# underwater naturalist

### AMERICAN LITTORAL SOCIETY REGIONAL OFFICES

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

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#### **Delaware Revisited**

Your latest issue of the Underwater Naturalist performed a great public service by bringing the problems of abuse and overuse of the Delaware Bay and surrounding wet lands to the attention of the public. It is only when a large segment of the public becomes aroused that our government officials will stand up to the industrialist, real estate and agricultural interest who profit from the activities that damage these areas. Your publication was a first step in arousing the public.

Lawrence King Schenectady, NY

p.s. In answer to your question on page 60, "What did Della Ware?" is, obviously, she wore her new Jersey. Didn't you know that? Or were you testing to see if we got to the last page? L.K.

As a long time "coastie" from Long Island, New York I have been seeking a Shangi-La, the way I remember life here long ago. Recently it was 'Paradise Found' in coastal Delaware. Then after reading UNDERWATER NATURALIST Vol. 26, No. 2 it abruptly became 'Paradise Lost.' From George Kowallis I learned that in coastal Delaware time brings change as yet another great place appears doomed to the destructive pace of 'progress.' I have seen this first hand on the south shore of Long Island where we once had thousands of baymen harvesting natures aquatic bounty we now have but a handful remaining. I have witnessed the

wholesale destruction of the marine eco-system on the Neuse River in North Carolina thanks to natures fury and short-sighted pig farmers whose holding tanks full of manure burst spoiling the waters of Pamlico Sound. The coup de grace was provided by the discovery of pfisteria piscicida which makes the waters unfit for human recreation. Then Sallie Callanen confirmed my doubts about human motives when confronted with the choice of environmental conservation vs: urban sprawl. Once again greed prospers as nature stumbles to recover. I hope that she is correct in her assumption that "citizens are no longer willing to sit back and wait." Steve Callanen's "Environmental problems and Land Use Around Delaware's inland Bays" brought to mind exactly the situation we had here on Long Island's south shore decades ago. I toured a huge sewage treatment plant the day it opened only to learn that the \$50,000,000 outfall pipe had not been connected thereby spilling the effluent into South Oyster Bay instead of the Atlantic Ocean. This was followed the explosion of a multi-million gallon holding tank full of concentrated sewage sludge further fouling the shallow bay. On the north shore of Long Island we had a sewage treatment plant in Huntington Harbor that spilled untreated sewage into the harbor for months. People wondered why they became ill from eating locally harvested shell-fish. Will we ever learn? To end on a positive note, I will never look upon the Delaware seashore the same again. When taking my next trip to the shore, I'll remember Dave Grant's "Crossing Delaware Bay" excellent article as well as Dennis Reynolds' "A Journey Down Route 9". There is hope for those of us who remember what history has taught us. Those unwilling or uncaring enough to dismiss our past mistakes are doomed to repeat these ecological catastrophies, Nature's resilience is being put to the test. I hope that coastal Delaware rises to the occasion

> Bill Ober Huntington, NY

### Tales Taggers Tell III

by PAM CARLSEN

The Society's fish tag-and-release program is its most successful volunteer effort. The program is open to members only, and then they are asked to buy Society tag kits, 10 tags, data cards, instructions, and an application needle. Thus, each tagger is making a substantial contribution to fisheries science. Since the program was started by Graham Macmillan in 1965, we have distributed more than 600,000 tags.

The procedure is simple: go fishing, catch a fish, put an ALS tag on it, release it, and wait for someone else to catch it. ALS does the record keeping. All tagging data are compiled here, each report is acknowledged, and once a year we transfer all the information to the National Marine Fisheries Service lab at Wood's Hole where it is available to fisheries biologists. In this issue we report on fish with ALS tags that were recaptured during 2001. Even if you don't fish or tag fish yourself, take a minute to read some of the data. Each line represents a member's efforts to work for better inshore habitat and for good fishing.

#### Longest Striper Return

It is always exciting when a recapturing fisherman sends in an old tag. In August of 1999, a striped bass was recaptured at East Rockaway Inlet, NY, carrying a tag that had been placed 5/24/88 at the Verrazano Bridge...a time span of eleven years and three months. This record held until August 7, 2002, when Michael Letavic caught a 45" striped bass in Fishers Island Sound, CT. This fish was originally tagged by Tony Evangelista on 11/25/90 in the East River, New York City at 13", and so the new record stands at eleven years, eight months, and thirteen days. Tony, who is also a member of the New Jersey Hudson River Fishermen's Association, has tagged with us since 1987, one of many longtime taggers.

#### **Bass Up and Down the Coast**

The coastal migration of striped bass (rockfish) between Virginia and New England was evident in the returns of many taggers. David Nova, White Stone, VA, had two fish he tagged in December

Pam Carlsen is director of the Society's fish tagging program and a member of the tagging committee of the Atlantic States Marine Fisheries Commission.

of 2001 in Chesapeake Bay at Windmill and Smith Points recaptured on July 3, 2002, at Gloucester, MA, and the other at Provincetown, MA. The fish were lunkers 45 and 46 inches long.

In December of 2002, the Chesapeake Bay Bridge Tunnel area gathered three A.L.S. tagged stripers. Richard Conklin's 1998 bass tagged in Bridgeport, CT, was recaptured one mile north of the second and third islands. Kevin Carrigan's 29" fish tagged 8/14/02, at Rockport, MA, was recaptured 1000 yards east of the third island and Albert Messina's 33" fish tagged June 2001 in Little Neck Bay, NY, was caught at the first island of the tunnel. Farther up the bay just south of Smith Point Light, Mark Anaya's 38" fish tagged in Jamaica Bay, NY, in May of 2002, was recaptured in November of 2002. Traveling farther south for the winter, Capt. Al Anderson had two spring stripers tagged in May and June of 2001 and two fall stripers tagged in October of 2002 at Block Island, RI, all arrived to be recaptured in Virginia coastal waters in the first two weeks of January, 2003. The bass were from 26 - 37" in length. Could these stripers have been headed for the Outer Banks of NC when they were intercepted?

#### North Carolina Fishing

According to Capt. Tim Barefoot in his column "Fishing Barefoot" in Sportfishing Report, February 2003, Vol



Record holder. Tony Evangelista, (above) tagged a striped bass in the East River in 1990. Michael Letavic recaptured the same fish in Fisher Island Sound, CT in 2002: a new ALS tagging record.

12.1, "striped bass show up in massive schools along the Outer Banks each win-They come to feed on menhaden (bunker), croakers, and grey trout." Two A.L.S. stripers were in the mix. Jakubowski's 31" fish tagged 10/27/00 at Robbins Reef Light, New York Harbor, was recaptured 12/18/02 at Cape Hatteras, and Jerry Angelini's 28" fish tagged 5/8/02 in Raritan Bay was recaptured off Nags Head on 1/25/03. Although this fishing is farther south, it is still a cold time to fish. Once again according to Capt. Barefoot, "Jan. 18, 2003 - high temperature was 27 degrees. Hand warmers and latex gloves were used all day. Rain

gear and insulated coveralls kept the fishermen comfortable as they caught and released over 50 fish."

#### **Power Plant Bass**

Warm water outflows of power plants have always been a favorite spot for striped bass to "hang out," no matter what the season. Terry Marburger has fished many winters at the Northport power plant, on Long Island, New York's, north shore, when everyone else is done for the season. George Horvath, also enjoys fishing a power plant, his on the Delaware River at Trenton, NJ, near Duck Island. On June 29, 1998, George tagged many small stripers and cataloged the natural events around him as he tagged.

7:12 - "Cloudy with a strong west wind, made fishing tolerable here this evening."

8:14 - "Saw some cottontail rabbits and a ground hog."

8:24 - "A drake mallard landed in the warm water discharge."

8:38 - "A great blue heron glided into the power plant's artificial wetlands."

8:42 - "Got multiple bites from several different insects."

9:09 - "Caught 16 striped bass, five white perch, and two bluefish on chicken livers."

9:12 - "Only three other fishermen and one boat here tonight. I was the last to leave".

One of George's 16 stripers, a 9 1/2", 8 ounce fish, was recaptured on 11/24/02 at Port Norris, NJ, in Delaware Bay. It was 23 1/2" long.

#### **Taggers Share Bass**

On July 26, 2002, Mark Strober tagged a 17"" striped bass at Robbins Reef Light, NY Harbor. On Nov. 5, 2002, Glenn Blank recaptured this fish in NY Harbor. On June 25, 2002, Blank tagged a 28" bass at Hell Gate, in the East River, New York City. On Nov. 9, 2002, Strober recaptured this fish at the same place. From New York Harbor to Hell Gate in the East River, Mark Strober and Glenn Blank

share the same two fish.

The Pickering family of Lincoln, RI, also share the same two fish. On 12/27/02, Jon Pickering tagged a 17" striper on the Providence River. On 2/24/03, this fish was recaptured along with another tagged striper in the same river by his brother, Ben. The second fish was one that Ben had tagged only two nights before. Their dad, Dave Pickering

wrote, "I could hardly believe what I was seeing...strange happenings in RI."

#### Bluefish

Bluefish are known to be great travelers and voracious eaters. Bill Shillingford fishing in the creeks at Strathmere, NJ. tagged two, a 12" bluefish 7/22/02 and a 14" fish on 9/04/02. The July fish was recaptured the NC.

September one on 11/21/02 at Kitty Hawk, NC. Bill Finke tagged an 18" bluefish at Norwalk, CT, on 9/8/02. His fish was recaptured at Ocean City, MD, on 11/27/02.

#### Bites...Bites...Bites

Ben Allen, Westport, MA, tagged a 19"striped bass with the lower tail fluke missing. He wrote, "I did not see any evidence of disease on this fish. Whatever caused the damage to the tail, was done a while back, because it was well healed and the fish appeared very healthy. My feeling is some predator ripped it off when the fish was very young. With any luck, I won't hear until the fish is a fat, healthy, 50-pounder some 15 years from now."

Capt. Gene Nigro, Highlands, NJ, fishing Raritan Bay, sent in this picture of a well healed summer flounder, with a big bite on its underside. He reported, "Thought you may want this for your collection. It was a keeper at that!" Keeper fluke are 16 1/2" in New Jersey.

