin	Moriches Inlet, NY	09/17/98	G Bakos T Hixon	Flynn's Knoll, NJ Clinton, CT	31	06/18/00
24	G Kerkhan	Mantoloking, NJ Newburyport, MA	11/02/98 05/15/00	S Newingham	Amesbury, MA		06/18/00 06/19/00
24	M Wahlgren	Newburyport, MA Block Is., RI	07/10/99	W Janke	Fire Is. Inlet, NY	25	06/19/00
25 25	A Anderson LA Gonnello	Flynn's Knoll, NJ	05/27/00	F Heal	Ambrose Chan., NY	25	06/19/00
25 15	S Fries	Coney Is. Flats, NY	05/04/97	J Medina	Pier 17, East R., NYC	22	06/20/00
13	P Grippo	3rd Wantagh Brdg., NY	07/06/97	J Howard	Seaford, NY	22	06/20/00
14	T Marburger	Northport, NY	04/13/99	H Meyers III	E. Moriches, NY	20	06/20/00
25	R Kalenka	Shinnecock Bay, NY	06/22/97	D Gonzalez	Crossbay, Bklyn, NY	31	06/20/00

Specie	S						
	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
22	L Gonnello	Sandy Hash Chan MI	11/02/00	A 77'11'1	Theory is Marchine Marchine	~	06/00/00
15	A Drew Jr.	Sandy Hook Chan., NJ Charlestown, RI	11/03/98 06/08/93	A Hilliard S Kelly	Flynn's Knoll, NJ Fishers Is., NY	24 26	06/20/00 06/21/00
22	M Simmons	Barnegat Lt., NJ	11/16/99	B Nassif Jr.	West Newbury, MA	23	06/21/00
27	S Jakubowski	Sandy Hook, NJ	06/08/00	G Graman	Sandy Hook, NJ	28	06/21/00
23	G Ciriello	3 mi. E of Sandy Hook, NJ	10/01/97	LA Gonnello	Flynn's Knoll, NJ	26	06/21/00
9	G Horvath	Trenton, NJ	06/06/00	G Horvath	Trenton, NJ	09	06/21/00
23	M Simmons	Barnegat Lt., NJ	11/09/99	L Gonnello	Flynn's Knoll, NJ	24	06/22/00
29	S Radossi	East R., NY	11/06/99	I Santuchi	Roosevelt Is., NYC	30	06/22/00
26	A Anderson	Montauk Pt., NY	05/13/00	B McIntyre	The Race, L.I. Sound		06/22/00
16	R Grobarz	Monmouth Beach, NJ	04/19/98	J Maldonado	Lower East R., NYC	26	06/22/00
9	G Horvath	Trenton, NJ	06/06/00	G Horvath	Trenton, NJ	09	06/23/00
23	A Anderson	Block Is., RI	07/10/99	J Gagnon	Block Is., RI	24	06/23/00
16	R Messina	Little Neck Bay, NY	07/30/99	C Galvin	U.N., East R., NYC	22	06/23/00
9	G Horvath	Trenton, NJ	06/21/00	G Horvath	Trenton, NJ	09	06/23/00
23	A Anderson	Thames R., CT	12/19/99	P Lortie	Mousam R., ME	23	06/23/00
24	R Wolfskeil	Flynn's Knoll, NJ	06/11/00	R Kroon	Flynn's Knoll, NJ	24	06/23/00
22	G Kerkhan	Mantoloking, NJ	11/14/98	K Chointere	Providence, RI	23	06/24/00
26	G Ottavio	Cape May, NJ	12/04/99	J Barna	Rockport, MA	35	06/24/00
34	J Krauss	Raritan Bay, NJ	05/14/00	E Holcomb Sr.	Clinton, CT	35	06/24/00
26	W Marker	E. Rockaway Inlet, NY	06/19/99	W Marker	E. Rockaway Inlet, NY	27	06/24/00
25 27	A Elson	Cuttyhunk, MA	09/28/99	J Rose	Rockport, MA	28	06/24/00
13	D Kelly	Orient Pt., NY	09/29/99	D Zeiner	Plum & Gull Is., NY	30	06/24/00
24	G Ottavio B Vegel	Cape May, NJ	10/30/94	D Thompson	Trenton, NJ	25	06/25/00
23	R Vogel	Rumson, NJ Cone May NJ	10/22/97	J Beaver M Goodstone	Sandy Hook, NJ	27	06/25/00
23	L Schilling	Cape May, NJ Offebre Cape May, NJ	11/19/99		E. Hampton, NY		06/25/00
16	C Kennedy	Offshr., Cape May, NJ	05/01/00	C Denton	New London, CT	20	06/25/00
21	A Anderson P. Conklun	Thames R., CT Moriches Inlet, NV	03/21/99 07/04/98	C Kenyon R Keller	Norwich, CT	20	06/26/00
9	R Conklin	Moriches Inlet, NY		G Horvath	Flynn's Knoll, NJ	26	06/26/00
8	G Horvath	Trenton, NJ Trenton, NJ	06/06/00	G Horvath	Trenton, NJ	09	06/26/00
° 9	G Horvath G Horvath	Trenton, NJ Trenton, NJ	06/06/00	G Horvath	Trenton, NJ	08 09	
26	A Anderson	Block Is., RI	06/23/00 06/17/99	R Bellavance	Trenton, NJ Block Is., RI	27	06/26/00
25	A Anderson	Block Is., RI	07/07/99	R Bellavance	Block Is., RI	27	06/27/00 06/27/00
14	R Stasinos	Stamford, CT	08/26/98	F Stunkel	Stamford, CT	19	06/28/00
20	F Jessup	Moriches Inlet, NY	09/26/97	R Newallıs Jr.	Flynn's Knoll, NJ	27	06/28/00
36	C Wilcox III	Moriches Inlet, NY	10/30/99	D Kalosh	Moriches Inlet, NY	39	06/28/00
18	H Sweet	Warren R., RI	05/29/00	R Villella	Warren R., RI	18	06/28/00
25	D Brown	Spring Lake, NJ	06/24/99	G Graman	Flynn's Knoll, NJ	26	06/28/00
27	W Perlman	Rockaway, NY	12/13/99	S Swanson	Montauk Pt., NY	27	06/28/00
15	H Sweet	Warren, RI	08/27/98	P Farrell	Block Is., RI	20	06/28/00
23	G Blank	Govenor's Is., NY	11/14/99	R Glogg	Montauk, NY	26	06/28/00
14	D Taft	Oyster Bay, NY	11/12/99	B Fink	Westport, Ct	15	06/28/00
23	G Ottavio	Cape May, NJ	11/12/98	V Kowalski	Hackensack R., NJ	27	06/29/00
31	T Baricevich	Flynn's Knoll, NJ	06/20/00	J Beaver	Flynn's Knoll, NJ	31	06/29/00
30	S Knapik J	ones Beach, NY	11/26/99	T Templeman	Salisbury St. Pk., MA	31	06/29/00
29	R Conklin	Moriches Inlet, NY	10/19/99	R Hollis	Provincetown, MA	31	06/29/00
31	K Carrigan	Rockport, MA	06/04/00	R Swintuch Jr.	Salem Pwr. Plt., MA		06/29/00
20	D Kelly	Orient Pt., NY	09/28/99	E Hickox	Shelter Is., NY	21	06/30/00
19	R Grobarz	Monmouth Beach, NJ	04/19/98	P Sciotino	Flynn's Knoll, NJ	25	06/30/00
19	A Anderson	Thames R., CT	01/02/00	S Laemmle	Dennis, MA	20	06/30/00
19	A Messina Jr.	Little Neck Bay, NY	05/03/00	W Denning	Stepping Stones Lt., NY	20	06/30/00
26	G Ottavio	Cape May, NJ	11/12/99	P Bunnell	Manchester, MA	29	06/30/00
34	C Wilcox III	Moriches Inlet, NY	09/19/99	F Roese E.	Moriches, NY	35	06/30/00
26	J Beaver	Sandy Hook, NJ	06/17/00	R Tenzigolski	Flynn's Knoll, NJ	26	06/30/00
36	F Casey	Boston, MA	10/06/99	J Karolides	Salem Hbr., MA	38	06/30/00
22	F Stunkel	Stamford, CT	07/09/99	N Turnbull	Stamford, CT	24	07/01/00
	D Zurheide	Bay Ridge, NY	06/22/98	N LaSala	Sandy Hook, NJ	23	07/01/00
23	R Conklin	Moriches Inlet, NY	09/27/99	R Apman	Moriches Inlet, NY	24	07/01/00
24	M Simmons	Barnegat Lt., NJ	11/16/99	R Lehr	East Rockaway, NY	27	07/01/00
16	A Schweithelm	Northport, NY	04/23/97	D LaFrance	Sakonnet Pt., RI		07/01/00
25	S Jakubowski	Sandy Hook, NJ	06/01/00	J Papaccio	Flynn's Knoll, NJ		07/01/00
24	B Shillingford	Strathmere, NJ	09/22/97	G Wilson III	Great Egg Bay, NJ	29	07/01/00
8	G Horvath	Trenton, NJ	05/04/00	G Horvath	Trenton, NJ	08	07/01/00
28	A Anderson	Montauk, NY	05/20/00	ELi	Stonington, CT	28	07/02/00
18	G Horvath	Barnegat Inlet, NJ	12/05/99	J Fullmer	Dennis, MA	18	07/02/00
22	T Marburger	Shinnecock Inlet, NY	07/14/98	D Johnston	Sandy Hook, NJ	26	07/02/00
29	B Bottino	Spring Lake, NJ	06/27/99	R Dayton	Beach Haven Inlet, NJ	29	07/02/00