Art Schweithelm, Northport, NY, tagged two stripers in December of 2002. Both had fresh bites on their undersides

and one was missing a tail fluke. Art believes that both were attacked by seals. Joe Kane, Arrowsic. ME. who fishes the Kennebunk River. sent a photo of a 31" striper attacked by a seal. He wrote "The seals only eat the stomach out of the bigger fish. This striper was only a snack for this seal. They will attack four to six minimum per day. Our river is full of

them with more moving in every year."

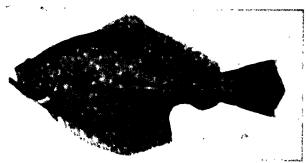


The July fish was Ben Allen holds a 19-inch striped bass minus its recaptured on lower tail fluke, apparently an old injury; the 11/22/02, at Duck, fish was otherwise healthy and well fed.

#### Flat Fishes

Charlie Kennedy of Cape May, NJ, wrote about the large rays that appear mid-August in Delaware Bay. Ray skeletons are made up of cartilage, a tough elastic fibrous connective tissue that makes them firm and tough, but flexible. Along with sharks, they are called cartilaginous fishes, rather than bony fishes, such as other flat fishes like summer and winter flounder. "A lot of the time the rays are traveling in pairs. I have seen them jump out of the water. May be something to do with mating. They get very big, four to five feet from wing tip to wing tip." From Kennedy's observations

these appear to be cownose rays. According to the Peterson Guide, "Atlantic Coast Fishes" by Robins/Ray/Douglass, "Most rays and skates are bottom dwellers. Some leap above the surface and produce a loud clap



One that got away. This healthy summer flounder, caught by Gene Nigro, obviously had an earlier encounter with a hungry denizen of the deep.

upon re-entry; this has been attributed to attempts to free themselves of parasites, but is is more likely associated with a territorial display." Cownose rays are periodic visitors to estuaries and well known shellfish eaters.

Two summer flounder (fluke) tagged in the summer of 2002 had interesting tag returns. John Weber's 14" fish tagged 7/19/02 on the south shore of Long Island, NY, was recaptured by the scallop vessel "Act IV", in the Hudson Canyon on 1/12/03. The tag was returned by a NMFS fisheries observer. Matthew Trana's, 15 1/2" fish tagged 8/12/02 in the Ambrose Channel, NY, was retrieved from a box of flounder at the New Orleans Seafood House, New Orleans, LA, on 9/12/02. This tag was returned by a fish filleter.

#### International Cod

On 5/24/02. Mike Jacques fishing at the Fingers on Jeffries Ledge tagged a 34" cod with tag 568919. On 12/23/02, we received a letter from Jennifer Hinze, a fisheries biologist with the Canadian Department of Fisheries and Oceans, who is working on a cod tagging project. She

wrote, "On 12/18, we received a phone call from a processing plant owner in Nova Scotia, who purchased a cod fish from a plant in Boston and found a tag numbered 568919. The fish was landed 12/16/02 in Boston.

On 1/13/03, we received information on a tagged 33 1/4" cod caught in American waters and trucked to Scotia Fisheries Ltd., Nova Scotia. This tag A-01780 was placed by the Universtiy of New Hampshire studying Atlantic cod, 10-15 miles off of New Hampshire. Although this wasn't our tag, we were able to assist in the recovery.

Two international cod fish, who went over the border in a hox

#### Black Sea Bass

Capt. Monty Hawkins tags many black sea bass on his party boat out of Ocean City, MD. On 10/13/02 fishing 16 miles ESE of Ocean City, a customer caught a double header of tagged sea bass. Both of these fish had been tagged onboard Capt. Monty's boat. One on 7/26/02 and the other on 9/03/02, 13.5 mi. SE of Ocean City, MD. This was a first for Capt. Monty.

Capt. Monty has also been cooperating with NOAA fisheries biologists, who have been placing USFWS red or orange belly tags in black sea bass from Virginia to Massachusetts. More than 3,000 fish were tagged as a joint project of federal and state scientists and commercial and recreational fishermen. If you catch a sea bass with one of these tags, remove the tag and record tag number, date and location of recapture, length of the fish and gear type. Call: 508-495-2000. The reward for the red tag is \$100. The orange tag is good for an embroidered baseball cap. For more information go to www.nefsc.noaa.gov/ read/popdy/blackseabass-tagging/, their website.

#### **Good Fish Story**

Al D'Amato of Cape May wrote, "A friend of mine, Tim Parke, caught a 32" striper and put it in to the back of his pick up truck. He drove it to the lobster house where we both work. This trip took about five minutes. We put the fish in a lobster tank, water temperature 45 degrees, and he lived there happily for two weeks. He didn't seem to eat the clams, scallops, and mussels we fed him, so rather than risk his survival we tagged him and turned him loose in Cape May Harbor. He was very frisky when we released him. #574398 has a good story to tell, if he is ever recaptured."

#### End of the Year 2002

From D'Amato again in Cape May, NJ, "My slowest year in about eight years, due mostly to weather."

Bill Terrill on Cape Cod, MA, "Big difference this year - where did the stripers go? On the Cape last year, I caught 62 stripers including five keepers. This year, I caught six shorts. Bluefish were more plentiful."

Fred Stunkel at Darien, CT, "Our fall season was almost a disaster. We had more days of unbelievable winds and cold temperatures; our long awaited blitz of migrating bass never materialized. Even the bait fish were absent. As strange as this all sounds, great bass fishing took place just across the sound on the New York side. The difference was the abundance of bait in that area."

Tom McCandless in Jamestown, RI, "Another season of tagging has come to a close. Thanks to the American Littoral Society for promoting such a terrific program. I tagged my first fish, a bluefish, in August of 1992, and ironically this was returned less that two months later. Since then I have quite a few stories to share with family and friends of tagged fish recaptured from Boston to the Virginia/North Carolina coast."

"And a final note on this year, the clam boat around which we were catching bass caught fire! Enough said." (D'Amato).

### GENERAL STORE

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**

The Art of Shelling by Chuck and Debble Robinson. A complete guide to shells and beach collectibles. \$14.

Blue Frontier: Saving America's Living Seas by David Helvarg. A detailed, lively discussion of the ocean's future, with the American Littoral Society a prominent player. \$12.

Crisis on the Coast by Gilbert Gaul and Anthony Wood. A tale of silly home location, greed and self-ishness as defined by a second home at the shore. \$9

#### 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

\*NEW\* Lighthouse T Shirt - Front features lighthouses familiar to ALS members: Montauk, Cape May, Sandy Hook and Assateague. Dictionary definition of "littoral" on the back. 100% cotton, white with black, red, and brown in illustration. M, L, XL, 2X, \$15.

Crab T - Update of a Classic - 100% cotton beige T Shirt with crab illustration on front and dictionary definition of "littoral" on the back. Illustration and lettering in navy blue. M, L, XL, 2X. \$15.

Crab T for Kids – Just the right size for young beachcombers. Similar to the adult Crab T but in stonewashed blue. 100% cotton. Youth Sizes: S, M, L. \$10.

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

#### SHIPPING CHARGES

\$0.00 to \$5.00 - \$0.00 \$5.01 to \$15.00 - \$3.50

\$15.01 to \$25.00 - \$4.30

\$25.01 to \$45.00 - \$5.40 \$45.01 to \$60.00 - \$6.50

\$60.01 to \$85.00 - \$7.70 \$85.01 to \$100 - \$9.60

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

### TAGGING REPORT

compiled by PAM CARLSEN

#### **TAGGING RETURNS**

Spe Len Date		Tagger	Place Tagged	Date	Recapturer	Location	Leng	jth
Atla	ntic	Cod						
18	J	Walsh Jr.	Stellwagon Bank, MA	03/18/01	L Bowen	Isle of Shoals, NH	19	08/08/01
9		Walsh Jr.	Stellwagon Bk., NA	04/04/01	K Nichols	Stellwagon Bk., MA	13	
Blac	k Gr	ouper						
14		Clark	Ramrod Key, FL	01/02/01	J Clark	Ramrod Key, FL	14	02/21/01
10		Clark	Ramrod Key, FL	01/02/01	J Clark	Ramrod Key, FL	10	
13		Clark	Ramrod Key, FL	01/06/01	JClark	Ramrod Key, FL	10	
13		Clark	Ramrod Key, FL	01/18/01	J Clark	Ramrod Key, FL	13	
13	J	Clark	Ramrod Key, FL	02/21/01	J Clark	Ramrod Key, FL	13	
13	J	Clark	Ramrod Key, FL	03/18/01	J Clark	Ramrod Key, FL	13	
13	J	Clark	Ramrod Key, FL	02/22/01	J Clark	Ramrod Key, FL	18	05/05/01
14	J	Clark	Ramrod Key, FL	04/12/01	J Olivieri	Ramrod key, FL	15	
Blac	k Se	a Bass				•		
10		Fiorillo	Long Branch, NJ	09/14/00	F/V Barbaa Anne	Offshr., Hudson Canyon, NJ	10	01/12/01
15		Hawkins	16 mi. E Ocean City, MD	11/14/00	C Townsend	17 E Ocean City, MD	10	05/09/01
16		Hawkins	22 mi. S Ocean City, MD	05/05/01	M Hawkins	22 mi. S ocean City, MD	16	05/05/01
12		Hawkins	23 mi. SE, Ocean City, MD	07/04/00	M Hawkins	18.5 mi. ESE Ocean City, MI		05/29/01
14		Bunting	9 mi. E Ocean City, MD	06/04/01	S Wisniewski	Fenwick Shoal, DE	, 15	06/08/01
10		Velsor	4 mi. SW Jones Inlet, NY	06/06/01	J Mihale	4 mi. SW Jones Inlet, NY	10	06/09/01
9	L	Velsor	4 mi. SW Jones Inlet, NY	6/06/01	J Mihale	4 mi SW Jones Inlet, NY	09	06/09/01
11	С	Hornung	12 mi. SE Ocean City, MD	09/14/00	B Baily	12 5 mi. SE Ocean City, MD	13	06/15/01
14	M	Hawkins	12.5 mi. SE Ocen City, MD	06/04/01	J Shipp III	12.7 mi. SE Ocean City, MD	14	06/15/01
15	M	Hawkins	12.5 SE Ocean City, MD	060/09/01	R Abele	Offshr, Ocean City, MD	15	06/19/01
12	С	Kennedy	Cape May Reef, NJ	06/13/01	W Essick	Cape May Reef, NJ		06/26/01
12	R	Conklin	Mid L.I. Sound	06/24/01	Unknown Fisherman	Mid L.I. Sound	12	06/2 <u>6/</u> 01
15	M	Hawkins	12 5 mi. SE Ocean City, MD	06/09/01	M Hawkins	12.7 mi. SE Ocean City, MD	15	07/03/01
15		Hawkins	12.5 mi. SE Ocean City, MD	06/13/01	M Hawkins	12.6 mt. SE Ocean City, MD	15	07/04/01
11		Kennedy	Cape May Reef, NJ	06/01/01	R Litka	Cape May Reef, NJ		07/055/01
14		Hawkins	12.7 mi. SE Ocean City, MD	06/15/01	M. Hawkins	12.7 mi. SSE Ocean City, MI	14	07/18/01
10		Hawkins	12.6 mi. SE Ocean City, MD	07/25/01	M Hawkins	12 7 mi. SSE Ocean City, MI	10	07/29/01
12		Hawkins	12 mi. SE Ocean City, MD	11/16/00	E Munn	Offshr., Ocean City, MD	12	08/05/01
19 10		Hawkins	21.8 mi. S Ocean City, MD	06/07/01	M Hawkins	24 mi. S Ocean City, MD	19	08/06/01
11		Hawkins	22 mi. S Ocean City, MD	05/15/01	M Hawkins	22.5 mi. S Ocean City, MD	10	08/06/01
10		Hawkins	13 mi. SE Ocean City, MD	06/14/00	J Bunting	11 mi. SE Ocean City, MD	15	08/10/01
10		Hawkins Velsor	12.6 mi. SE Ocean City, MD	07/25/01	M Hawkins	12 6 mi. SSE Ocean City, MI	10	08/12/01
15		Hawkins	4 1/2 mi SW Jones Inlet, NY	07/16/01	S Dybus	5 mi. W Lido Beach, NY	14	08/15/01
13		Hawkins	12.5 mi SE Ocean City, MD 25 5 mi. NE Ocean City, MD	06/13/01	M Hawkins M Hawkins	12.6 mi. SE Ocean City, MD	15	08/19/01
10		Hornung	16 mi E Ocean City, MD	08/22/01 05/23/01	M Czajkowski	25.4 mi. NE Ocean City, MD	13	08/24/01
16		Hawkins	22 mi. S Ocean City, MD	05/15/01	E Garrett	18.5 mi. ESE Ocean City, ME		08/26/01
11		Hawkins	25.5 mi. NE Ocean City, MD	08/22/01	N Khachadorian	22 mi. S Ocean City, MD	17	08/30/01
11		Goodwin	SW Jones Inlet, NY	08/25/01	B Klettner	25.2 mi. NE Ocean City, MD SW Jones Inlet, NY	11	09/01/01
8		Velsor	4 mi SW Jones Inlet, NY	06/06/01	C Young Sung	Freeport, NY	11	09/02/01
10		Goodwin	SW Jones Inlet, NY	08/25/01	B Klettner	SW Jones Inlet, NY	08	09/03/01
11		Horvath	Offshr.,Is. Beach St. Pk., NJ	08/05/01	W Egerter	Seaside Pk., NJ	11	09/08/01
10	M	Hawkins	12.6 mi. SE Ocean City, MD	07/25/01	M Hawkins	13 mi SSE Ocean City, MD	10	09/15/01 09/18/01
15	M	Hawkins	12.6 mi. SE Ocean City, MD	07/07/01	M Hawkins	12.6 mi. SSE Ocean City, MD	16	
16	M	Hawkins	12.6 mi. SE Ocean City, MD	07/25/01	M Hawkins	12.7 mi SSE Ocean City, ME	16	09/18/01 09/18/01
13	В	Baily	12 Mi. SE Ocean City, MD	06/13/01	M Hawkins	12 6 mi. SSE Ocean City, ME	13	09/18/01
10		Hawkins	20 mi. NE Ocean City, MD	06/20/01	D Peoples	2 mi. S DB Bouy, DE	11	09/19/01
8	J	Weber Jr.	3rd Meadowbrook Brdg., NY	09/14/01	J Weber Jr.	3rd Meadowbrook Brdg., NY	08	09/21/01
10	C	Fiorillo	Long Branch, NJ	09/06/01	A Dzikowicz	Elberon, NJ	11	09/23/01
9	JV	Weber Jr	Long Creek Brdg., NY	09/14/01	M Fariello	Freeport, NY		09/24/01
11	M	Hawkins	25.5 mi. S Ocean City, MD	07/12/01	J Dawson	20 mi. E Assateague, VA	11	10/01/01

Speci Lengt		Place Tagged	Date	Recapturer	Location L	engi	th Date
							· ·
15	M Hawkins	25.5 mi. S Ocean City, MD	07/12/01	J Dawson	20 mi. E Assateague, VA	15	10/01/01
12	M Hawkins	25.5 mi. S Ocean City, MD	07/21/01	J Dawson	20 mi. E Assateague, VA	12	10/03/01
10	M Hawkins	23.5 mi. S Ocean City, MD	07/21/01	J Dawson	20 mi. E Assateague, VA	11	10/03/01
12	M Hawkins	28 mi. SW Ocean City, MD	07/14/01	J Dawson	20 mi. E Assateague, VA	13	10/03/01
10	M Hawkins	12.6 mi. SSE Ocean City, MD		C Hornung	12.8 mt. SSE Ocean City, MD	11	10/04/01
13	C Hornung	19 mi.SE Ocean City, MD	09/23/01	M Hawkins	19.8 mi. SE Ocean City, MD	13	10/04/01
18	M Hawkins	15.5 mi. E Ocean City, MD	07/09/01	M Hawkins	15.6 mi. E Ocean City, MD	18	10/09/01
11	C Hornung	26 mi. SE Ocean City, MD	09/23/01	J Dawson	20 mi. E Assateague, VA	11	10/09/01
17	M Hawkins	25.8 mi. S Ocean City, MD	05/05/01	J Dawson M Hawkins	20 mi. E Assateague, VA	18	10/09/01
17	M Hawkins	22.6 mi. SE Ocean City, MD	06/16/01 05/23/01	M Hawkins	23.1 mi. SSE Ocean City, MD 18.5 mi. ESE Ocean City, MD		10/10/01
10 11	C Hornung	16 mi. E Ocean City, MD 18.5 mi. ESE Ocean City, MD		M Hawkins	18.5 mi. ESE Ocean City, MD		10/13/01
10	M Hawkins M Hawkins	12.6 mi. SE Ocean City, MD	07/25/01	M Hawkins	13 mi. SSE Ocean City, MD	11	10/14/01
10	M Hawkins	13 mi. SSE Ocean City, MD	09/18/01	M Hawkins	13 mt. SSE Ocean City, MD	10	10/14/01
15	M Hawkins	18.5 mt. ENE Ocean City, MI		M Hawkins	17.4 mi. NE Ocean City, MD	15	10/14/01
13	M Hawkins	12.4 mi. NE Ocean City, MD	06/25/01	M Hawkins	17.4 mi. NE Ocean City, MD	13	10/18/01
10	M Hawkins	17 mi. NE Ocean City, MD	08/09/01	M Hawkins	17.3 mi. NE Ocean City, MD	10	10/18/01
9	L Velsor	4 mi. SW Jones Inlet, NY	06/06/01	F McQuade	McAllister Grounds, NY		10/20/01
12	M Hawkins	18.5 m: ESE Ocean City, MD		M Hawkins	18.5 mi ENE Ocean City, MD	12	10/21/01
11	M Hawkins	18.7 mi. ESE Ocean City, MD		M Hawkins	18.5 mi. ESE Ocean City, MD	12	10/21/01
12	M Hawkins	25 5 mi. NE Ocean City, MD	08/22/01	C Moyer Jr	Off Lewes, DE	13	10/22/01
10	A Schweithelm	Southside, Montauk, NY	10/08/01	M Potts	Southside, Montauk, NY	10	10/30/01
10	A Schweithelm	Southside, Montauk, NY	10/08/01	M Potts	Southside, Montauk, NY	10	10/30/01
11	M Hawkins	18.3 mi ESE Ocean City, MD	07/16/01	M Hawkins	18.5 ESE Ocean City, MD	11	10/31/01
17	M Hawkins	25.5 mi. S Ocean City, MD	07/12/01	M Hawkins	25.5 mi S Ocean City, MD	17	11/03/01
10	M Hawkins	28 mi. SW Ocean City, MD	07/14/01	J Dawson	20 mi E Assateague, VA	10	11/07/01
10	M Hawkins	28 mi. SW Ocean City, MD	07/19/01	J Dawson	20 mi. E Assateague, VA	10	11/07/01
12	M Hawkins	28 mi. SW Ocean City, MD	07/14/01	J Dawson	20 mi. E Assateague, VA	13	11/07/01
11	M Hawkins	25.5 mi. S Ocean City, MD	07/12/01	J Dawson	20 mi. E Assateague, VA	13	11/07/01
11	M Hawkins	25 mi. S Ocean City, MD	07/12/01	J Dawson	20 mi. E Assateague, VA	13	11/07/01
13	M Hawkins	25.5 mi. S Ocean City, MD	07/12/01	J Dawson	20 mi. E Assateague, VA	13	11/07/01
12	M Hawkins	17.4 mi. NE Ocean City, MD	06/25/01	J Dawson	20 mi. E Assateague, VA	13	11/07/01
18	M Hawkins	18.5 mr. ESE Ocean City, MD		M Hawkins	18.5 mi. ESE Ocean City, MD		11/24/01
13	M Hawkins	19 mi. ESE Ocean City, MD	10/24/01	M Hawkins	18.7 mi. ESE Ocean City, MD		11/24/01
15	M Hawkins	16.5 mi. ESE Ocean City, ME	08/08/01	M Hawkins	16.5 mi. ESE Ocean City, MD	10	11/25/01
Bluefi				0.11	Cough Ambar NI	٠.	059401
29	A Anderson	Block Is., RI	10/15/00	C Adams	South Amboy, NJ	31	05/24/01
17	H Bowman III	Fire Is. Inlet, NY	05/10/01	R Groh	Bellport, NY		06/04/01
18	A Schweithelm	Northport, NY	06/01/01	S Cone A Schweithelm	Rye, NY Asharoken Beach, NY	14	06/30/01 07/08/01
14	A Schweithelm	Eatons Neck, NY	06/08/01	T Winters	The Race, L.I. Sound	14	08/01/01
29	A Anderson	Block Is., RI	05/25/01	L Marriott	Execution Lt., NY		08/15/01
17	A Schweithelm	Eatons Neck, NY	06/15/01 09/20/00	R Dupre	Westport, MA		08/15/01
25 29	A Anderson A Anderson	Block Is., RI	08/07/01	J Meehl	The Race, L.1. Sound		08/19/01
31	A Anderson	Block Is., RI Block Is., RI	07/08/01	T McVey	Narragansett, RI		09/04/01
27	A Anderson	Block Is., RI	07/25/01	V Sokolohorsky	Cos Cob, CT	28	09/07/01
25	A Anderson	Block Is., RI	07/24/01	W Tucker Jr.	Offshr., The Farms, NJ		09/15/01
27	A Anderson	Block Is., RI	08/07/01	R Kovacs	Milford, CT		09/16/01
27	A Anderson	Block Is., RI	08/07/01	O Van Helmond	Westhampton, NY		09/22/01
28	A Anderson	Block Is., RI	07/08/01	M Timmerman	Martha's Vineyard, MA	28	09/22/01
25	A Anderson	Block Is., RI	07/13/01	R DiNicola	Milford, CT	26	09/23/01
27	A Anderson	Block Is., RI	07/13/01	J Rose	Watch Hill Lt., RI	28	09/27/01
27	A Schweithel	Eatons Neck, NY	08/30/01	E Aubry	Mamaroneck, NY	27	10/19/01
26	R Kyker	Norwalk, CT	09/24/00	R Arias	Norwalk Is., CT	27	10/21/01
19	B Finke	Norwalk, CT	08/06/01	M Mohiuddin	Roosevelt Is., NYC		10/21/01
27	A Anderson	Block Is., RI	07/13/01	J Sheehan	Niantic, CT		10/29/01
29	G Blank	East R., NYC	10/04/01	G Sherman	Offshr., 17 fathoms, NJ	32	11/04/01
17	M Tabasso	Ventnor, NJ	09/18/01	B Pittman	VA Beach, VA		11/04/01
Dogfi 27	sh T Rumpf	Middle Ground, L.I.S.	08/12/01	J Kaminsky	2 mi. NW Mattituck, NY	30	11/08/01
	-	Middle Ground, L.I.o.	JUI 120 VI			50	11,00,01
Fluke		Con Don Co. NV	07/20/01	D. Vardina	Iones Inlat NIV		
14	J Weber Jr.	Sea Dog Cr., NY	07/20/01	D Verdino	Jones Inlet, NY		
14	J Weber Jr.	Freeport, NY	07/27/01	M Bradley M Tabor	Reynold's Chan., NY	1.4	07/07/00
13 14	L Velsor W Filce	Long Beach, NY Mantoloking, NJ	06/09/00 07/20/98	M Tabor C Petruccelli	Reynold's Chan., NY Offshr., Cape Henlopen, DE	14	07/03/00
177	44 LIICE	manoloking, NJ	V1120178	Createten	Onsia, Cape Hemopen, DE	18	01/06/01