Species							
Length	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
	N.J.	Westport, CT	08/30/98	L Wicenski	Hoffman Is., NY	23	07/02/00
	R Kyker I Gibbons	Far Rockaway, NY	12/06/98	J Beaver	Flynn's Knoll, NJ	26	07/02/00
	M Vargas	Milford, CT	11/09/99	C Freeman	Cape Neddick, ME	25	07/03/00
	C Carroll Jr.	Raritan Bay, NJ	10/05/98	A Safdeye	Flynn's Knoll, NJ	27	07/03/00
	A D'Amato	Cape May Inlet, NJ	04/07/00	R Larson	Plum Is., MA	31	07/03/00
	H Sweet	Warren, RI	10/28/99	D Crepeau	Swansea, MA	19	07/03/00
	F Stunkel	Stamford, CT	07/02/98	R Tantala	Ship Bottom, NJ	32	07/03/00
	L Gonnello	Flynn's Knoll, NJ	07/12/99	R Dufresne	Martha's Vineyard, MA	29	07/03/00
9 (G Horvath	Trenton, NJ	06/26/00	G Horvath	Trenton, NJ	09	07/03/00
17 r	D Hoxsie	Pt. Judith, RI	08/19/97	R Jobin	Pt. Judith, RI		07/04/00
22 ł	H Sweet	Barrington, RI	06/10/98	R Ferland	Barrington, RI	28	07/04/00
	3 Horvath	Trenton, NJ	07/01/00	G Horvath	Trenton, NJ	08	07/04/00
	F Heal	Staten Is., NY	10/12/98	R Roux	Saco R., ME	26	07/04/00
	R Spiro	Merrimack R., MA	07/16/99	S Szymanski	Newburyport, MA		07/04/00
	R Pearson Jr.	Breezy Pt., NY	12/03/99	M Marr	Breezy Pt., NY	26	07/05/00
	I Sweet	Warren R., RI	05/18/00	P Graeber	Barrington, RI		07/05/00
	Gonnello	Flynn's Knoll, NJ	06/28/00	D Davies	Flynn's Knoll, NJ	28	07/05/00
	< Boyd	Old Orchard Lt., NY	06/10/99	D Davies	Flynn's Knoll, NJ	28	07/05/00
	A Anderson	Block Is., RI Norwalk, CT	06/04/00	S Walicki	1 mi E Montauk Lt., NY	29	07/05/00
	R Kyker	Rumson, NJ	10/31/97	R Pedicand	Greenwich, CT	28	07/06/00
	f Shaheen	Portland, ME	10/11/99	M Stalgartis	Flynn's Knoll, NJ	25	07/06/00
	3 Garfield	Stamford, CT	08/03/99	B Garfield F Ruckel	Portland, ME	24 22	07/06/00 07/06/00
	R Stasinos	Quick's Hole, MA	09/08/98 09/27/99		City Is., NY	22	07/06/00
	I Sweet l' Matraxia	Flynn's Knoll, NJ	06/29/00	T Hickey A Beko	Cuttyhunk, MA Flynn's Knoll, NJ	21	07/06/00
	Conklin	Moriches Inlet, NY	05/09/99	A Carbone	•	26	07/06/00
	r Rinaldi	Westhampton, NY	11/19/99	R Serbagi	Stratford, CT Magnolia, MA	20	07/06/00
	Ries	Cold Spring Hbr., NY	08/24/99	C Ruger	Caumsett St. Pk., NY	19	07/07/00
	D Kelly	Sag Harbor, NY	05/13/99	G Warren	Montauk Pt., NY	26	07/07/00
	Anderson	Green Hill, RI	10/23/99	R Davis	Pawcatuck, CT	19	07/07/00
	Г Магга	Reynold's Chan., NY	07/15/98	T Gallis	Flynn's Knoll, NJ	26	07/08/00
	A LoCascio	Pea Island, NY	08/23/98	C Roa	New Rochelle, NY		07/08/00
	Leja	Bridgport, CT	10/13/99	W Clark	Martha's Vineyard, MA	28	07/08/00
	C Taylor	Stone Harbor, NJ	10/24/99	M Reed	Stone Harbor, NJ	25	07/08/00
	Dickinson	Susquehanna Flats, MD	04/06/99	M Niestrath	Cedar Pt., MD	23	07/08/00
28 F	Casey	Boston, MA	07/01/00	N Young	Hull, MA		07/08/00
34 A	A DeFrancisco	Housatonic R., CT	10/15/99	R Wright	Rye, NH		07/08/00
21 A	Anderson	Thames R., CT	04/15/00	A Cote	Augusta, ME	22	07/08/00
24 Т	Marburger	Shinnecock Inlet, NY	06/11/00	B Cicerani	Shinnecock Inlet, NY	25	07/09/00
	R Nystrom	Devon, CT	10/29/99	R Nystrom	Bridgeport, CT	22	07/09/00
	A Strober	Upper East R., NYC	04/30/00	R Maresca	Hell Gate, NYC	21	07/09/00
	Anderson	Block Is., RI	06/23/99	D Walsh	Block Is., RI		07/09/00
	R Pearson Jr.	Breezy Pt., NY	06/11/97	A Compher	Flynn's Knoll, NJ	25	07/09/00
	A Simmons	Barnegat Light, NJ	07/23/98	R Lehr	Rockaway Bch., NY	29	07/10/00
	Boulmetis	Ambrose Chan., NJ	09/08/97	P Sciotino	Sandy Hook Chan., NJ	29 26	07/11/00
	Anderson	Block Is., RI	10/31/99	C Sterling Jr.	Barnegat Inlet, NJ	20	07/11/00 07/11/00
	A Schweithelm	Northport, NY McCrie Shoal, NJ	04/17/99	J Sugrue	Stratford, CT	20	07/11/00
	C Kennedy C Carroll Jr.	Sandy Hook, NJ	11/21/99	T Leonardis	Sea Isle City, NJ Block Is BI	30	07/11/00
	Coronato	Great Kills, S.I., NY	10/30/99	B Della Valle	Block Is., RI Jamaica Bay, NY	30	07/11/00
		Barnegat Lt., NJ	10/17/99	T Anello B Hasslink	Marblehead, MA	22	07/11/00
	A Simmons 8 Spiro	Merrimack R., MA	10/28/99 07/09/99	R Hesslink S Maguire	Merrimack R., MA	27	07/11/00
	R Kyker	Westport, CT	07/03/00	R Silberstein	Eatons Neck, NY	26	07/12/00
	Heal	Verrazano Brdg., NY	11/24/99	R Leyrer	Shrewsbury Rocks, NJ	30	07/12/00
	Kalenka	Shinnecock Bay, NY	05/28/00	J Reichart	Shinnecock Bay, NY	28	07/12/00
	I June	Nissequogue R., NY	09/18/99	S Griffin	Stony Brook, NY	22	07/12/00
	Woodroffe Sr.	Ris Pk., NY	09/14/99	A Seltzer	Rockaway Beach, NY		07/13/00
	Schweithelm	Northport, NY	08/03/97	R Groin Jr.	Nissequogue R., NY	29	07/13/00
	Matraxia	Flynn's Knoll, NJ	06/29/00	F Strugibenetti	Romer Shoal, NJ		07/13/00
	Shaheen	Navesink R., NJ	06/17/98	R Kremins	Sandy Hook, NJ	28	07/13/00
	Conklin	Norwalk, CT	09/27/98	W Rivera	East R., NYC	26	07/13/00
	Della Porta	Swampscott, MA	09/05/99	S Kem	Revere Beach, MA	28	07/13/00
	Pirone	Hart Is., NY	06/19/00	R Pirone	Hart Is., NY	24	07/13/00
24 R		Hart Is., NY	07/05/00	R Pirone	Hart Is., NY	21	07/13/00
	R Pirone						
21 R 26 L	Gonnello	Flynn's Knoll, NJ	06/28/00	B O'Connell	Flynn's Knoll, NJ	26	07/14/00
21 R 26 L				B O'Connell C Arroyo G Hınefelt	Flynn's Knoll, NJ East R., NYC Rock Hall, MD	26 32	07/14/00 07/14/00 07/15/00

Specie: Length		Place Tagged	Date	Recapturer	Location	Leng	th Date
17	W Anderson	Provincetown, MA	06/13/00	B Damour	Provincetown, MA	17	07/15/00
18	P Grippo	Wantagh, NY	06/19/00	W Matuszak	Jones Beach, NY	18	07/15/00
19	A Anderson	Thames R., CT	01/02/00	P Jenness	Manchester, MA	22	07/15/00
17	W Woodroffe A Anderson	Ft. Tilden, NY Block In BI	12/04/97	L Merly P Himelfarb	Fairfield, CT	19 28	07/15/00 07/15/00
27 27	R Templeton	Block Is., RI Block Is., RI	06/09/98 06/04/00	F Miller Jr.	Montauk, NY Block Is., RI	28 29	07/15/00
29	C Kennedy	25 mi. S Cape May Inlet, NJ	04/16/00	M Coleman	The Race, L.I. Sound	30	07/15/00
16	H Sweet	Warren, RI	07/16/98	J Peloquin	Warren R., RI		07/16/00
22	A LoCascio	Pt. Washington, NY	11/06/98	H Dunn	Greenwich, CT	25	07/16/00
16	M Simmons	Barnegat Light, NJ	08/20/97	M Kulinski	Barnegat Inlet, NJ	25	07/17/00
29	P Gillis	Buzzards Bay, MA	06/09/96	D Burger	Lusby, MD	32	07/17/00
24 28	A Anderson W Marker	Block Is., RI	07/11/99	B Della Valle B Braccia	Block Is., RI Atlantic Beach, NY	27 30	07/17/00
28	A Anderson	E.Rockaway Inlet, NY Block Is., RI	06/08/00 06/03/00	J Rainone	Block Is., RI	29	07/18/00 07/18/00
27	A Anderson	Block Is., RI	06/01/00	J Kaminsky	Roanoke Shoal, L.I., NY	28	07/18/00
19	B Shillingford	Flat Creek, NJ	05/15/98	T Westervelt	Belmar, NJ	27	07/18/00
27	C Kennedy	Offshr., Cape May, NJ	04/27/00	S Woodward	Bourne, MA	27	07/18/00
21	H Sweet	Quick's Hole, MA	09/27/99	P Courtney	Martha's Vineyard, MA		07/19/00
25	W Marker	Atlantic Beach, NY	06/20/99	J Balsamo	Atlantic Beach Brdg., NY		07/19/00
25	T McCandless	Jamestown, RI	10/05/99	J Pontes Jr.	Bristol Hbr., RI	30	07/19/00
26	W Perlman	Atlantic Beach, NY	06/28/97	M Boccio	Jamaica Bay, NY	32	07/19/00
25 28	P Johnson Sr. C Carroll Jr.	Block Is., RI Sandy Hook, NJ	10/16/99 10/05/99	A Daniele R Edwards	Flynn's Knoll, NJ Flynn's Knoll, NJ	29 31	07/20/00 07/20/00
25	A Anderson	Block Is., RI	08/01/99	F Miller Jr.	Block Is., RI	28	07/20/00
16	D Taft	Rockaway Inlet, NY	09/08/94	A Daniele	Flynn's Knoll, NJ	30	07/20/00
9	G Horvath	Trenton, NJ	06/06/00	G Horvath	Trenton, NJ	09	07/20/00
24	F Stunkel	Norwalk, CT	10/11/99	P Kavanaugh	1.5 mi. W Cuttyhunk Is., M	\ 27	07/20/00
17	B Shillingford	Corson's Inlet, NJ	07/01/98	J Mattson	I.C.W., Ocean City, NJ	22	07/20/00
22	J Daly	Shark R. Inlet, NJ	11/07/98	B Costantini	Sunken Meadow Pk., NY		07/20/00
9	G Horvath	Trenton, NJ	06/20/00	G Horvath	Trenton, NJ	09	07/20/00
23 31	G Blank M Russo	East R., NY Great South Bay, NY	10/08/99 11/08/99	J Maldonado C Porter	Lower East R., NYC Appledore Is., NH	32	07/20/00 07/21/00
35	A Anderson	Block Is., RI	06/17/99	T Theodores	Monomoy Is., MA	52	07/21/00
25	R Oelschlager Sr.	Portsmouth, NH	08/04/99	A Mazzitelli	Kittery, ME		07/21/00
9	G Horvath	Trenton, NJ	07/20/00	G Horvath	Trenton, NJ	09	07/21/00
22	A D'Amato	McCrie Shoal, NJ	11/19/99	S Kane	Newport, RI	25	07/21/00
9	G Horvath	Trenton, NJ	07/20/00	G Horvath	Trenton, NJ	09	07/21/00
28	F Heal	Raritan Bay, NY	10/21/99	W Herbert	Martha's Vineyard, MA	30	07/21/00
19 17	A Anderson W Perlman	Thames R., CT	01/02/00	M Lamothe C DeCrescenzo	Saco R., ME	22 28	07/21/00 07/22/00
26	R Nystrom	Atlantic Beach, NY Stratford, CT	05/11/97 08/28/99	R Leja	Rockaway, NY Bridgeport, CT	28	07/22/00
20	T Shaheen	Locust, NJ	06/10/00	J Beaver	Sandy Hook, NJ	-0	07/22/00
28	A Messina	Little Neck Bay, NY	08/29/99	R Mele	Jamaica Bay, NY	29	07/22/00
10	G Horvath	Trenton, NJ	05/28/00	G Horvath	Trenton, NJ	10	07/22/00
15	N Kennedy	Thames R., CT	04/22/99	M Dote	Hudson R., NYC	20	07/23/00
25	A Anderson	Montauk Pt., NY	05/12/00	F Tedeschi Jr.	E. Hampton, NY		07/23/00
20	A LoCascio	Port Washington, NY	11/07/98	W Stark Sr.	Manhasset Bay, NY	24	07/23/00
21 32	G Ciriello S Jakubowski	Sandy Hook, NJ	10/06/96	R Srnka N Hulbıg	Flynn's Knoll, NJ Monomou Is MA	31 35	07/23/00 07/24/00
23	D Kelly	Old Orchard Lt., NY Orient Pt., NY	05/16/00 07/16/00	A Letavec	Monomoy Is., MA Orient Pt., NY	35	07/24/00
18	D Taft	Fue Is., NY	06/16/99	S Pugach	Fire Is., NY		07/24/00
13	GS Gray	Charlestown, RI	06/21/00	K Ford	Charlestown, RI	13	07/24/00
19	A Anderson	Thames R., CT	03/13/99	B Garfield	Portland, ME	24	07/24/00
15	T Lake	Bay Ridge, NY	11/26/99	P D'Amico	Bayside, NY	19	07/25/00
23	D Obropta	Sandy Hook, NJ	06/07/00	R Harbina	Elberon, NJ	24	07/25/00
27	W Perlman	Rockaway, NY	12/10/99	J Dowd III	The Race, L.I. Sound	29	07/25/00
16 28	A Messina Jr.	Little Neck Bay, NY	07/16/00	M Lazar	Little Neck Bay, NY	20	07/25/00
28 17	K Carrigan J Dickinson	Rockport, MA Susquehappa Flats MD	06/02/00 04/06/00	A Clough	Newburyport, MA Chesaneake Bay, MD	28	07/26/00 07/26/00
17	S Knapik	Susquehanna Flats, MD Jones Beach, NY	04/06/00	A Jones III J Mayer Jr.	Chesapeake Bay, MD Mattapoisett, MA	22	07/27/00
27	A Anderson	Block Is., RI	07/12/00	G Stephens	Montauk, NY	~~	07/27/00
17	A Anderson	Thames R., CT	12/19/99	O Kutty	Pt. Judith, RI	20	07/27/00
19	GS Gray	Charlestown, RI	06/21/00	W Gordon	Charlestown, RI	21	07/27/00
21	G Ottavio	Cape May, NJ	09/19/98	J Wright	Cape May, NJ	25	07/27/00
27	W Periman	Rockaway, NY	06/18/99	B Ramirez	Ambrose Chan., NY	29	07/27/00
	B Garfield	Portland, ME	07/12/00	M Lotfey	Cape Elizabeth, ME	28	07/28/00
27	A Anderson	Block Is., RI	06/05/00	R Faby	Block Is., RI		07/28/00