Spe Len	cies gth	Tagger	Place Tagged	Date	Recapturer	Location	Lenr	th Date
					1.000ptuici	Locaton	rent	Jui Date
12	F	Waltzinger III	Long Branch, NJ	06/04/99	C Petruccelli	Offshr., Fenwick Is., DE	16	01/08/01
14	D	Goodwin	S.E. of Jones Inlet, NY	06/03/00	F/V Susan L	Offshr., Cape May, NJ	18	
14		Evangelista	Brooklyn Flats, NY	09/01/96	F/V Vaud T	Offshr., Cape May, NJ		01/12/01
15		Weber Jr.	Jones Beach, NY	07/29/99	B Hardy	Offshr, Cape May, NJ		01/20/01
13		D'Amato	Cape May, NJ	08/18/99	F/V "Little Bit"	Offshr., Currituck Beach, NO	17	01/24/01
15		Matraxia	Deal, NJ	07/11/99	F/V Cliff & Chris	22 mi. E VA/NC Border	17	02/07/01
14 15		Goodwin	Jones Inlet, NY	07/11/99	F/V Cliff & Chris		18	02/07/01
13		Matraxia Waltzinger III	Pt. Judith, RI	07/11/00	Hewlett Fish Mkt.		15	02/19/01
14		Waltzinger III Waltzinger III	Manasquan, NJ	09/23/00	V Cannon Jr.	Offshr., Hudson Canyon, NJ		02/27/01
15		Waltzinger III	Sea Bright, NJ	08/14/99	Martins Fish Co.	20 mi. E Ocean City, MD	16	
17		Kennedy	Long Branch, NJ I.C.W #466, NJ	10/11/99	Martins Fish Co	50 mi. E Delaware Bay	15	03/29/01
14		Spall	Sandy Hook, NJ	04/12/01 06/28/00	W Werner G Cashman	S Rte. 47 Brdg., NJ	17	04/15/01
18		D'Amato	I.C.W., Wildwood, NJ	04/20/01	A Long	Wachapreague Inlet, VA I.C.W., Wildwood, NJ	14	04/21/01
13		Piszczatowski	Glen Cove, NY	06/18/00	F/V Ocean State	Block Is. Sound, RI	18 17	04/22/01
15		Waltzinger III	Chincoteague, VA	04/12/00	J Pusey	Chincoteague, VA	16	04/28/01 05/01/01
14		Weber Jr.	Jones Inlet, NY	08/11/00	D Lippman	Captree St. Pk., NY	14	05/03/01
17	T	Matraxia	Pt. Judith, RI	07/11/00	F/V Ocean State	Block Is. Sound, RI	21	05/05/01
15	F	Waltzinger III	Chincoteague, VA	04/24/01	H Hayes	Chincoteague Inlet, VA	15	05/11/01
16	В	Shillingford	Ludlam Bay, NJ	05/08/01	G Balog	Sea Isle City, NJ	16	05/11/01
15	C	Kennedy	I.C.W. #470, NJ	07/28/99	H Munn	Ludlams Bay, NJ	18	05/12/01
13	J	Hickey Jr.	Sea Girt, NJ	07/07/00	D Baumeister	N. Belmar, NJ	•••	05/12/01
19	C	Kennedy	I.C.W. #453, NJ	04/20/01	R Cucinotta	N. Wildwood, NJ	19	05/13/01
18	В	Shillingford	Ludlam Bay, NJ	05/10/01	K Everingham	Sea Isle City, NJ	17	05/15/01
11		Strober	Bayonne, NJ	05/31/99	A Yanovsky	Canarsie Pier, NY	17	05/15/01
15		D'Amato	I C.W, Wildwood, NJ	05/10/00	B Dunham	Stone Harbor, NJ	17	05/15/01
14		Matraxia	Ambrose Chan., NY	07/23/00	J Strohmeier	Hoffman Is., NY	16	05/16/01
16		D'Amato	60' Slough, DE Bay	07/13/00	J Dougherty	#19, Delaware Bay	17	05/16/01
15		Shillingford	Ludlam Bay, NJ	05/10/01	G Lukosavich	Sea Isle City, NJ		05/18/01
13 17		D'Amato	I.C.W, Wildwood, NJ	05/05/00	S Suchanoff	Avalon, NJ	15	05/18/01
15		Shillingford	Ludlam Bay, NJ	05/10/01	G Edmund	Sea Isle City, NJ	17	05/19/01
17		Gonnello D'Amato	Sandy Hook Bay, NJ	06/24/00	M Korn	Raritan Bay, NJ	16	05/20/01
13		Matraxia	I.C.W., Wildwood, NJ	05/11/01	G Jakominich	#469 I C.W., NJ	18	05/22/01
16		Kennedy	Ambrose Chan., NY I.C W., Wildwood, NJ	07/23/00	C Mockler	Sandy Hook Bay, NJ	14	05/24/01
14		Gibbons	Lido Bch., NY	04/28/00 05/23/00	J Byrne M Heyman	I.C.W., Wildwood Cr., NJ	17	05/25/01
15		Kennedy	Lower DE Bay, NJ	07/28/00	J Harper	Jones Inlet, NY Buoy #19, DE Bay	15	05/27/01
15	S	Fries	Ambrose Channel, NY	06/21/00	G Bachert	Sandy Hook, NJ	15 16	05/27/01
17	В	Shillingford	Ludlam Bay, NJ	05/10/01	C Stansfield	Ludlam Bay, NJ	18	05/27/01 05/29/01
16	С	Kennedy	I C.W. #470, NJ	05/17/01	J Danna	I.C.W., Wildwood Cr., NJ	16	06/01/01
13		Frawley Jr.	Shinnecock Bay, NY	09/08/00	T Holm	Shinnecock Bay, NY	14	06/01/01
16		Shillingford	Ludlam Bay, NJ	05/10/01	R Gorman	I.C W #331, NJ	• •	06/01/01
17		Kennedy	I C W. # 470, NJ	05/26/99	D Bowman	Wildwood Crest, NJ	21	06/02/01
13		Weber Jr.	Reynold's Chan., NY	05/15/01	W Kiernan	Reynold's Chan., NY	13	06/03/01
25		Dickerson	Manasquan R., NJ	09/11/99	R Pontecorvo	Shark R., NJ	26	06/05/01
15 18		Piszczatowski	Glen Cove, NY	07/21/00	F LoSavio	Hempstead Hbr, NY	18	06/06/01
14		Benjamin Anderson Jr.	Keansburg Pier, NJ	06/04/01	B Scarnechia	Keansburg Pier, NJ	18	06/06/01
14 J		eber Jr.	Fire Is. Inlet, NY Reynold's Chan., NY	05/03/01	E White	Jones Beach Pier, NY	15	06/06/01
10		Reiss	Staten Is., NY	05/26/00 05/23/99	R Dixon R Hartmann	Merrick Bay, NY	15	06/06/01
13		Russo	Orient Pt., NY	08/04/00	B Russo	Newport, RI	15	06/08/01
14		Carlsen	Shark R., NJ	09/21/00	W Campbell	Gardiner's Is., NY	14	06/09/01
12		Waltzinger III	Belmar, NJ	06/09/01	H Straub	Somers Pt., NJ Asbury Pk., NY	15	06/09/01
12		Weber Jr.	Reynold's Chan., NY	06/08/01	B Fauth	Freeport, NY		06/10/01
15		Kennedy	I.C.W #473, NJ	06/28/00	T Kirchner	Stone Harbor, NJ	12	06/10/01
18		Moore	Moriches Bay, NY	08/06/00	M Lange	Buoy 12, Moriches Bay, NY	19	06/12/01
16		D'Amato	I.C.W., Wildwood, NJ	06/13/01	J Stella	Wildwood Cr., NJ	20 16	06/13/01 06/14/01
15	J	lickey Jr.	Offshr., Klondike, NJ	07/01/00	B Ford	Dumpsite, N of Manasquan, N		06/14/01
17		Knapik	Jones Inlet, NY	10/23/00	M Meisten	Fire Is., NY	18	06/15/01
13	D	Blue	Sandy Hook, NJ	05/22/99	G Bachert	Sandy Hook, NJ	16	06/15/01
15	S	Fries	Rockaway Inlet, NY	08/23/00	S Miller	Merrick, NY	15	06/16/01
14		Malheiros	Sandy Hook, NJ	07/22/00	T Sereika	Sandy Hook Bay, NJ	15	06/17/01
18		Kennedy	I.C.W. #466, NJ	04/12/01	W Zee	I.C.W., N. Wildwood, NJ	-	06/17/01
17		Waltzinger III	Chincoteague, VA	04/24/01	K Reisinger	Chincoteague Bay, VA	17	06/19/01
14		Weber Jr.	E. Reynold's Chan., NY	05/12/00	D Miller	Robert Moses Brdg., NY	15	06/19/01
15		Kennedy	I.C.W. #465, NJ	05/10/00	R Gill	Hereford Inlet, NJ	17	06/22/01
14	\$ 6	Carlsen	Shark R., NJ	09/27/99	D Rutsch	Barnegat Bay, NJ	19	06/22/01

10 Underwater Naturalist

Length	s Tagger	Place Tagged	Date	Recapturer	Location	Leng	h Date
15	J Smailer	Lower DE Bay, NJ	08/08/00	D Frank	Fortesque, NJ	15	06/22/01
19	C Kennedy	I.C W. #466, NJ	04/20/01	F Jacobs	Cape May Hbr., NJ	19	06/22/01
14	J Hickey Jr.	Offshr., Klondike, NJ	06/24/00	S Goldstein	5 mi. SW Jones Inlet, NJ	14	06/23/01
1	J Weber Jr	Reynold's Chan., NY	06/21/01 06/10/01	M Guerra G Bachert	Pt. Lookout, NY Sandy Hook, NJ	11	06/23/01
2	T Matraxia A D'Amato	Sandy Hook, NJ I.C.W., Wildwood, NJ	05/11/01	R Rizzi		13 17	06/24/01 06/24/01
6 5	A D'Amato	I.C.W., Wildwood, NJ	06/08/01	S London	I.C.W., Wildwood Cr., NJ Cape May Hbr., NJ	15	06/24/01
5	B Shillingford	I.C.W., Ocean City, NJ	05/24/01	E Schmitt	I.C.W., Ocean City, NJ	15	06/25/01
6	B Russo	E. Marion, NY	05/14/01	L Pirıllı	Fulton Fish Mkt., NY	18	06/25/01
19	C Kennedy	I.C.W. #477, NJ	06/08/01	F Tortella	I.C.W., Wildwood, NJ		06/26/01
16	C Kennedy	I.C.W #477, NJ	06/08/01	F Tortella	I C.W., Wildwood, NJ	16	06/26/01
7	W Gano	Moriches Bay, NY	06/20/00	C Altbacker	Great South Bay, NY	18	06/28/01
14	M Strober	Verrazano Brdg., NY	06/26/99	M Tedesco	Flynn's Knoll, NJ	15	06/28/03
16	S Carlsen	Atlantic Highlands, NJ	06/14/01	G Bachert	Ammo. Pier, NJ	16	06/29/0
4	W Filce	Ortley Beach, NJ	07/12/97	D Vance	1 mi. E Asbury Pk., NJ	17	06/29/01
17	B Goodman	S of Jones Inlet, NY	07/01/00	P Scherer Jr.	S of Fire Is. Inlet, NY	17	06/30/0
15	A Piszczatowski	Glen Cove, NY	06/05/01	L Bonati	Matinecock Pt., NY		07/01/03
16	J Gibbons	Lido Beh., NY	05/06/00	J Caligium	Gardiners Is., NY	20	07/01/01
12	B Shillingford	I.C.W., Ocean City, NJ	06/20/01	B Gray	I.C W., Ocean City, NJ	12	07/01/01
15	B Goodman	S of Jones Inlet, NY	09/02/00	G Cohen	Pt. Lookout, NY	16	07/02/0
13	J Spahr	Jones Inlet, NY	06/29/01	J Brancazio	Jones Inlet, NY	13	07/02/0
5	C Kennedy	I.C.W. #457, NJ	05/22/01	M Mangano	Wildwood, NJ	15	07/03/01
7	J Tırpak	Highlands, NJ	06/09/01	J Geist	Sandy Hook Bay, NJ		07/03/01
14	J Hickey Jr.	Long Branch, NJ	07/23/00	K Delanoy	2 mi. E Bay Head, NJ	14	07/03/01
12	J Hickey Jr.	Long Branch, NJ	07/05/00	L Felton	Long Branch, NJ	16	07/03/01
10	R Anderson Jr.	Fire Island Inlet, NY	07/04/01	N Asheraft	Fire Is., NY 2 mi. N Manasquan Inlet, N.	13	07/04/01
15	F Waltzinger III	Asbury Pk., NJ	06/18/01	F Kırchofer E Salnick	Lido Beach, NY	1	07/04/0
15	J Weber Jr.	Reynold's Chan., NY	05/15/01	J Padden	Fire Is. Inlet, NY		07/05/01 07/05/01
2	R Anderson Jr.	Fire Is. Inlet, NY	07/04/01	N Trangucci	Moriches Bay, NY		07/07/01
12	R Anderson L Gorman	Fire Is. Inlet, NY	07/10/01	V Resende	Sandy Hook, NJ	12	07/07/01
12 16	V Viola	U.S.C.G., Sandy Hook, NJ	06/18/01 07/24/00	T Kohler	Longport, NJ	18	07/07/01
13	B Shillingford	Moriches Inlet, NY Ludlam Bay, NJ	05/11/01	G Shinn	Sea Isle City, NJ	••	07/07/01
16	G Horvath	4 mi. E Harvey Cedars, NJ	07/07/01	G Horvath	4 mi. E Harvey Cedars, NJ	16	07/07/01
16	A D'Amato	I.C.W., Wildwood, NJ	04/28/00	R Musselman	I.C.W., Sea Isle City, NJ	19	07/07/01
11	B Shillingford	I.C.W. # 302, NJ	07/02/01	S Brown	I.C.W. #308, NJ	12	07/08/01
11	J Weber Jr.	Reynold's Chan., NY	06/08/01	R Chester Jr.	Jones Inlet, NY		07/08/01
15	D Goodwin	Jones Inlet, NY	05/13/00	W DıCarlo	Freeport, NY	17	07/08/01
11	F Waltzinger III	Manasquan, NJ	06/09/01	G Bachert	Sandy Hook Bay, NJ	12	07/08/01
12	D Goodwin	Merrick Bay, NY	06/26/01	S Hines	Merrick Bay, NY	12	07/09/01
13	D Goodwin	Mernck Bay, NY	06/26/01	W Stammel	Merrick Bay, NY		07/09/01
15	M Frawley Jr.	Shinnecock Bay, NY	08/24/00	S Cerny	Shinnecock Bay, NY	18	07/09/01
17	A Baret	Sandy Hook Bay, NJ	05/12/01	D Peters	Sandy Hook Bay, NJ	17	07/09/01
21	C Kennedy	I.C.W #470, NJ	05/14/01	K Raza	I.C.W #473, NJ	22	07/09/03
13	R Anderson Jr.	Fire Is. Inlet, NY	09/01/00	D Quinn	E of Robt. Moses Brdg., NY		07/10/01
14	F Waltzinger III	Long Branch, NJ	06/26/00	R Mansfield	3 mi. E Long Branch, NJ	14	07/11/01
14	B Goodman	S of Jones Inlet, NY	07/01/00	H Resnick	Long Beach, NY	14	07/12/01
14	A Gano	Fire Is., NY	06/29/00	B Ford	Dumpsite, N of Manasquan,		07/12/01
15	W Filce	Sea Girt Reef, NJ	06/19/01	B Ford	Dumpsite, N of Manasquan,	NJ	07/13/01
14	R Anderson Jr.	Fire Is. Inlet, NY	07/10/01	D Sharinn	Captree, NY		07/13/01
14	W Filce	Manasquan, NJ	10/11/99	T Kiburis	Jamaica Bay, NY	18	07/14/01
12	M Strober	Hoffman Is., NY	06/30/01	J Strohmeier	Hoffman Is., NY	12	07/14/0
15	J Gibbons	Offshr., Lido Bch., NY	06/11/00	A Stasi	Captree, NY		07/14/01
9	B Shillingford	Strathmere, NJ	05/11/01	E Schmutz	Ocean City, NJ Sandy Hook, NJ	14	07/14/0
14	M Strober	Hoffman Is., NY	05/27/00	R Zoltowski	Leonardo, NJ	17	07/14/0
14 14	A Malheiros L Ruch Jr.	Belford, NJ	08/02/00	D Virgil G Battito	Flynn's Knoll, NJ	17	
14 14	J Weber Jr.	Long Branch, NJ	06/17/00 06/08/01	L Kim	Jones Beach, NY		07/15/0 07/15/0
1 <del>4</del> 16	L Gonnello	Jones Inlet, NY Sandy Hook Bay, NI	06/26/01	W Davis	Leonardo, NJ	16	07/15/0
15	H Bowman III	Sandy Hook Bay, NJ Robt. Moses Brdg., NY	05/02/01	M Weimar	Great South Bay, NY	17	07/15/0
13	A D'Amato	Cape May Canal, NJ	08/31/00	R Goodin	Cape May Hbr., NJ	15	07/16/0
12	J Weber Jr.	Reynold's Chan., NY	05/15/01	C Chon	Baldwin, NY	1.5	07/18/0
13	J Weber Jr.	Freeport, NY	06/08/01	D Aries	Lido Beach, NY		07/19/0
15	B Shillingford	I.C.W., Ocean City, NJ	05/25/01	J Flynn	Corson's Inlet, NJ	15	07/19/0
15	D Crann	Beach Haven, NJ	09/09/00	D Britton	Barnegat Lt., NJ	16	07/20/01
18	F Stunkel	Stamford, CT	07/01/99	S Whitting	Montauk, NY	19	07/21/0