Species	S						
	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
	B M	David OT	02/14/05	DMiller	Normalic CT	36	07/28/00
	R Nystrom	Devon, CT Reynold's Chan., NY	02/14/95 08/14/96	P Miller D Eichin	Norwalk, CT Atlantic Beach Brdg., NY	28	07/28/00
22	Т Магта В Кикот	Westport, CT	05/15/99	C Ambler	Old Saybrook, CT	23	07/28/00
21 25	R Kyker T Marburger	Northport, NY	05/26/98	K Konrad	Niantic, CT	29	07/29/00
25	W Perlman	Atlantic Beach, NY	06/20/96	A Boyt	Block Is., RI	32	07/29/00
	H Sweet	Warren, RI	09/24/97	C Delderfield	Barrington, RI	26	07/29/00
	T Marburger	Shinnecock Inlet, NY	06/06/00	J Timpanaro	Shinnecock Bay, NY	28	07/29/00
	R Kalenka	Shinnecock Bay, NY	06/29/97	M Dill	Moriches Bay, NY	29	07/30/00
	D O'Rourke	Old Orchard Lt., NY	05/17/00	R Rheault	Pt. Judith, RI		07/30/00
27	S Torpey	Sandy Hook, NJ	05/20/00	F Pfisterer	Montauk, NY	30	07/30/00
21	C Kennedy	Prissy Wicks Shoal, NJ	04/13/00	P Rzeczycki	Salisbury, MA		07/30/00
17	A Perednia	East River, NY	04/26/97	T Lynch	Breezy Pt., NY	30	07/31/00
15	A Messina Jr.	Little Neck Bay, NY	04/03/00	N Zerellav	Housatonic R., CT		08/01/00
27	R Szellan	Coney Is., NY	12/04/99	M Basbas Jr.	Martha's Vineyard, MA	31	08/01/00
	R Nystrom	Fairfield, CT	06/10/00	M Lundvall	Fairfield, CT	27	08/01/00
	F Casey	Boston, MA	06/07/99	J Walsh	Wellfleet, MA	33	08/01/00
	R Conklin	Moriches Inlet, NY	10/02/98	L Gonnello	Flynn's Knoll, NJ	26	08/02/00
	F Casey	Boston, MA	06/28/00	T Abbadessa	Hull, MA	28	08/02/00
	B Garfield	Portland, ME	08/10/99	B Garfield	Portland, ME	27	08/02/00
	T Shaheen	Navesink R., NJ	04/16/98	B Scutti	Montauk Lt., NY	30	08/02/00
	F Casey	Boston, MA	06/25/00	T Keaveny	Boston, MA	47	08/03/00
	B Shillingford	Delaware Bay, NJ Barnegat Inlet, NJ	11/14/99	J Glavickas	Cape Cod Canal, MA	43	08/03/00 08/03/00
	S Wright	Raritan Reach, NJ	11/20/99 05/11/99	B Rossicono	Newburyport, MA	20 36	08/03/00
	S Jakubowski F Casey	Boston, MA	09/24/96	M Crotty R Ross	N. Truro, MA Boston, MA	35	08/04/00
	•	Loch Arbour, NJ	05/26/00	J Crocker		55	08/04/00
	W Dalton R Pearson Jr.	Breezy Pt., NY	06/11/97	C Shanahan	Martha's Vineyard, MA	28	08/04/00
	M StroberBay	Ridge flats, NY	11/26/99	S Fierston	Niantic R., CT Brewster, MA	28	08/05/00
	T McConnell	Provincetown, MA	06/13/00	B Moran	Provincetown, MA	-0	08/05/00
	D Kelly	Orient Pt., NY	07/23/00	J Scarrone	Plum Is., NY		08/05/00
	A Anderson	Block Is., RI	05/26/99	C Sturgis	Block Is., RI	29	08/05/00
	G Nigro	Flynn's Knoll, NJ	10/24/99	J Dalder	Shinnecock Bay, NY	24	08/06/00
	R Conklin	Moriches Inlet, NY	07/17/00	M Gaeta	Moriches Inlet, NY		08/06/00
21	R Nystrom	Stratford, CT	10/12/99	J Broadhurst	Bourne, MA	21	08/07/00
31	R Kyker	Norwalk, CT	09/14/96	R Brenseke	Eatons Neck, NY	34	08/07/00
15	R Conklin	Westport, CT	10/03/99	M Weiner	Westport, CT	23	08/08/00
25	D Kelly	Orient Pt., NY	10/21/99	R Kyker	Norwalk, CT	25	08/08/00
	R Leja	Bridgport, CT	08/23/99	R Filler	Montauk, NY	25	08/09/00
	P Johnson Sr.	Block Is., RI	06/22/99	E Ernst	Montauk, NY	30	08/09/00
	J Balicki	Union Beach, NJ	03/25/00	R Santos	Narragansett, RI	18	08/09/00
	P Grippo	Jones Beach, NY	11/12/99	W Oakes	Plum Gut, NY	24	08/10/00
	M Russo	Sailor's Haven, NY	11/01/98	R Malewski	Milford, CT	26	08/10/00
	B Radice	Deal, NJ Flynn's Knoll, NJ	05/21/99	S Inzone	Montauk Pt., NY	27	08/10/00 08/10/00
	LA Gonnello		06/21/00	K Randall	Flynns Knoll, NJ	28	08/11/00
	D Kelly	Sag Harbor, NY Block Is., RI	05/03/97	T Sullivan	Sag Harbor, NY Block Is., RI	30	08/11/00
	J Posh B Loode	Ocean City, NJ	06/28/00	R Blank	Salisbury, MA	36	08/12/00
	R Leeds D Keily	Orient Pt., NY	04/08/98 10/21/99	E Heath J Kouvaios	Cape Cod Canal, MA	25	08/12/00
	M Simmons	Barnegat Lt., NJ	10/19/99	B Tyler	Fishers Is., NY		08/13/00
	T Matraxia	Montauk Pt., NY	07/29/00	M Tafe	Montauk, NY	33	08/13/00
	S Jakubowski	Old Orchard Lt., S.I., NY	10/29/99	R Bossie	Portsmouth, NH	35	08/14/00
	R Leja	Bridgeport, CT	06/18/00	M Antilla	Fairfield, CT		08/14/00
	C Wilcox III	Moriches Inlet, NY	10/07/99	F Tedeschi Jr.	S of Fire Is., NY		08/14/00
	D Kelly	Orient Pt., NY	10/19/99	T Clark	Orient PL, NY	33	08/14/00
	A LoCascio	Execution Lt., NY	05/26/99	R Colagiovanni	Watch Hill, RI	38	08/14/00
	B Garfield	Portland, ME	07/03/99	D O'Connell	Portland, ME	22	08/15/00
	J Mahan	Jersey City, NJ	04/02/99	R Weckesser	Kıll Van Kull, NY	12	08/15/00
	K Carrigan	Rockport, MA	06/15/00	J Rose	Rockport, MA	26	08/15/00
	D Basedow Jr.	Atlantic Beach Brdg., NY	06/16/99	A Hodgson	Verrazano Brdg , NY	28	08/16/00
16	H Sweet	Warren, RI	10/24/98	J Peloquin	Warren R., RI	24	08/17/00
28	A LoCascio	Execution Lt., NY	05/21/99	F Mildner	Middle Ground, L.I. Sound	33	08/18/00
	D Kelly	Orient Pt., NY	07/23/00	W Beebe	Orient Pt., NY		08/18/00
	K Carrigan	Rockport, MA	07/21/00	J Rose	Rockport, MA	28	08/18/00
	W Dalton	Long Branch, NJ	11/20/98	J Pereira Jr.	Coney Is., NY	26	08/19/00
	A Messina Jr.	Manhasset Bay, NY	10/09/99	D Burke	Manhasset Bay, NY Waterford, CT	**	08/19/00
	A Anderson	Thames R., CT	03/13/99	C Watts	Rockport, MA	32 30	08/19/00 08/19/00
30	K Carrigan	Rockport, MA	06/24/00	K Carrigan	TOORPOIL MITS	50	30.1900

Species							
Length	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
	Mittelmark	Jones Inlet, NY	06/13/99	G Metcalf	Merrimack R., MA	22	08/20/00
	Beaver	Sandy Hook, NJ	07/22/00	J Smiley	Verrazano Brdg., NY		08/20/00
	W Perlman	Atlantic Beach, NY	11/28/99	P Radwanski	Monomoy Is., MA		08/20/00
	R Pearson Jr.	Breezy Pt., NY	09/22/99	J Smiley	Verrazano Brdg., NY		08/20/00
	A Bencivenga R Chmiel	Sandy Hook, NJ	06/29/00	J Smiley	Verrazano Brdg., NY		08/20/00
	B Garfield	Stonington, CT Portland, ME	05/17/00 07/11/00	B Tyler B Garfield	Fisher's Is., NY Portland, ME	26	08/20/00 08/21/00
	C Carroll Jr.	Shrewsbury R., NJ	06/11/00	G Hueth	Navesink R., NJ	20	08/21/00
	A Messina Jr.	Little Neck Bay, NY	04/27/00	R Nystrom	Bridgeport, CT	19	08/21/00
	R Ries	Cold Spring Hbr., NY	07/11/99	R Messina	Makamah Beach, NY	25	08/22/00
31 S	5 Jakubowski	Robins Reef Lt., NY	12/07/99	J Selden	Chatham, MA		08/22/00
26 A	A Anderson	Block Is., RI	08/06/98	R Tuma	Montauk, NY	28	08/23/00
24 C	C Kennedy	2 mi. S Cape May Pt., NJ	01/08/00	A Fogal	Riverhead, NY	25	08/23/00
F	Casey	Boston, MA	08/03/00	A Coy	Boston, MA	34	08/24/00
25 C	C Maxon	Boston, MA	05/24/00	R Mei	Salisbury, MA	26	08/25/00
14 A	Anderson	Thames R., CT	12/19/98	D Hughes	Dover, NH	18	08/25/00
27 A	Anderson	Block Is., RI	06/17/98	T Flaherty	Newport, RI	31	08/26/00
27 A	A Anderson	Block Is., RI	05/30/00	F Fischbein	Block Is., RI	30	08/26/00
16 E	3 Shillingford	Strathmere, NJ	08/30/98	R Ebeling	New York Harbor	24	08/27/00
	ſ Shaheen	Rumson, NJ	06/13/98	B Bogdanowicz	Flynn's Knoll, NJ	28	08/27/00
29 J	Karolides	Beverly, MA	09/16/98	R Tollas	Quick's Hole, MA	31	08/27/00
22 T	f Shaheen	Rumson, NJ	05/24/00	R Tuma	Montauk, NY	25	08/28/00
17 F	⁷ Jessup II	Moriches Inlet, NY	09/14/98	B Saunders	Moriches Inlet, NY	21	08/29/00
	Foti	Staten Is., NY	09/13/98	B DiCostanzo	Swinburne Is., NY	25	08/29/00
	ľ Strmiska	Fishers Is, NY	10/24/99	J Ziobo	Napatree Pt., RI	44	08/29/00
	5 Jakubowski	Sandy Hook, NJ	06/04/00	M Gnad	Tin Can Grounds, Bklyn, NY	30	08/30/00
	W Perlman	Rockaway, NY	06/07/00	S Kuszel	Montauk Pt., NY		08/30/00
	R Pirone	Hart Is., NY	07/28/00	J Riordan	Bet. Hart & City Is., NY		08/30/00
	⁷ Tellefsen	Sandy Hook, NJ	11/12/99	T Van Buren	Barnstable, MA	36	08/31/00
	3 Bottino	Spring Lake, NJ	07/25/00	B Zemlanicky	Spring Lake, NJ		08/31/00
	R Kyker	Norwalk, CT	09/26/99	D Cingolani	Norwalk, CT	21	09/01/00
	A Messina Jr.	Manhasset Bay, NY	06/18/00	C Chicosky	Manhasset Bay, NY		09/01/00
	A D'Amato	Cape May, NJ	11/18/98	K Vespaziani	Provincetown, MA	29	09/02/00
	l Kyker	Norwalk, CT	10/16/99	M Rolf	Middle Ground, L.I. Sound	29	09/02/00
	Shaheen	Rumson, NJ	05/14/00	B Frank	Elberon, NJ	26	09/02/00
	Ponticorvo	Sandy Hook, NJ	11/26/99	T Walton	Saco R., ME	20	09/02/00
	. Tikusis 3 Ottavio	Normandy Beach, NJ Cape May, NJ	06/16/00 11/02/96	T Nguyen E Teise	Verrazano Brdg., NY Stone Harbor Pt NI	28 24	09/05/00 09/06/00
	G Ottavio	Cape May Pt., NJ	08/15/99	K Rudok	Stone Harbor Pt., NJ Stone Harbor Pt., NJ	25	09/06/00
	S Kellner	Mattituck, NY	06/20/98	M Purrazzella	Sagaponack, NY	25	09/07/00
	S Keiper	Indian R., DE	10/16/98	J Moore IV	Delaware Bay, NJ	22	09/07/00
) Kelly	Orient Pt., NY	06/24/00	J Christensen	Orient Pt., NY	26	09/07/00
	Marburger	Northport, NY	03/12/00	T Man	South St., NYC	16	09/08/00
	G Blank	East R., NY	10/06/99	R Padilla Jr.	Roosevelt Is., NY	29	09/08/00
	Casey	Boston, MA	08/26/99	F Casey	Boston, MA	30	09/08/00
	Stunkel	Stamford, CT	11/08/99	R Ewell	Wellfleet, MA	24	09/08/00
	Leonard ~	Portsmouth, RI	08/21/99	I Jarvis	Westhampton Beach, NY		09/09/00
	W Marker	E. Rockaway Inlet, NY	09/09/99	R Frey	Moriches Bay, NY	26	09/09/00
35 A	Anderson	Block Is., RI	06/01/00	B Dahrouge	Nantucket Shoals, MA		09/09/00
	Marburger	Northport, NY	02/26/96	R Franko	Stratford, CT	24	09/09/00
20 A	A Schweithelm	Northport, NY	07/04/98	T Hall	The Triangle, L.I. Sound	30	09/09/00
	l Fiorillo Jr.	Sandy Hook Bay, NJ	11/12/99	F Stevens	Falmouth, ME		09/09/00
26 V	/ DeLisi	Warren R., RI	05/17/00	F Maciel	Warren R., RI	27	09/10/00
18 R	R Ries	Cold Spring Hbr., NY	05/23/99	J Sommer	Barnegat Inlet, NJ	20	09/10/00
24 A	Anderson	Block Is., RI	06/12/98	J Joffray	Plum Is., NY	26	09/10/00
24 C	Carroll Jr.	Monmouth Beach, NJ	04/29/00	R Popivchak	Shark R., NJ		09/11/00
33 J	Foti	Staten Is., NY	06/06/98	D Miller	Block Is., RI	44	09/12/00
28 A	D'Amato	Offshr., Cape May, NJ	04/20/00	J Meade	Boston, MA		09/12/00
23 N	A Simmons	Barnegat Lt., NJ	11/10/99	T Cocchia	Norwalk, CT		09/12/00
34 R	t Maimone	Rye, NH	06/02/00	S McDonough	Isles of Shoals, NH	34	09/12/00
27 S	Jakubowski	Sandy Hook, NJ	06/30/00	W Muller	Sandy Hook, NJ	30	09/13/00
20 R	R Conklin	Moriches Inlet, NY	07/17/00	R Frey	Moriches Bay, NY	21	09/14/00
30 C	Carroll Jr.	Sandy Hook, NJ	10/08/99	C Nolte	Montauk Pt., NY		09/14/00
25 L	. Gonnello	Ambrose Chan., NY	10/31/99	G Pearson	Cape Cod Canal, MA	29	09/15/00
30 C	3 Blank	East R., NY	10/10/98	R Neumann	Jones Beach, NY		09/15/00
30 G							
	Kozak	Rhinecliff, NY	05/10/99	S Ventura	Tin Can Grounds, NY	28	09/15/00

Spec	ies						
	th Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
34	M Brooking	Troy Dam, NY	04/18/00	C Marino	Montauk Pt., NY	38	09/15/00
21	L Richards	Freeport, NY	07/06/97	J Heins Jr.	Jones Inlet, NY	32	09/15/00
24	S Jakubowski	Flynn's Knoll, NJ	06/24/00	M Koutsoupakis	Breezy Pt., NY		09/15/00
25	B Garfield	Portland, ME	07/01/00	B Garfield	Portland, ME	25	09/16/00
26	J Posh	Stratford, CT	10/18/99	F Daniel	Stratford, CT	28	09/17/00
20	B Garfield	Portland, ME	07/17/00	D Sowerby	York Beach, ME	24	09/18/00
31	S Kellner	Mattituck Inlet, NY	06/30/00	S Rosin	Duck Pt., L.I. Sound	31	09/18/00
29	R Leja	Bridgeport, CT	10/13/98	J Feltovich	Derby, CT	32	09/19/00
32		Montauk Pt., NY		J Rade	Montauk, NY	36	09/19/00
	P Grippo	Stratford, CT	09/24/98			25	09/19/00
20	G D'Amato	Merrick Bay, NY	10/11/99	F Sing	Stratford, CT	23	09/19/00
20	P Grippo	Sandy Hook, NJ	10/25/99	H Holdsworth	Cape Cod Canal, MA	26	09/20/00
24	A Bencivenga	•	06/28/00	M O'Byrne	Breezy Pt., NY	20	09/21/00
24	R Nystrom	Devon, CT	10/04/99	T Kopcso	Stratford, CT	23	09/21/00
27	A Anderson	Block Is., RI	06/15/00	D Samuels	Montauk, NY		
23	G Nigro	Sandy Hook, NJ	07/05/00	W Longo	CT side, L.I. Sound		09/21/00
18	A Perednia	East R., NY	06/05/96	J Maldonado	Lower Manhattan, NYC	31	09/21/00
22	S Keiper	Indian R., DE	10/25/97	B Frank	Elberon, NJ	32	09/21/00
19	A Messina Jr.	Little Neck Bay, NY	05/19/00	E Diaz	Staten Is., NY		09/22/00
23	R Nystrom	Stratford, CT	10/13/99	J Feltovich	Derby, CT	26	09/22/00
33	S Henry	Stellwagon Bk., MA	08/13/00	R Stone	N. Truro, MA		09/23/00
26	G Blank	East R., NY	10/12/99	T Haupet	Breezy Pt., NY		09/23/00
16	S North	Spring Lake, NJ	11/21/98	A Mozitis	Patcong Cr., Linwood, NJ	19	09/23/00
25	L Gonnello	Flynn's Knoll, NJ	06/29/00	T Haupet	Breezy Pt., NY		09/23/00
14	T Galletta	Sandy Hook, NJ	11/19/95	M Grogan	Nauset Beach, MA	31	09/23/00
13	R Stasinos	Stamford, CT	09/27/98	M Gutierrez	Stamford, CT	27	09/23/00
24	G Kerkhan	Sea Bright Brdg , NJ	06/17/00	J Abrams	Shrewsbury R., NJ	25	09/23/00
19	A LoCascio	Manhasset Bay, NY	10/27/96	J Maldonado	Lower Manhattan, NYC		09/23/00
22	A Messina Jr.	Little Neck Bay, NY	08/12/00	A Messina	Little Neck Bay, NY	23	09/23/00
30	D Kelly	The Race, L.I. Sound	08/22/00	J Tuthill	The Race, L.I. Sound		09/23/00
32	D Kelly	Orient Pt., NY	09/19/99	P Lobozza	Gilgo Beach, NY	35	09/24/00
32	D Dibblee	Esopus, NY	05/12/97	R Gabrielsen	1 mi. off Cutchogue, NY	36	09/24/00
19	P Grippo	Wantagh, NY	07/08/99	G Lombardo Jr.	3rd Wantagh Brdg., NY	24	09/25/00
16	B Shillingford	Ludlam Bay, NJ	06/28/98	D Mackey	Wellfleet, MA	23	09/25/00
17	T McCandless	Jamestown, RI	06/20/98	C Carroll Jr.	Sandy Hook, NJ	22	09/25/00
22	D Blue	Romer Shoal, NJ	05/05/00	B Biedinger	Sea Bright, NJ	26	09/26/00
24	G Ottavio	Cape May, NJ	12/04/99	J Miller Sr.	Cape May St. Pk., NJ	26	09/27/00
27	R Conklin	Moriches Inlet, NY		J Klembe	Fisher's Is., NY	29	09/28/00
25	G Clusman	Bay Head, NJ	10/20/99	R Waldron	Orient Pt., NY	32	09/28/00
23	J Mulkerin		11/05/98		Martha's Vineyard, MA	37	09/29/00
		Sandy Hook, NJ	11/09/95	A Rigg	Hampton Bays, NY	29	09/29/00
25	M Berger	Rockaway Reef, NY	06/26/99	L Molnar D. Clark	Charlestown, RI	34	09/29/00
31	B Shillingford	Cape May, NJ	11/14/99	R Clark S Feltrinelli	Hempstead Hbr., NY	21	09/29/00
20	A Messina Jr.	Little Neck Bay, NY	09/01/00		Orient PL, NY	31	09/30/00
21	F Stunkel	Stamford, CT	11/18/96	B Russo	Hampton Bays, NY	29	09/30/00
	A Visentin	Shinnecock Bay, NY	06/11/00	L Molnar	Beach Haven Inlet, NJ	22	09/30/00
22	C Carroll Jr.	Sandy Hook, NJ	09/25/00	M Mills		34	
27	R Grobarz	Brick Beach, NJ	05/22/97	R Saputo	Sandy Hook, NJ Charlestown, RI	34	09/30/00 09/30/00
25	P Kozak	Hidden Hbr., NY	05/10/00	R Clark		24	
23	A Messina Jr.	Little Neck Bay, NY	08/01/00	M Yoshida T. Bethamura	Battery Pk., NYC		09/30/00
24	A Anderson	Block Is., RI	06/05/00	T Ratkiewicz	Newport, RI Montauk Pt NV	24	09/30/00
40	P Grippo	Montauk Pt., NY	06/24/00	P Grippo	Montauk Pt., NY	40	10/01/00
25	L Gonnello	Flynn's Knoll, NJ	06/28/00	J Fanelli	Island Beach St. Pk., NJ	27	10/01/00
18	J Dickinson	Susquehanna flats, MD	05/12/99	P Kellam III	Pt. Lookout, MD		10/01/00
26	P Grippo	Goose Cr., Wantagh, NY	07/27/00	Р Кагр	2nd Wantagh Brdg., NY		10/01/00
29	A Schweithelm	Cold Spring Hbr., NY	05/22/00	J Catanese	Kings Pk., NY	31	10/01/00
26	F Casey	Boston, MA	09/20/00	A Coy	Boston, MA	26	10/01/00
29	W Perlman	Rockaway Beach, NY	06/10/99	W Melendez	Howard Beach, NY	32	10/02/00
24	C Maxon	Boston, MA	09/06/00	J King	Newport, RI	26	10/02/00
24	R Templeton	Block Is., RI	07/01/00	J Posh	Block Is., RI	26	10/02/00
26	R Stasinos	Port Chester, NY	07/09/00	E Marostica	Sheepshead Bay, NY	29	10/03/00
26	J Lutz	Cape May, NJ	11/20/99	J Brady	Montauk, NY	28	10/03/00
20	A Moore	Newburgh, NY	05/25/00	B Chace	Highlands Brdg., NJ	24	10/03/00
17	R Tye	Ches. Bay Brdg. Tun., VA	11/06/99	H Watson III	Cheaspeake Bay, VA	19	10/04/00
20	T McCandless	Jamestown, RI	09/27/00	W Pfeil	Jamestown, RI	20	10/04/00
25	B Masse	Warwick, RI	09/17/00	B Burton	The Race, L.I. Sound		10/05/00
16	R Gomolson	Strathmere, NJ	09/28/98	G O'Driscoll	Sea Isle City, NJ	24	10/05/00
36	B Shillingford	Cape May Rips, NJ	11/12/99	C Cannizzaro	Fire Is. Inlet, NY		10/05/00
30	P Lowcher	Sea Bright, NJ	07/01/98	H Rauer	Shrewsbury R., NJ	27	10/06/00
	1 LOWellet				,,,		