Spec		Place Tagged	Date	Recapturer	Location	Long	th Date
		39		. roughtarer	Location	Leng	Date
16	D Goodwin	Jones Inlet, NY	05/05/01	M Castelluzzo	Jones Inlet, NY	17	07/22/01
15	T Matraxia	Flynn's Knoll, NJ	07/17/01	A Tang	Asbury Pk., NJ	17 15	07/22/01 07/22/01
15	T Matraxia	Ambrose Chan., NY	07/15/01	A Dzikowicz	Verrazano Brdg., NY	15	07/22/01
15	F Waltzinger III	Spring Lake, NJ	05/12/01	P Bruchel	Raritan Bay, NJ	16	07/23/01
12	R Anderson Jr	Fire Is. Inlet, NY	07/10/01	C Glynn	Captree, NY		07/23/01
16	J Weber Jr.	Swift Cr., NY	07/13/01	J Weber Jr.	Swift Cr., NY	16	07/27/01
15 14	J Leather T Stanık	Manasquan, NJ	06/24/00	P Marotta	Island Beach St. Pk., NJ	17	07/28/01
13	L Velsor	Chapel Hill Chan., NJ 4 mi. SE Jones Inlet, NY	07/15/01	E Pulcini	Pt. of Sandy Hook, NJ	14	07/28/01
16	F Waltzinger III	Asbury Pk., NJ	06/19/01 06/10/01	D Orlando J Vazquez	Jones Inlet, NY Belmar, NJ	13 17	07/29/01
11	J Weber Jr.	Sloop Chan., NY	07/06/01	M Alba	Merrick, NY	17	07/29/01 07/30/01
13	F Waltzinger II	Upper Manasquan R., NJ	07/08/01	N Graciano	Manasquan R., NJ	13	07/31/01
13	J Weber Jr	Sloop Chan., NY	07/06/01	K Olsen	3rd Meadowbrook Brdg., N		07/31/01
14	A Gano	Fire Is. Inlet, NY	07/05/01	J Garone	Fire Is. Inlet, NY	15	07/31/01
12	J Weber Jr.	Freeport, NY	05/29/01	C Slotnick	Freeport, NY	14	08/01/01
16	S Fries	Montauk, NY	07/31/01	L Pash	Montauk Pt., NY	16	08/01/01
15	B Goodman	S of Jones Inlet, NY	07/30/00	F Carlson	4 mi. E Jones Beach, NY	17	08/02/01
12 14	J Weber Jr.	Freeport, NY	07/27/01	Y Sherwood	Reynold's Chan., NY		08/03/01
12	J Weber Jr. J Weber Jr.	Freeport, NY	07/27/01	Y Sherwood	Reynold's Chan., NY		08/03/01
12	J Weber Jr.	Sea Dog Cr., NY Sea Dog Cr., NY	07/20/01	F Kobesky	Reynold's Chan., NY	12	08/04/01
13	R Anderson Jr.	Fire Is. Inlet, NY	07/13/01 07/10/01	A Peters A Haldenwang	Freeport, NY	12	08/04/01
13	J Weber Jr.	Sea Dog Cr., NY	07/20/01	K Isogai	Robt. Moses St. Pk., NJ Jones Beach, NY	13 13	08/04/01
11	R Anderson Jr.	Fire Is. Inlet, NY	07/21/01	E Corke	Fire Is., NY	13	08/05/01 08/05/01
14	F Waltzinger	Long Branch, NJ	07/12/99	M Hurley	Long Branch, NJ	16	08/06/01
13	C Kennedy	I.C.W #466, NJ	05/08/00	R Stock	Cape May Hbr., NJ	16	08/07/01
13	F Waltzinger III	Avon, NJ	06/20/00	D Baumeister	Manasquan Inlet, NJ	14	08/09/01
13	T Stanik	Flynn's Knoll, NJ	07/15/01	K Thomas	Flynn's Knoll, NJ		08/11/01
16	A Dzikowicz	Coney Is., NY	07/11/01	A Pietraniello	Ambrose Chan., NY	16	08/11/01
16 12	A Dzikowicz E Swain Jr.	Concy Is., NY	06/27/01	B Gorra	E. Rockaway Inlet, NY	. 17	08/11/01
12	R Anderson Jr	Fire Is. Inlet, NY	08/03/01	C Altbacker	Great South Bay, NY	1.13	Q8/11/01
12	R Anderson Jr.	Fire Is. Inlet, NY Fire Is. Inlet, NY	08/17/00	R Schmidt	Moriches Bay, NY	14	08/12/01
15	J Weber Jr.	Sloop Chan., NY	07/04/01 08/03/01	M Rodriguez D DePalo	Captree, NY	12	08/12/01
12	F Waltzinger III	Upper Manasquan R., NJ	07/09/01	R Tonkery	Sloop Chan., NY Manasquan, NJ		08/12/01 08/12/01
14	J Weber Jr.	Jones Inlet, NY	08/10/01	R Muro Jr.	E of Jones Inlet, NY	14	08/15/01
15	J Hickey Jr.	Sea Girt, NJ	07/08/00	J Malloy	Ambrose Chan., NY	• •	08/15/01
12	J Weber Jr.	Sea Dog Cr., NY	07/20/01	K Nicoll	Sea Dog Cr, NY		08/15/01
13	F Waltzinger III	Upper Manasquan R., NJ	08/06/01	G Caputi	Manasquan R., NJ	14	08/16/01
15 13	T Stanik	Raritan Bay, NJ	07/28/01	B Schoenig	Princess Bay, NY		08/17/01
13	J Hickey Jr. J Mena	Manasquan R., NJ Kings Pt., NY	07/06/01	T Pfister	Manasquan R., NJ	13	08/17/01
13	C Altbacker	Great South Bay, NY	07/20/99	E Kulich	W. Long Is. Sound	17	08/18/01
15	A Sargente	Lower New York Bay, NY	08/11/01 08/06/99	T O'Toole G Thompson	Democrat Pt., NY Fire Is., NY	14	08/18/01
12	F Waltzinger III	Upper Manasquan R., NJ	07/08/01	N Catone	Pt. Pleasant Canal, NJ	17 12	08/18/01
19	R Kyke	Norwalk, CT	06/14/98	L Sokerka	Norwalk, CT	23	08/18/01
13	J Hickey Jr.	Offshr., Klondike, NJ	07/01/00	G Larson	SE Shark R.Inlet, NJ	14	08/18/01
15	F Waltzinger III	Upper Manasquan R., NJ	07/02/01	M Facas	Manasquan Inlet, NJ	16	08/19/01
14	M Strober	2 mi. S Verrazano Brdg., NY	07/06/01	M Murphy	Ambrose Chan., NY	15	08/19/01
14	W Filce	Manasquan R., NJ	08/06/01	V Stavola	Manasquan Inlet, NJ	14	08/21/01
14	J Weber Jr.	Reynold's Chan., NY	08/10/01	J McKeon	Reynold's Chan., NY	14	08/23/01
13 15	J Weber Jr. S Fries	Freeport, NY Coney Is., NY	07/27/01 07/06/01	K Ohliger R Sims	Freeport, NY	13	08/24/01
15	D Goodwin	3 mi. S Tobay Bch., NY	07/21/01	S Bock	Rockaway Reef, NY	18	08/26/01
13	S Carlsen	Shark R., NJ	07/12/01	R Main	S Shinnecock Inlet, NY Shark R. Inlet, NJ	15	08/26/01
12	B Shillingford	I.C.W., Ocean City, NJ	07/25/01	O Brogan Jr.	I.C.W., Strathmere, NJ	15 12	08/26/01
15	M Frawley Jr.	Shinnecock Bay, NY	07/24/01	T Pearson	Southampton, NY	16	08/27/01 08/28/01
14	M Frawley Jr.	Shinnecock Bay, NY	09/08/00	E McLean	Nantucket Sound, MA	16	08/29/01
15	G Nigro	Sandy Hook, NJ	06/10/01	H DeBlock Sr	Keyport, NJ	16	08/29/01
15	S Fries	Tin Can Grounds, NY	07/07/01	J ZaFranı	Ambrose Chan., NY	15	08/30/01
14	W Filce	2 mi. E Manasquan, NJ	06/16/01	K Buckley	Long Branch, NJ	14	09/01/01
15	L Bleiler	Belford, NJ	05/27/01	D Gladysiewicz	Buoy #47, Raritan Bay, NY	17	09/01/01
16	J Dotsey	Montauk, NY	08/25/01	K Blanchard	3.2 mi. SE Montauk, NY	16	09/02/01
14 13	W Filce J Weber Jr.	Offshr., Manasquan, NJ Sea Dog Cr., NY	09/25/00 07/20/01	D Golom B Lanka	Offshr., Spring Lake, NJ	15	09/03/01
13	F Waltzinger III	Upper Manasquan R., NJ	08/11/01	T Reeves	Jones Beach St. Pk., NY Manasquan R., NJ	13	09/06/01
14	J Hickey Jr.	Seaside Pk., NJ	08/11/01	E Lang	Mantoloking, NJ	14	09/07/01
- •			20.17.00		minoroking, 143	14	09/08/01