Specie	s						
	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
•							10/06/00
26	A D'Amato	5 mi. S Cape May, NJ	11/29/99	T Harris	Island Beach St. Pk., NJ	26	10/06/00
27 24	C Silva G Nigro	Middletown, RI Sandy Hook, NJ	08/02/98 06/09/96	J Skurka G Barton	Raritan R., NJ	31 34	10/06/00 10/06/00
25	A Schweithelm	Crab Meadow Beach, NY	06/19/90	T Stanton	East R., NYC Mouth of Connecticut R	29	10/07/00
25	A D'Amato	Cape May, NJ	12/09/98	R Keane	Marion, MA	29	10/07/00
14	A Messina Jr.	Cold Spring Hbr., NY	07/22/00	E Condon	Cold Spring Hbr., NY	16	10/08/00
22	R Nystrom	Bridgeport, CT	07/24/00	R Riekert	Bridgeport Harbor, CT	25	10/08/00
19	A LoCascio	Manhasset Bay, NY	09/03/96	J Wrage	East R., NYC	30	10/08/00
17	A Messina Jr.	Cold Spring Hbr., NY	07/24/00	E Condon	Cold Spring Hbr., NY	18	10/08/00
27	R Conklin	Moriches Inlet, NY	10/19/99	D Testaverde	Great Kills, NY		10/08/00
23	G Ottavio	Cape May, NJ	09/12/97	D Arber Jr.	Cape May Inlet, NJ	25	10/08/00
19	J Dickinson	Susquehanna Flats, MD	04/06/99	D Payne	Smith Pt., VA	19	10/09/00
27	W Perlman	Atlantic Beach, NY	11/07/99	G Lake	Atlantic Beach Brdg., NY	30	10/09/00
18	K Falvey	Shinnecock Bay, NY	05/20/00	R Beaulieu	Thames R., CT		10/09/00
23	R Leja	Bridgeport, CT	09/24/00	R Berger	Stratford, CT		10/09/00
23	P Orenzo	East R., NYC	11/05/98	A Almazo	East R., NYC	28	10/10/00
27	D Hoxsie	Charlestown, RI	08/08/98	A Boyer	Charlestown, RI	32	10/10/00
24	W Anderson	Provincetown, MA	09/25/99	B Dalton	Long Beach Is., NJ	28	10/10/00
19	F Stunkel	Stamford, CT	08/27/98	J Karg	Great Kills, NY	23	10/10/00
22	G Nigro	Sandy Hook, NJ	11/06/99	W Terrill	Provincetown, MA	22	10/10/00
18	Р Спрро	Wantagh, NY	07/14/99	W Stahl	Jones Beach, NY		10/11/00
21	G Ottavio	Cape May, NJ	09/09/00	G Ottavio	Cape May, NJ	22	10/11/00
20	W Brett	Provincetown, MA	07/29/00	W Terrill	Provincetown, MA	20	10/11/00
31	G Blank	Hell Gate, NY	11/07/99	M Glowala	Rockaway, NY	32	10/12/00
19	A Messina	Manhasset Bay, NY	07/17/99	W Yackel	Rocky Pt., NY	24	10/12/00
29	W Marker	E. Rockaway Inlet, NY	11/26/99	B Mignogna	Narragansett Beach, RI		10/12/00
22	G Kerkhan	Sea Bright Brdg., NJ	05/20/00	M Christiansen	Ocean City, NJ	24	10/12/00
16	R Messina	Little Neck Bay, NY	07/07/99	E Diaz	34th St., NYC		10/12/00
22	A Schweithelm	Asharoken, NY	06/21/98	J Schneider	Crab Meadow Beach, NY	31	10/12/00
25	B Sheehan	Bay Ridge, NY	06/20/99	J Strohmeier	Bay Ridge flats, NY	28	10/14/00
25 19	C MacNamee	Delaware Bay, NJ	11/03/98	R Filler R Susinno	Cross Ledge Lt., DE Bay	29 27	10/14/00
19	G Nigro J Zımardo	Sandy Hook, NJ	07/14/96 07/28/97	J Tran	Romer Shoal, NJ Shoreline of CT	21	10/15/00 10/15/00
24	A Messina	S. Amboy, NJ Little Neck Bay, NY	08/16/99	R Spinelli	East R., NYC	28	10/15/00
34	R Szellan	Hoffman Is., NY	12/12/99	Unknown Fisherman	Execution Lt., NY	34	10/15/00
16	R Kyker	Norwalk, CT	09/06/95	D Harrison	East R., NYC	26	10/15/00
18	A Schweithelm	Asharoken, NY	08/16/00	R Wertz	Kings Park, NY	18	10/15/00
20	R Chmiel	Watch Hill, RI	05/23/98	M Twiss	Stonington, CT	26	10/15/00
24	H Sweet	Bristol, RI	09/02/00	T Ziobo	Watch Hill, RI	25	10/15/00
31	F Casey	Boston, MA	09/19/99	D Garrett	Mantoloking, NJ	32	10/15/00
38	R Nugent Jr.	E. Gilgo Beach, NY	09/27/98	S Alfano	Fire Is. Inlet, NY	41	10/17/00
20	W Marker	E. Rockaway Inlet, NY	06/27/99	E Diaz	Battery Pk., NYC		10/17/00
29	G Blank	East River, NY	11/07/99	J Anthony	Pt. Judith Lt., RI	32	10/17/00
25	L Gonnello	Flynn's Knoll, NJ	07/19/99	R Luik	Lower NY Bay	26	10/18/00
17	M Simmons	Barnegat Lt., NJ	11/17/96	D Speciale	Ocean City, NJ	29	10/18/00
38	A Messina Jr.	Little Neck Bay, NY	09/11/00	S Masuda	East R., NYC	39	10/18/00
29	S Jakubowski	🕶 Raritan Reach, NJ	05/08/00	J Richey	Rips, Sandy Hook, NJ		10/18/00
25	B Harold	Highlands Brdg., NJ	10/15/99	M Presto	Red Bank, NJ	27	10/20/00
16	J Ragusa	Fire Is., NY	11/18/99	S Just	Wading R., NY	22	10/20/00
24	A Moore	Newburgh, NY	04/29/97	W Holmen	Eatons Neck, NY	31	10/20/00
23	G Ciriello	Breezy Pt., NY	07/06/97	G Buschmann	Statue of Liberty, NYC	33	10/21/00
26	G O'Driscoll	Provincetown, MA	06/23/99	D Mann	Montauk Pt., NY	29	10/21/00
21	B Shillingford	Cape May, NJ	11/07/98	B Cantz	Stone Harbor, NJ	26	10/21/00
22	W Marker	E. Rockaway Inlet, NY	12/09/99	P Doheny	Harwich, MA	24	10/21/00
25	R Chmiel	Stonington, CT	06/23/98	R Mele	Jamaica Bay, NY	29	10/21/00
19	A Messina Jr.	Cold Spring Hbr., NY	07/30/00	S Kellner	Mattituck Inlet, NY	22	10/21/00
22	D Kelly	Mecox Bay, NY	11/05/98	P Kaplan	Moriches Inlet, NY	25	10/21/00
17	A Messina	Little Neck Bay, NY	08/15/99	F Tappalardi	City Is., Ny	17	10/21/00
27	C Maxon	Huli, MA	09/19/00	A Bergelson	Montauk Pt., NY		10/22/00
22	T Shaheen	Rumson, NJ	06/13/98	J Drastal	Flynn's Knoll, NJ	28	10/22/00
	H Sweet	Warren, RI	06/13/00	D Parillo	Warwick, RI	20	10/22/00
29	A Anderson	Montauk Pt., NY	10/17/97	A Vendzules	Delaware Bay, NJ	36	10/22/00
24	M Berger	Rockaway Reef, NY	11/20/99	R Tuma	Montauk, NY	26	10/22/00
	R Conklin	Moriches Inlet, NY	10/06/00	J Kuhn	Shinnecock Canal, NY		10/23/00
20	D Zurheide	Bay Ridge, NY	06/23/98	J Bonura	J.F.K. Airport, NY	31	10/23/00
25	R Guttadauro	Princess Bay, NY	09/03/00	M Brasile R Johin	Hackensack R., NJ Charlestown, PJ	25	10/24/00
18	T McCandless	Jamestown, RI	09/08/00	R Jobin	Charlestown, RI		10/24/00

Species	Tagger	Place Tagged	Date	Recapturer	Location	Lengt	h Date
Lengui	lagger	11000 109900					
		towardawan DI	00/20/00	J Medina	Pier 17, East R., NYC	27	10/24/0
	T McCandless	Jamestown, RI	09/28/98 06/20/99	O Sorgentoni	Brandywine Lt., NJ	38	10/24/0
	R Gardrel	Block Is., RI Montauk Pt., NY	06/05/99	A Smith	Seaside Hts., NJ	30	10/24/0
	A Anderson T Lake	Governors Is., NY	11/21/98	J Maldonado	Pier 36, East R., NYC	19	10/24/0
	M Berger	E. Rockaway Inlet, NY	06/03/00	B Snyder	Sandy Hook, NJ	28	10/26/0
	F Casey	Boston, MA	07/31/00	S Chabot	Cape Cod Canal, MA	24	10/26/0
	J Mumman	Corson's Inlet, NJ	10/22/99	J Kadany	Sea Isle City, NJ	30	10/26/0
	R Kondub	Stamford, CT	07/29/00	R Wilhelm	Eastchester Bay, NY		10/26/0
	C Jazmin Jr.	Sea Isle City, NJ	11/24/96	S Comstock	Montauk, NY	35	10/27/0
	B Shillingford	Strathmere, NJ	07/05/00	J Sammon Sr.	Townsend Inlet, NJ		10/27/0
	A Anderson	Block Is., RI	06/20/99	T Brown	Block Is., RI	30	10/27/0
3	P Chowansky	Sea Girt, NJ	08/28/99	F Ecker	Barnegat Inlet, NJ	27	10/27/0
4	G Kerkhan	Mantoloking, NJ	10/18/98	M Webster	3 mi. S Long Beach, NY	32	10/27/0
8	D Kelly	Orient Pt, NY	09/19/99	J Wiatr	Delaware Bay, NJ	38	10/28/0
	R Kyker	Norwalk, CT	06/29/00	J Lovette	White Plains, MD	35	10/28/0
2	C Bones	Cape May, NJ	09/03/98	D Carrick	Cape May, NJ	24	10/29/(
	M Brooking	Troy Dam, NY	04/21/00	J Anderson	Sandy Hook, NJ	32	10/30/0
	D Pion	Block Is., RI	07/17/99	D Schmidt	Moriches Inlet, NY	30 26	10/30/0
	L Gonnello	Keansburg, NJ	10/16/99	D Smith	Lavalette, NJ	20	10/31/
	D Kelly	Orient Pt., NY	10/21/99	J Horvath	Found, Pt. Pleasant, NJ	26	10/31/
	A Anderson	Block Is., RI	07/11/99	D Zambrotta	Block Is., RI	28	11/01/
-	R Szellan	West Bank Lt., NY	06/19/00	M Fleschner	West Bank Lt., NY	30	11/01/
	D Hoxsie	Charlestown, RI	05/15/98	R Lamberti B Lombort	Moriches Inlet, NY	50	11/01/
	S Jakubowski	Sandy Hook, NJ Cone May, NJ	06/05/00	R Lamberti	Moriches Inlet, NY Green Hill, RI		11/01/
	J Lutz	Cape May, NJ Strathmere, NJ	11/20/99	J Hooper Jr.	Corson's Inlet, NJ	24	11/01/
	G O'Driscoll	Strathmere, NJ Cone May NI	10/19/00	S Demopoulos	Reeds Beach, DE Bay	18	11/01/
	G Ottavio	Cape May, NJ Sandy Hook Bay, NJ	09/25/99	S Baratta Sr. B Dress	Little Egg Hbr. Bay, NJ	26	11/01/
	D Obropta	Spring Lake, NJ	11/13/97 11/21/98	R Popivchak	Spring Lake, NJ		11/01/
	S North	Sandy Hook, NJ	06/05/00	R Langdon	Democrat Pt., Fire Is., NY		11/01/
	S Jakubowski	Westport, CT	08/14/00	S Kellner	Mattituck Inlet, NY	19	11/02/
	R Kyker R Maimone	Rye, NH	09/27/00	A Day	Milford, CT	38	11/02/
	G Blank	East River, NY	11/10/99	S Jakubowski	Robins Reef Lt., NY	26	11/02/
	B Garfield	Portland, ME	07/03/00	I Pierce	Watch Hill, RI	33	11/02/
	W Leahey	Newark, NJ	11/20/98	A Henle	Nutley Brdg., NJ	19	11/02/
	H Sweet	Providence R., RI	08/09/00	G Matteson	Seekonk R., RI	20	11/03/
	A D'Amato	Cape May Inlet, NJ	09/25/97	J Sheppard	14' Lt., DE Bay	26	11/03/
	A Schweithelm	Northport, NY	05/01/00	J Jankovich	Plum Is., NY	20	11/03/
	H Sweet	Warren, RI	09/14/96	J Medina	St. George, S.I., NY	21	11/03/
	D Hoxsie	Charlestown, RI	06/04/00	B Egert	Atlantic Beach, NY	26	11/03/
	D Kelly	Orient Pt., NY	09/12/00	F Woolley	Brandywine Shoal, DE Bay		11/03/
	M Simmons	Barnegat Lt., NJ	11/16/99	T Glicksman	Highlands Brdg., NJ	24	11/04/
	R Conklin	Moriches Inlet, NY	11/19/99	J Cournoyer	Napatree Pt., RI		11/04/
7	A LoCascio	Throgs Neck Brdg., NY	11/22/98	J Fusco	Throgs Neck Brdg., NY	32	11/04/
9	M Sammons	Barnegat Lt., NJ	11/17/96	R Martineau	Sandy Hook, NJ	29	11/04/
1	T Marburger	Northport, NY	04/25/99	D Stillwagon	Northport, NY	26	11/04/
	M Wahlgren	Newburyport, MA	08/28/00	M Nedwidek	Charlestown, RI	28	11/05/
1	R Nystrom	Fairfield, CT	06/18/00	A Piessi Jr.	Seaside Pk., NJ	23	11/05/
3	A Anderson	Block Is., RI	07/18/00	P Jakits	Montauk, NY	35	11/05/
:3	C Carroll Jr.	Sandy Hook, NJ	10/15/00	A Seltzer	Coney Is., NY	25 28	11/06/
22	W Dalton	Loch Arbour, NJ	05/21/00	H Desch	Cape May, NJ	28 15	11/06/
3	T Lake	Robbins Reef, NJ	11/26/99	S Rakiec	Charlestown, RI	24	11/07/
2	R Nystrom	Bridgeport, CT	07/30/00	J Medina	Pier 36, East R., NYC	24	11/07/
:5	B Shillingford	Townsends Inlet, NJ	10/07/99	W Mammele	Avalon, NJ Sandy Hook, NJ	25	11/07/
5	E Petronio Jr.	Block Is., RI	08/02/99	G Hlavka	Absecon, NJ	25	11/07/
.6	A Anderson	Block Is., RI	06/13/99	J Navrath	Absecon, NJ Statue of Liberty, NYC	28	11/07/
4	J Dotsey	Montauk, NY	08/24/98	R Muller	Barnegat Inlet, NJ	28	11/09
1	T Shaheen	Rumson, NJ	05/26/00	B DiBernardo	Pt. Jefferson, NY	32	11/09/
6	S Hartmann	Eatons Neck, NY	08/20/98	P Cardi D Palas	Mid Chesapeake Bay, MD	33	11/10/
11	J Posh	Block Is., RI	06/29/00	D Bales	Ortley Beach, NJ	22	11/10
9	T Shaheen	Locust, NJ	06/14/00	A Comforti D Hadland	Hampton Bays, NY	38	11/10
3	C Wilcox III	Monches Inlet, NY	10/15/98	L Clement	Jones Inlet, NY	31	11/10
21	P Grippo 3rd	Wantagh Brdg., NY	07/06/97	L Clement M Pickering	Galilee, RI	20	11/10
8	A Anderson	Thames R., CT	01/02/00	R Gill	Stone Harbor, NJ		11/11/
22	C Kennedy	Cape May, NJ Jamestown, RI	12/15/99 09/24/00	M Mirisola	6 mi. E Montauk Pt., NY	28	11/11/
28	T McCandless					20	

Leng	cies gth Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
18	R Pearson Jr.	Croton Base MN					
24	G Nigro	Croton Bay, NY Sandy Hook, NJ	05/21/00		Flynn's Knoll, NJ	22	
22	S Kellner	Mattituck, NY	11/22/98		Sandy Hook Chan, NJ	27	
19	D Hoxsie	Pt. Judith, RI	06/28/97		Rockaway Inlet, NY	31	
24	R Kyker	Norwalk, CT	05/23/00		Verrazano Brdg., NY	22	
23	J Zimardo	South Amboy, NJ	11/05/96		Norwalk, CT	25	
15	M Simmons	Barnegat Lt., NJ	09/09/99	•	Rockaway, NY	26	
22	H Sweet	Bristol, RI	07/08/99		Stone Harbor, NJ	20	
20	T Shaheen	Locust, NJ	06/13/00	0	Sandy Hook Bay, NJ	25	
26	R Conklin	Moriches Inlet, NY	06/10/00		Keansburg, NJ	22	
25	A Messina Jr.	Manhasset Bay, NY	10/01/00		Cape May, NJ	28	
25	R Leja	Bridgeport, CT	10/10/99	J Robbins	Cape May, NJ	27	11/15/00
22	T Shaheen	Sandy Hook, NJ	06/16/00 08/12/99	M Colon G Muller Jr.	New Haven, CT		11/15/00
19	G Ottavio	Cape May, NJ	09/26/99		Breezy Pt., NY	28	
25	S Jakubowski	Sandy Hook, NJ	06/10/98	D George	White Stone, VA		11/15/00
22	G Blank	East R., NY	10/10/98	P Weidman	2 mi. E Cold Spr. Inlet, NJ	30	11/15/00
20	S Torpey	Union Beach, NJ	04/15/00	A Hyslop	East R., NYC	26	11/16/00
20	R Leja	Bridgeport, CT		T Lynch B Manafaild	Rockaway Beach, NY	23	11/16/00
26	G Ottavio	Cape May, NJ	06/10/00 11/20/99	R Mansfield	Sea Bright, NJ		11/16/00
18	R Kress	Chatham, MA	06/10/00	J Gardner	Cape May, NJ		11/16/00
22	A Messina Jr.	Little Neck Bay, NY	09/10/00	A Macaluso F Kertesz	Moriches Inlet, NY	18	11/16/00
15	J Karolides	Danvers, MA	09/13/95		Beach Haven, NJ	23	11/16/00
17	H Sweet	Prudence Island, RI	10/30/97	J Polhamus	Stone Harbor, NJ	29	11/17/00
16	R Kyker	Norwalk, CT	08/03/96	C Fleig B Yuska	Pt. Pleasant, NJ	26	11/18/00
43	R Paganini	Long Beach, NY	10/30/00	B Yuska	Verrazano Brdg., NY	29	11/18/00
24	P Johnson Sr.	Block Island, RI	10/15/00	J Day	Hooper Lt.,MD	43	11/18/00
19	D Kelly	Sag Harbor, NY		C Bishop	Southampton, NY		11/19/00
16	A Schweithelm	Eatons Neck, NY	05/28/00	A Daniels	Sag Harbor, NY		11/19/00
19	F Heal	Staten Is., NY	05/08/99	J Gould	Norwich, CT	18	11/19/00
26	J Posh	Milford, CT	11/09/99	M Guy	Clements Is., MD	23	11/19/00
23	A Messina Jr.	Little Neck Bay, NY	08/11/00	J Kay	Brant Beach, NJ	27	11/19/00
36	P Kozak	Esopus, NY	09/10/00	R Deutsch	Fire Is. Inlet, NY	25	11/20/00
21	C Wilcox III	Moriches Inlet, NY	05/11/00	R Nowicki	South Amboy, NJ	36	11/20/00
9	W Perlman	Rockaway, NY	11/11/00	D Spatz	2 mi. ESE Atlantic City, NJ		11/20/00
9	J Foti	South Beach, S.I., NY	06/04/00	J LoCicero	Jones Inlet, NY		11/20/00
3	F Stunkel	Stamford, CT	06/18/00	S Jakubowski	Hoffman Is., NY	29	11/20/00
0	T McCandless	Jamestown, RI	10/15/99	T Weyhrauch	Throgs Neck Brdg., NY	27	11/21/00
5	R Conklin	Moriches Inlet, NY	10/10/00	M Millman T. Dilashi	Monmouth Beach, NJ		11/22/00
0	A Anderson	Thames R., CT	11/01/99 11/29/98	T Pileski E Malava	Montauk Pt., NY	29	11/23/00
0	C Carroll Jr.	Sandy Hook, NJ		F Malave	Old Saybrook, CT	24	11/23/00
.8	A LoCascio	Throg's Neck Brdg., NY	11/12/00	A Turner Sr.	Offshr., Assateague Inlet, VA	20	11/23/00
0	H Sweet	Warren, RI	12/05/98	P Apuzzi	Throgs Neck Brdg., NY		11/23/00
2	W Periman		10/20/99	J Varga	Barnegat Inlet, NJ	25	11/23/00
6	J Posh	Atlantic Beach, NY Stratford CT	06/14/97	B Crawford	Shrewsbury Rocks, NJ	29	11/24/00
7	H Sweet	Stratford, CT Warren, RI	10/18/99	R Coyle	Tin Can Grounds, Bklyn, NY	26	11/24/00
6	A Dangelo		09/25/97	S Jakubowski	Hoffman Is., NY	26	11/24/00
4	A LoCascio	Block Is., RI Davids Is., NY	08/03/00	J Greenberg	Chesapeake Beach, MD		11/24/00
4	C Kennedy	Cape May, NJ	09/04/00	D Dedrick	Liberty Is., NY Harbor	15	11/24/00
6	M Brooking	Troy Dam, NY	12/09/99	T Dearolf	Cape May, NJ	26	11/24/00
ĩ	D Kelly	Orient Pt., NY	04/30/00	E Robinson	Cape May, NJ	36	11/24/00
6	S Jakubowski	Old Orchard Lt., NY	09/13/00	S Jakubowski	Hoffman Is., NY	31	11/25/00
2	T Rinaldi	Mattituck, NY	05/17/00	D Callahan	Hatteras Inlet, NC	43	11/25/00
4	G Kerkhan	Mantoloking, NJ	05/06/00	J Seo	Lewes, DE		11/25/00
3	A LoCascio		11/15/98	R Roth	Manhattan, NYC	29	11/25/00
í	P Grippo	Manhasset Bay, NY Montauk Pt., NY	10/12/95	P Doyle	Governor's Is., NY	27	11/25/00
,	A LoCascio		10/22/00	M Spears	Cheaspeake Bay, MD	32	11/26/00
	A Anderson	Manhasset Bay, NY	11/16/98	J Medina	Pier 17, East R., NYC	20	11/26/00
,)		Block Is., RI	07/16/00	W Kowalski	Hackensack R., NJ	25	11/26/00
	S Hartmann E Stunkel	Eatons Neck, NY Stamford, CT	10/08/99	M Mehillo	Verrazano Brdg., NY	30	11/26/00
	F Stunkel	Stamford, CT	10/16/99	D Politi	Southport, CT	27	11/28/00
	J Karolides	Beverly, MA	07/01/98	J Nunziato	Manasquan R., NJ	29	11/28/00
} '	B Shillingford	Corson's Sound, NJ	05/28/00	S Clark	Strathmere, NJ		11/28/00
•	A Anderson	Block Is., RI	06/21/00	M Hansen	1 mi. N Barnegat Inlet, NJ		11/28/00
	A Schweithelm	Northport, NY	07/24/99	J Nunziato	Island Beach St. Pk., NJ	30	11/29/00
	W Anderson	Provincetown, MA	09/28/99	C Neely	Beach Haven, NJ		11/29/00
	A Schweithelm	Asharoken, NY	07/02/98	J Tunnell	Lavalette, NJ		11/30/00
	A Schweithelm R Kyker	Northport, NY	09/07/97	J Hurd	Avalon, NJ		12/01/00
		Westport, CT	06/30/00	G Palmer	Island Beach St. Pk., NJ		