12 Underwater Naturalist

Casai	••						
Speci- Lengt	es h Tagger	Place Tagged	Date	Recapturer	Location L	.engt	h Date
14	B Bagliani	Delaware Bay, NJ	06/05/99	J Hunt	Delaware Bay	18	09/08/01
13	M Strober	Hoffman Is., NY	06/30/01	M Strober	Hoffman Is., NY	13	09/08/01
13	F Waltzinger III	Upper Manasquan R., NJ	08/11/01	B Hanson	Manasquan R., NJ	13	09/09/01
16	A D'Amato	Cape May, NJ	06/28/01	M Eisaman	Offshr., Atlantic City, NJ	17	09/09/01
14	D Goodwin	Merrick Bay, NY	08/11/01	B Stuck	Merrick, NY	15	09/09/01
11	F Waltzinger III	Upper Manasquan R., NJ	07/09/01	B Hanson	Manasquan R., NJ	12	09/09/01
12	R Anderson Jr.	Fire Is Inlet, NY	08/04/01	R Clarke	Fire Is. Inlet, NY	13	09/16/01
14	B Shillingford	I.C.W., Ocean City, NJ	07/25/01	G Rainey	Ocean City, NJ	16	09/19/01
11	J Weber Jr.	Reynold's Chan., NY	06/29/01	B Schulze	2 mi. W Jones Inlet, NY	13	09/23/01
16	A D'Amato	Cape May Hbr, NJ	08/03/00	E Thomas	Cape May Hbr., NJ	16	09/25/01
14	L Gordon Jr.	Lynnhaven Inlet, VA	05/15/01	M Banks	Ches. Bay Brdg. Tun., VA	16	09/30/01
22	G Bachert	Offshr., Mud Buoy, NJ	10/03/01	Z Livingston	Offshr., Mud Buoy, NJ		10/21/01
14	D Crann	Beach Haven, NJ	06/19/99	M Hamric	Offshr., Chincoteague, VA	15	12/04/01
Great	Barracuda T Matraxia	Islamorada, FL	01/17/01	J Fox	Marathon, FL		02/14/01
Great	er Amberjack						00/04/01
46	JC Wright	Offshr., Rudee Inlet, VA	08/30/01	K Barnhart	Offshr., Rudee Inlet, VA		09/04/01
	Crevalle	Connibel EI	10/14/00	D Milner	Ft. Myers Beach, FL	16	11/03/00
16	G Ottavio	Sannibel, FL	10/16/00		Sarasota, FL	18	03/28/01
18	J Wright	Venice, FL	01/31/01	A Miller	Sarasota, FL	10	05/25/01
Polla						••	0.1/20/01
18	A Schweithelm	6 mi S. Block Is., RI	04/22/01	M Potts	6 mi. S Block Is., RI	18	04/29/01
17	M Hawkins	18.5 mi. ESE Ocean City, MD	05/30/01	J Dudeck	18 mi. ESE Ocean City, MD	17	06/02/01
16	M Hawkins M Wahlgren	18.5 mi. ESE Ocean City, MD 30 mi. E Salisbury, MA	05/29/01 06/04/01	M Czajkowski P LaBrie	18.5 mi. ESE Ocean City, M Offshr., Jeffreys Ledge, MA	D 18	08/26/01 09/06/01
Red [	Orum						
17	L Gordon Jr.	Lynnhaven R., VA	07/02/00	R Koontz	Cape Pt., Buxton, NC	24	02/09/01
17	J Wright	Venice, FL	01/11/01	R Couchot	Englewood, FL	18	02/24/01
Red (	Grouper						
17	J Clark	Ramrod Key, FL	01/06/01	J Clark	Ramrod Key, FL	17	01/18/01
14	J Clark	Ramrod Key, FL	01/02/01	J Clark	Ramrod Key, FL	14	01/18/01
18	J Clark	Ramrod Key, FL	01/18/01	J Clark	Ramrod Key, FL	18	01/25/01
18	J Clark	Ramrod Key, FL	01/25/01	J Clark	Ramrod Key, FL	18	01/27/01
18	J Clark	Ramrod Key, FL	01/27/01	J Clark	Ramrod Key, FL	18	01/30/01
18	J Clark	Ramrod Key, FL	01/30/01	J Clark	Ramrod Key, FL	18	02/09/01
18	J Clark	Ramrod Key, FL	02/09/01	J Clark	Ramrod Key, FL	18	02/22/01
19	J Della Porta	Marco Is., FL	04/04/01	P Christensen	Marco Is., FL	19	04/15/01
Shee	pshead						
11	D McConnell	Treasure Is., FL	01/09/02	Unknown fisherman	Treasure Is., FL	11	02/10/01
Snoo	k					••	04/10/01
22	A Schweithelm	Boca Grande, FL	04/02/01	R Gibson	Boca Grande, FL	22	04/10/01
Souti	nern Flounder				51	12	03/03/01
12	J Wright	Venice, FL	11/30/00	D Cecil	Venice, FL	13	02/07/01
18	J O'Keeffe	Indian R., Stuart, FL	04/26/99	R Carr	Indian R., Stuart, FL	21	03/14/01
Strip	ed Bass						
18	B Fonash	Strathmere, NJ	10/02/96	J Janda III	Tilghman Is., MD		02/25/99
19	B Fonash	Strathmere, NJ	10/01/96	W Logan	Woodland Beach, DE		04/15/99
14	R Stasinos	Stamford, CT	09/27/98	J Steneck	Lloyd Neck, NY	24	
25	C Kennedy	Hereford Inlet, NJ	12/05/98	T Kohler	Esopus Lt., NY	25	
27	S Jakubowski	West Bank Lt., NY	11/29/99	A Zygmuntowicz	Chatham, MA	31	08/15/00
33	A D'Amato	Cape May, NJ	11/01/99	A Zygmuntowicz	Chatham, MA	28	08/15/00
22	A LoCascio	Throgs Neck Brdg, NY	11/14/99	A LoCascio	Throgs Neck Brdg., NY	22	11/19/00
36	M Brooking	Troy Dam, NY	04/18/00	G Haywood	Offshr., VA Beach, VA		01/05/01
30	S Jakubowski	Raritan Reach, NJ	05/11/00	G Haywood	Offshr., VA Beach, VA		01/05/01
22	A D'Amato	3 mi. E Cape May, NJ	11/09/00	SEAMAP Cruise	S of Oregon Inlet, NC	22	01/16/01
25	S Hartmann	Eatons Neck, NY	09/11/99	R/V Oregon	Outer Banks, NC	23	01/17/01
19	JC Wright	Ches. Bay Brdg. Tun., VA	12/21/00	R/V Oregon	Outer Banks, NC	20	01/17/01
27	D Kelly	Orient Pt., NY	06/16/00	R/V Oregon	Outer Banks, NC	30	01/17/01
22	T Lake	Bay Ridge, NY	11/26/99	K Letherer	Newport, RI	28	02/01/01
14	A Schweithelm	Crab Meadow Beach, NY	08/18/00	J Palma	Crab Meadow Beach, NY	18	