Species	;					_	
Length	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
24	R Nystrom	Bridgeport, CT	08/04/00	J Gardiner	Northport, NY	28	12/01/00
	R Pearson Jr.	Croton Bay, NY	04/27/00	R Allen	3 mi. E Cape Charles Lt., VA	28	12/01/00
35	S Jakubowski	Bay Ridge Flats, NY	05/28/98	G Conklin	Smith Pt. Beach, NY	38	12/02/00
28 2	S Giaccone	Montauk Pt., NY	11/22/98	J Kesler	Duck, NC	32	12/03/00
	R Kyker	Norwalk, CT	05/30/98	P Regula	Sea Bright, NJ	23	12/03/00
28	R Grobarz	Long Branch, NJ	05/15/99	F Chylinski	Throgs Neck Brdg., NY	29	12/03/00
24	A Messina Jr.	Cold Spring Harbor, NY	08/20/00	B Mastrangelo	2 mi. E Avalon, NJ		12/05/00
23	L Gonnello	Sandy Hook Chan., NJ	11/01/98	S Sprague	Seaside Pk., NJ	27	12/06/00
20 '	T Cannuli	Corson's Inlet, NJ	10/11/97	C Scherer	1 1/2 mi. E Wildwood Cr., N	IJ 24	12/09/00
27 (G Blank	East R., NYC	10/31/98	J Medina	East R., NYC	30	12/09/00
20 1	F Heal	Raritan Bay, NY	11/01/99	J Green	Leipsic R., DE Bay, DE	23	12/10/00
26 1	Р Бгірро	Long Beach, NY	10/24/00	B Harman	Chesapeake Bay, VA		12/11/00
23	Della Porta	Swampscott, MA	06/15/00	D Hare	Cape May, NJ	27	12/11/00
26	Γ Leonardis	Sea Isle City, NJ	10/25/00	J Ball Jr.	Margate, NJ	26	12/13/00
30 I	F Tellefsen	Princess Bay, NY	11/18/99	M Rankin	VA Beach, VA	34	12/15/00
27 1	R Nystrom	Bridgeport, CT	08/21/00	B Miller	Virginia Beach, VA	28	12/21/00
32 (G Blank	NY Harbor	10/23/00	D Johnson	VA Beach, VA	32	12/21/00
27 5	5 Jakubowski	Raritan Reach, NJ	05/15/00	E Hux Jr.	1.5 mi. E False Cape, VA	32	12/24/00
18 1	M Heffernan	Long Beach, NY	12/04/98	R Sılva	Norwich, CT	25	12/30/00
Tautog							
-	M Hawkins	Ocean City, MD	09/21/99	R Hoffman	Ocean City, MD		09/21/99
9 1	R Stasinos	Stamford, CT	11/07/98	I Santiago	L.I. Sound, NY	14	05/05/00
14 1	M Hawkins	Offshr., Ocean City, MD	12/03/99	M Hawkins	Offshr., Ocean City, MD	14	06/11/00
9)	Weber Jr.	Pt. Lookout, L.I., NY	05/05/00	T Weiss	Hempstead Reef, NY		07/15/00
10 1	Weber Jr.	Pt. Lookout, L.I., NY	05/05/00	T Weiss	Hempstead Reef, NY		07/15/00
15 1	R Pirone	Execution Lt., NY	11/03/98	R Pirone	Execution Lt., NY	18	10/03/00
10 /	A Piszczatowski	Glen Cove, NY	04/29/00	A Piszczatowski	Glen Cove, NY	10	10/07/00



Here is a sampling of books and items for sale. More selections are available in our BEACHLOVERS Catalog. Call or write for a copy.

BOOK SHELF

Fields of Sun and Grass by John R. Quinn. In the shadow of Manhattan, largely unnoticed by the millions of motorist zooming by on one of the worlds busiest highways, lies the Meadowlands. Naturalist John Quinn, through his sketches and writing, shows us the beauty, history, and political complexities of this great American urban wildernesses. \$16

Life in the Chesapeake Bay by Alice & Robert Lip-pson. A guide to more than 100 kinds of fishes and species of crabs, clams, jellyfishes, sponges, and other invertebrates commonly found in the Chesapeake Bay and coastal inlets from Cape Hatteras to Cape Cod. Wonderful reading, beautifully illustrated. \$14.

AMERICAN LITTORAL SOCIETY BOOKS

Anglers Guide to Sharks by Jack Casey A classic field guide to the sharks that inhabit the waters from Maine to the Chesapeake Bay. \$3.

New Jersey Coastwalks by D. W. Bennett. Pack a lunch, put on your walking shoes, get in your car, and drive to Kearny, NJ. At this point take out your copy of NJCW and follow the author's route from Kearny to Cape May and on to the Delaware Bay. Always changing, the coastline of New Jersey offers many surprises. This book will take you on a watery tour that will fascinate and teach you at the same time. \$5.

OTHER ITEMS

Golf Style Short Sleeve Knit Shirt: White with ALS logo, 60% combed cotton, 40% polyester. In sizes large and extra large. Was \$25, now \$20. M, L, XL & 2XL

ALS Walking Field Guide T Shirts - Color: Series 1: Fishes of the Atlantic - Pacific Green Series 2: Shore Birds - Caramel Series 3: Coastal Ducks - Sandstone Order by Series number 100% cotton w/art work on the back and American Littoral Society on the front pocket. M, L, XL \$15.

NEW 1/2 zip sweatshirt. Huntergreen w/white "We Care About The Coast" logo 50/50. M, L, XL, 2XL. \$25.

Littoral Notecards w/envelopes. 8 pack piping plover or heron pen/ink drawings. \$5.

SHIPPING CHARGES \$5.01 to \$15.00 - \$3.20 \$15.01 to \$30.00 - \$5.10 \$30.01 to \$50.00 - \$6.10 over \$50.00 - \$9.10

For all items in this notice send a check made out to: AMERICAN LITTORAL SOCIETY, SANDY HOOK, HIGHLANDS, N.J. 07732

Spec		Diago Terrad		. .			
Lent	Jui laggel	Place Tagged	Date	Recapturer	Location	Leng	th Date
16	R Pirone	Execution Lt., NY	10/03/00	J Diaz	Execution Lt., NY	16	10/15/00
12	R Stasinos	Stamford, CT	11/06/98	J Sabanski	Greenwich, CT	16	10/13/00
16	T Marburger	Shinnecock Inlet, NY	06/11/00	A Havel	2 mi. S Shinnecock Inlet, N		11/01/00
13	A Piszczatowski	Glen Cove, NY	11/04/00	J Careccia	Glen Cove, NY	. 13	11/07/00
15	R Pirone	Execution Lt., NY	10/13/00	L Madura	Execution Rock, NY	15	11/10/00
12	S Fries	Brooklyn Y.C., NY	11/11/00	S Fries	Brooklyn Y.C., NY	12	11/12/00
12	A Piszczatowski	Glen Cove, NY	04/29/00	J Brooks	Pingo Neck, L.I. Sound, NY		11/12/00
22	R Pirone	Execution Lt., NY	11/05/98	G Martin	Execution Lt., NY	23	11/13/00
12	R Boyd	Offshr., 17 Fathoms, NJ	11/22/99	C Rhoads	Offshr., 17 Fathoms, NJ	25	11/18/00
Wea	kfish						
19	D Haines	Cape May Pt., NJ	05/06/00	K Csaniz	Cape May Pt., NJ	19	05/09/00
23	A D'Amato	Cape May Hbr., NJ	05/31/00	G Schrader	Cold Spring Inlet, NJ	19	06/05/00
20	B Shillingford	Strathmere, NJ	05/28/00	M Tabasso	Atlantic City, NJ	20	06/12/00
25	A D'Amato	Cape May Hbr., NJ	06/09/00	E Metzner	Cape May Hbr., NJ	25	06/21/00
23	A D'Amato	Cape May Hbr., NJ	06/01/00	A LaTorre	N. Wildwood, NJ	23	06/27/00
17	B Shillingford	I.C.W., Strathmere, NJ	07/03/00	G Salstrom	Ludlams Bay, NJ	25	07/09/00
20	B Shillingford	Ludiam Bay, NJ	07/01/00	M Swiacki Jr.	Sea Isle City, NJ		07/17/00
25	J Foti	The Narrows, NY	07/23/00	T Niemira	Verrazano Brdg., NY	25	07/23/00
21	B Shillingford	Strathmere, NJ	07/08/00	W Taylor	Ludlams Bay, NJ	21	07/23/00
21	B Shillingford	Ludlam Bay, NJ	07/01/00	G Walters	Atlantic City, NJ	24	07/29/00
20	A D'Amato	Cape May Canal, MA	08/31/00	C Baczek	Cape May Canal, NJ	21	09/08/00
24	B Shillingford	Strathmere, NJ	07/13/00	J Latwinas	I.C.W., Marker #320, NJ	25	09/12/00
17	G Horvath	Barnegat Inlet, NJ	08/23/00	M Tabasso	Ocean City, NJ	25	10/24/00
Wint	er Flounder						
5	W Filce	Manasquan R., NJ	05/01/99	Unknown Fisherman	Mantoloking Brdg., NJ	14	03/12/00
2	M Sattan	Sandy Hook Bay, NJ	04/29/99	G Bohadel	Oceanic Brdg., NJ	13	04/07/00
4	J Lutz	Avalon, NJ	05/01/00	J Grone	Avalon, NJ	14	05/09/00
6	J Lutz	Avalon, NJ	05/01/00	D Harris	Avalon, NJ		05/13/00
3	NJ Mar. Sci. Cons.	Sandy Hook Bay, NJ	03/31/00	C Petruccelli	Offshr, Manasquan Inlet, NJ	13	06/10/00

_Yes, I want to be a member of the American Littoral Society.

_ I am currently a member and here are my renewal dues.

Enclosed is my check for \$_____. With these annual membership dues I will receive the *Coastal Reporter* newsletter, the *Underwater Naturalist* journal, field trip and event information, tagging privileges, and any local chapter newsletters and information.

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THE END OF THE LINE? GLOBAL THREAT TO SHARKS

by Susie Walters

WildAid, 450 Pacific Ave., Suite 201, San Francisco, CA 94133.

56 p. \$10(paper) postpaid, or download from www.wildaid.org

Sharks are ancient, active swimming machines, present in all waters — lakes. rivers, nearshore, and deep oceans. They cruise coral reefs and hunt under ice. Pygmy sharks are a foot or so long; whale sharks, the world's largest fish, grow to 40 feet and nearly as many tons. Sharks are omnivores, feeding on everything from plankton to whales. They have teeth but no bones, bear live young or lay eggs, grow slowly but live a long time, and reach sexual maturity late and have small broods after long gestation periods. Because they tend to be big, they carry a lot of meat, and their fins bring up to \$100 a pound to provide the consistency for sharkfin soup, so they are widely pursued by fishermen. And most people fear or dislike sharks.

Add it all together and it spells trouble.

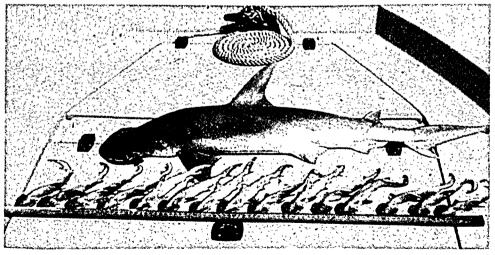
Worldwide, shark species are in decline as measured by numbers of sharks caught and their decreasing sizes. In fact, this is a measure of all fisheries - a species is targeted, its larger members are caught first, and in subsequent catches, the sizes drop off. This has recently been true for swordfish, tilefish, whiting, and goosefish. The new favorite of chefs — Chilean seabass (its real name is Patagonian toothfish, but who would order that at a fancy eatery?) - will possibly disappear from the menu soon. It is a slow grower, takes 10 years to mature, and tries to hide out in up to 10,000 feet of water, but it has been found and fished.

But back to sharks. This well-illustrated book lays out the issues and desriptions of the species, their life histories and their habitats. It provides the background needed to slow down the killing of sharks before it's too late. Read it for its facts and its message.

FISHERIES OF THE UNITED STATES, 2000

National Marine Fisheries Service

13-15 East-West Highway, Rm 12340 Silver Spring, MD 20910 Phone 301-713-2328 Homepage: http://www.st.nmfs.gov/stl/



A Bonnethead shark and her litter of fifteen.

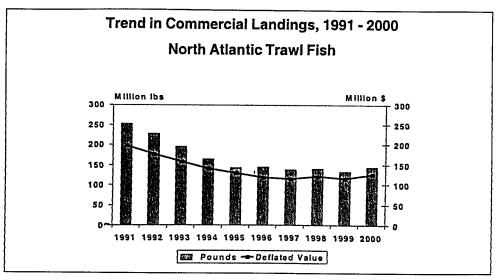
Each year the Fisheries Service puts out a statistical compilation about how many fish were caught in this country's waters by commercial and recreational fishermen, numbers on aquaculture, and a summary of worldwide fisheries. It's lots of numbers; if you are really into fish, pick up a copy.

Here are some of those numbers: U.S. commercial landings were 9.1 billion pounds valued at \$3.5 billion in 2000. That's a decrease of 270 million pounds (down 3 percent) but an increase in value of \$82 million (up 2 percent). Edible landings were up slightly, while reduction fish (menhaden and such) were down. The recreational fishery accounted for 429 million fish. Of that total 184 million fish were kept, the rest released. World landings for 1999 (most recent data available) were up 7 percent over the previous year to

and Washington; for value: Alaska, Louisiana, Massachusetts, Maine, and Texas. The five most caught recreational fish were striped bass, spotted seatrout, and in a tie for third: dolphin, summer flounder (fluke), and red drum.

Adding catch and aquaculture together, China produced 40 million metric tons of fish in 1999, slightly more than the next eight nations combined, in order: Peru, Japan, India, Chile, United States, Indonesia, Russian Federation, and Thailand. More than half of China's production was from aquaculture.

Finally, over the past 10 years, the world commercial catch has increased by only 7%, while aquaculture production has almost tripled and now accounts for a third of world fisheries production. In other words, the commercial catch fishery appears to have reached or exceeded its



126 million metric tons year (277 billion pounds).

The top three fish landings in the U.S. were Alaskan pollock 2.6 billion pounds; menhaden 1.7 billion; and salmon 628 million. In value it was shrimp \$690 million; crabs \$405 million; and lobsters \$334 million. Top five fishing states in pounds were Alaska, Louisiana, California, Virginia,

sustainable yield.

Want more numbers? Grab this report.

THE MOON PULLED UP AN ACRE OF BASS

by Peter Kaminsky

Hypernion Press

244 pp. \$23.95 (cloth)

The author took a month off, traveled to

Montauk at the eastern tip of Long Island, to chase fish with a flyrod. Every angler should use this approach instead of stealing half days here and there or getting up before dawn, fishing for three hours, and then pretending to put in a full day's work. The key to Kaminsky's adventure was to wait till after Labor Day to let what another writer once called the "lousy summer crowd" leave, case the joint through the rest of the month, and then put in 31 October days of fishing.

Kaminsky does it in style. He stays at the late chef Pierre Franey's cottage; its ready for occupancy and has "a huge inferno of a stove — four blackened burners and a grill down the middle, knives for cutting every known edible, and pans galore." (It should be noted that when this author is not authoring he is cooking, eating, or savoring and commenting on fine wines.)

But this book is almost all about fish and fishing at Montauk, a place where he says "a thousand-mile convoy of striped bass, bluefish, weakfish, shad, tuna, albacore, anchovies, menhaden, blueback herring, sharks, whales, and dolphins begins to pass by Montauk Point on the way south." He later adds waterfowl, song birds, and monarch butterflies to the mix and thinks that "In pure numbers of individuals, it dwarfs any migration on land."

This is about a month of thinking about fish, where they will be and when, and then going after them, primarily by boat, casting into schools of striped bass and sneaking alongside albacore - 10-pound racehorses. There are stormed-out days. evenings of angling mayhem, and times when the fish aren't there but should be. What angler hasn't tried to think where the fish will surely be and then gone there to find them absent? Or guessed just right? Kaminsky and his fellow anglers and guides do both during this month of dreams. And, yes, there is that evening when an acre of bass are drawn up by the moon.

Kaminsky takes potshots at a few of his

dislikes, including the Hampton McMansions now crowding the water's edge, trolling, wire leaders, and fellow anglers who dawdle over breakfast. And he probably frowns on inappropriate wines. But most of the time he simply takes us fishing, and he does a terrific job.

THE MOON BY WHALE LIGHT

by Diane Ackermen

Vintage Books

240 p. \$11.00 (paper)

This is a collection of four pieces that the author wrote for *The New Yorker* magazine and then wisely gathered in this worthy paperback. We review it here for two reasons: first, it's a model of natural history writing; second, a nice Society member mailed it in last month as a gift. We should note that the book was published in 1991 and our copy is a fourth edition, so you may have to look for it in used bookstores or in the library.

The articles deal with bats, whales, alligators, and penguins, all inhabitants of the littoral at one time or another. Ackerman's method is to go somewhere, hook up with an authority on the subject, and then head out into the field. In this collection, it's Merlin D. Tuttle, founder of Bat Conservation International, in Texas; Kent Vliet, Florida alligators; Roger Payne, chasing whales in Maui and Patagonia; and various researchers at the San Diego Zoo and on a vessel in the Anarctic to write about penguins.

Most of the writing is about the animals, how they eat, migrate, and reproduce and about the scientists that follow them to learn things. It is thankfully free of preaching and anthropomorphism. There are animal/people interactions: someone knows how to snatch bats out of the air, a leopard seal attacks a zodiac full of observers, and curious penguins walk up to their new, two-legged friends for a closer look. When you finish these tales you will want to go there and see bats, penguins, alligators, and whales where they live..

The Last Page

First off, there don't seem to be easy answers to any questions right now, but the sea continues to delight us, and the surprising life designs of its inhabitants draw us under its spell. Instead of addressing questions readers have sent in (and there are a pile of them), we'll let them accumulate for the next issue and instead touch on a handful of seemingly strange but obviously successful ways marine wildlife adapts to its environment.

Some Penguins Lay Two Eggs: Generally, penguins lay and incubate a single egg, but the erect-crested penguin of the islands southeast of New Zealand lays two. The first pale green one the size of a standard chicken egg is neglected. The second egg is white, twice the size of the first; this the female broods and hatches. Why two eggs? researchers ask. It would seem to be a waste just when the adults need all their energy to hatch and raise chicks. Maybe the first egg primes the females reproductive system for the "real" egg. Or, could the arrival of the second egg — big and bright — trigger the female's instinct to brood? Biologists plan to return to the Antipodes Islands for more research. Meanwhile, erect-crested penguins continue their winning second egg strategy.

Hello Mother, Hello Father: Like most Serranidae, (a group of fishes that includes groupers), black sea bass mature as females and then change to males as they get bigger. They begin to mature at about 4.5 inches and half are mature when they are 8 inches at age 3, still mostly female. By the time they are 12 inches long they are almost all male. Striped bass (which are Sciaenidae, along with drums and weakfish, croakers and spot) don't change sex as they mature, but show another adaption: almost all striped bass bigger than 25 pounds are females (bigger females, more eggs?). The seahorse has yet another approach: the female deposits fertilized eggs in the male's pouch, and he bears live young.

Meanwhile, in the Sargasso Sea: European and American eels spawn near the Sargasso Sea south of Bermuda. Eggs and larvae drift with the currents clockwise along the U.S. shoreline north and east to Iceland and then south and east to Europe. American elvers peel off and enter American streams several months after birth; European eels pass up U.S. rivers and wait till the currents take them to Europe. In both cases, the elvers, about two inches long and almost transparent, swim into estuaries where the males settle down. Females seek freshwater, going as many as several hundred miles upstream to mature. They return to the estuaries and join the males for a spawning trip to the Sargasso. As usual, scientists are perplexed about this strategy.

22,000 Frequent Flyer Miles: Arctic terns are the champions of bird migration, 11,000 miles from the Southern Hemisphere to breed in the Arctic and then the same distance back to spend a pleasant summer in the Antarctic. They are thought to see more daylight than any other animal. But why does any bird fly 11,000 miles to lay eggs? It may do this to avoid a southern hemisphere predator, or it may have had another breeding strategy before continents began to drift apart.

I Had My Brother For Lunch: Embryonic sand tiger sharks are oophagic — they commit intrauterine cannabalism. The first embryonic sand tiger shark to form in each of its mother's two uteruses starts to tear apart fertilized and unfertilized eggs by the time it is four inches long, and keeps on eating its sibling embryos until it is the sole survivor. The winners are about 40 inches at birth. Like many sharks, the result is a small brood (maybe the smallest) of precocious offspring.

Abandoned eggs, sex changes, mystical migrations, and extreme sibling rivarly. What's going on here? We don't know, but it works.

D.W. Bennett

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 Jersey Highlands, NJ 07732 732-291-0055

South Jersey P.O. Box 1306 Tuckerton, NJ 08087 609-294-3111

Institute of Coastal Education 3419 Pacific Ave.

Wildwood, NJ 08260 609-729-9262

NY/NJ Harbor Baykeeper Highlands, NJ 07732 732-291-0176 *Northeast Region* 28 West 9th Road Broad Channel, NY 11693 718-634-6467

Southeast Region 4154 Keats Drive Sarasota, FL 34241 941-377-5459

Delaware Riverkeeper P.O. Box 326 Washington Crossing, PA 18977 215-369-1188

www.littoralsociety.org

Project ReefKeeper 2809 Bird Ave., Suite 16 Miami, FL 33133 305-358-4600

Cape Florida Project An Ecological Restoration 1200 South Crandon Blvd. Key Biscayne, FL 33149 305-361-0611

GUIDELINES FOR SUBMISSION

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.

ART WORK: 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. If possible, please send a disk with your manuscript. 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.