23 21 32 23 27 33 42 29 22 23 23 25 20 27 23 34 42 29 29 22 23 23 25 26 27 27 28 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	T Matraxia T Shaheen S Fries R Kyker E Petronio Jr. A D'Amato R Gardrel D Kelly A Wright T Matraxia M Summons S Hartmann T Rinaldi R Gardrel G Nigro A Schweithelm	Flynn's Knoll, NJ Rumson, NJ Montauk Pt., NY Norwalk, CT Block Is., RI Cape May, NJ Block Island, RI The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	06/15/99 05/02/99 10/15/99 08/20/00 08/02/00 10/25/00 07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	M Cannan R Graham B Fleming R Graham F/V Dixie Dandy J Lancaster T Barnes D Lester T Marks D Lester	Chester R , MD Surry, VA Oregon Inlet, NC Surry, VA E of Outer Banks, NC 4 mi. N Oregon Inlet, NC Oregon Inlet, NC Roanoke Sound, NC Surry, VA	24 24 28 33 31 24	02/02/01 02/03/01 02/04/01 02/07/01 02/08/01 02/13/01 02/15/01 02/15/01
21 32 23 27 33 42 29 22 22 22 23 25 20 27 23 34 44 45 46 46 46 46 46 46 46 46 46 46 46 46 46	T Shaheen S Fries R Kyker E Petronio Jr. A D'Amato R Gardrel D Kelly A Wright T Matraxia M Simmons S Hartmann T Rinaldi R Gardrel G Nigro	Rumson, NJ Montauk Pt., NY Norwalk, CT Block Is., RI Cape May, NJ Block Island, RI The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	05/02/99 10/15/99 08/20/00 08/02/00 10/25/00 07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	R Graham B Fleming R Graham F/V Dixie Dandy J Lancaster T Barnes D Lester T Marks D Lester	Surry, VA Oregon Inlet, NC Surry, VA E of Outer Banks, NC 4 mi. N Oregon Inlet, NC Oregon Inlet, NC Roanoke Sound, NC Surry, VA	24 28 33	02/03/01 02/04/01 02/07/01 02/08/01 02/13/01 02/15/01
32 23 27 33 42 29 22 23 23 25 20 27 23 14	S Fries R Kyker E Petronio Jr. A D'Amato C Gardrel D Kelly A Wright T Matraxia M Summons S Hartmann T Runaldi R Gardrel G Nigro	Montauk Pt., NY Norwalk, CT Block Is., RI Cape May, NJ Block Island, RI The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	10/15/99 08/20/00 08/02/00 10/25/00 07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	B Fleming R Graham F/V Dixie Dandy J Lancaster T Barnes D Lester T Marks D Lester	Oregon Inlet, NC Surry, VA E of Outer Banks, NC 4 mi. N Oregon Inlet, NC Oregon Inlet, NC Roanoke Sound, NC Surry, VA	24 28 33	02/04/01 02/07/01 02/08/01 02/13/01 02/15/01
23 27 33 42 29 22 23 23 25 20 27 23 14	R Kyker E Petronio Jr. A D'Amato R Gardrel D Kelly A Wright T Matraxia M Summons S Hartmann T Rinaldi R Gardrel G Nigro	Norwalk, CT Block Is., RI Cape May, NJ Block Island, RI The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	08/20/00 08/02/00 10/25/00 07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	R Graham F/V Dixie Dandy J Lancaster T Barnes D Lester T Marks D Lester	Surry, VA E of Outer Banks, NC 4 mi. N Oregon Inlet, NC Oregon Inlet, NC Roanoke Sound, NC Surry, VA	28 33	02/07/01 02/08/01 02/13/01 02/15/01
27 33 442 29 222 23 223 225 200 27 23 34 44	E Petronio Jr. A D'Amato R Gardrel D Kelly A Wright T Matraxia M Summons S Hartmann T Rinaldi R Gardrel G Nigro	Block Is., RI Cape May, NJ Block Island, RI The Race, L.I. Sound Island Beh. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	08/02/00 10/25/00 07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	F/V Dixie Dandy J Lancaster T Barnes D Lester T Marks D Lester	E of Outer Banks, NC 4 mi. N Oregon Inlet, NC Oregon Inlet, NC Roanoke Sound, NC Surry, VA	28 33	02/08/01 02/13/01 02/15/01
333 442 229 222 233 223 225 220 277 233 144	A D'Amato R Gardrel D Kelly A Wright T Matraxia M Simmons S Hartmann T Rinaldi R Gardrel G Nigro	Cape May, NJ Block Island, RI The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	10/25/00 07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	J Lancaster T Barnes D Lester T Marks D Lester	4 mi. N Oregon Inlet, NC Oregon Inlet, NC Roanoke Sound, NC Surry, VA	33 31	02/13/01 02/15/01
42 229 222 23 23 225 220 27 23 14 36 18	R Gardrel D Kelly A Wright T Matraxia M Simmons S Hartmann T Rinaldi R Gardrel G Nigro	Block Island, RI The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	07/03/00 08/22/00 11/04/00 05/13/00 07/21/97	T Barnes D Lester T Marks D Lester	Oregon Inlet, NC Roanoke Sound, NC Surry, VA	31	02/15/01
222 223 223 225 220 227 223 144 366 188	D Kelly A Wright T Matraxia M Simmons S Hartmann T Rinaldi R Gardrel G Nigro	The Race, L.I. Sound Island Bch. St. Pk., NJ Raritan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	08/22/00 11/04/00 05/13/00 07/21/97	D Lester T Marks D Lester	Roanoke Sound, NC Surry, VA		
23 23 25 20 27 23 14 36	T Matraxia M Simmons S Hartmann T Rinaldi R Gardrel G Nigro	Rarıtan Bay, NY Barnegat Light, NJ Eatons Neck, NY Baitıng Hollow, L.L., NY	05/13/00 07/21/97	D Lester	Surry, VA		02/15/01
23 25 20 27 23 14 36	M Simmons S Hartmann T Rinaldi R Gardrel G Nigro	Barnegat Light, NJ Eatons Neck, NY Baiting Hollow, L.I., NY	07/21/97		D. 1 0 4		02/15/01
25 20 27 23 14 36	S Hartmann T Rınaldi R Gardrel G Nıgro	Eatons Neck, NY Baiting Hollow, L.I., NY			Pamlico Sound, NC	29	02/20/01
20 27 23 14 36	T Rınaldi R Gardrel G Nigro	Baiting Hollow, L.I., NY		S Romaine	Hatteras, NC	38	02/25/01
27 23 14 36 18	R Gardrel G Nigro			B Swann	Cobb Is., MD	27	02/27/01
23 14 36 18	G Nigro		11/03/93 08/21/00	J Katsaros J Zimmerman	Northport, NY	30	02/28/01
14 36 18		Block Island, RI Flynn's Knoll, NJ	10/17/98	R McKeil	Bowers Beach, DE Oregon Inlet, NC	27	03/01/01
18		Asharoken, NY	07/12/00	J Mahan	Jersey City, NJ	28 16	03/02/01
	A Anderson	Block Is., RI	06/01/00	M Breiholz	E Kill Devil Hills, NC	38	03/10/01 03/10/01
18	D Hoxsie	Charlestown, RI	06/03/00	M Morse Sr.	Cohansey Cove, DE Bay, NJ	22	03/13/01
	S Brodsky	Long Beach, NY	10/22/00	T Baum	Delaware Bay, NJ	28	03/15/01
25	M Russo	Sailor's Haven, F.I., NY	11/01/00	R Bundick	1 mi. E Cedar Is., VA		03/15/01
18	J Myers	Nauset Beach, MA	07/20/00	A Martin	Norwich, CT	22	03/19/01
24 23	A D'Amato	Cape May, NJ	04/15/99 12/15/99	E Jett F Maddox	Fairview Beach, VA	27	03/23/01
9	J Baker H Sweet	Indian R. Inlet, DE Providence, RI	07/23/99	R Hoellger	Pocomoke Sound, VA		03/24/01
25	W Smagalski	Upper Hackensack R., NJ	10/30/99	V Kowalski	Haverstraw Bay, NY Hackensack R., NJ	26	03/25/01
21	G Nigro	Sandy Hook, NJ	11/06/99	R Croft	Montville, CT	29	03/25/01
!1	T Marburger	Northport, NY	04/20/99	N Rizzuto	Piermont, NY	26 26	03/26/01 03/27/01
:0	A Anderson	Thames R., CT	12/29/00	S Warner	Groton, CT	21	03/28/01
0	R Szellan	Old Orchard Lt., NY	05/16/00	T Baum	Delaware Bay, NJ	32	03/28/01
4	A Schweithelm	Montauk, NY	06/11/99	A Loving	Quantico, VA	26	03/31/01
5	A Anderson	Thames R., CT	11/28/98	J Carr	Norwich Hbr., CT	18	04/01/01
.9 7	A LoCascio	Execution Lt., NY	05/21/99 08/01/98	M Morse Sr. W Pallen	Middle Grounds, DE Bay	31	04/01/01
4	B Shillingford R Chmiel	Strathmere, NJ Fishers Is., NY	07/02/98	J Fabryka	Bowers Beach, DE	23	04/03/01
8	F Ryan	Darien, CT	11/12/00	D Labriola	Fenwick Is., DE Dividing Cr., DE Bay, NJ	26	04/03/01
0	R Pearson Jr.	Breezy Pt., NY	11/10/98	T Baum	Delaware Bay, NJ	24	04/04/01 04/05/01
4	L Gonnello	Ambrose Chan., NY	11/01/98	J Matkovic	Island Beach St. Pk., NJ	31	04/06/01
9	F Stunkel	Stamford, CT	10/23/00	S Hoang	Fishkıll, NY	٠.	04/06/01
.6	E Feret	Freeport, NY	05/24/99	M Pagani	Baltimore, MD	39	04/07/01
9	R Maimone	Rye, NH	06/11/00	VIMS Gill Net	James R., VA	40	04/09/01
.3 4	J Casey	Manasquan, NJ Charlestown, RI	11/15/00 06/28/98	J Knowles B Khouri	Delaware Bay	23	04/10/01
4	D Hoxsie  A Messina Ir	Little Neck Bay, NY	07/16/00	A LoCascio	Great Kills, NY	24	04/12/01
8	G Blank	Governors Is., NY	11/20/99	D Garey	Manhasset Bay, NY Fishkill Ct., NY	15	04/13/01
0	R Nystrom	Bridgeport, CT	10/15/98	R Leja	Bridgeport, CT	23 27	04/14/01 04/14/01
5	R Conklin	Moriches Inlet, NY	06/21/99	M Witham	South Amboy, NJ	30	04/14/01
4	J Ragusa	Great South Bay, NY	11/12/00	D Lemke	S Cmd. Barry Brdg., NJ	30	04/15/01
7	A Schweithelm	Asharoken, NY	09/28/00	F Williams	Alpine, NJ	18	04/15/01
9	P Hierholzer	Avalon, NJ	11/25/98	A Varelli Sr.	Gloucester City, NJ	19	04/15/01
5	C Carroll Jr.	Bay Head, NJ	12/19/98	M Kern	West Cr., Cape May, NJ	25	04/16/01
4 2	T Lake J Drew	Robbins Reef, NJ Hope Is., RI	11/26/99 06/11/00	S Kelly C Shirey	Secaucus, NJ	17	04/18/01
2	W Brett	Provincetown, MA	07/29/00	E Dubinsky	Wilmington, DE Reeds Beach, NJ	24	04/19/01
3	C Carroll Jr.	Sandy Hook, NJ	10/05/99	G Grieb	Tappan Zee Brdg., NY	24	04/19/01
8	G Blank	Verrazano Brdg., NY	11/25/00	B Baskerville Sr.	Newark Bay @ Bayonne, NJ	24	04/20/01
7	R Conklin	Moriches Inlet, NY	11/02/00	J Davin	Haverstraw Bay, NY	19	04/20/01 04/21/01
6	D O'Rourke	Old Orchard Lt., NY	05/18/00	J Kramer	Potomac R., MD	36	04/21/01
9	A Anderson	Block Is., RI	07/04/00	G James	Mid Cheaspeake Bay, MD	31	04/21/01
1	D Hoxsie	Charlestown, RI	05/30/99	K Moss	Chesapeake Beach, MD	26	04/21/01
1 •	JC Wright	Linkhorn Bay, VA 2 mi. S Cape May Pt., NJ	02/15/01	J Hammond	Lynnhaven Inlet, VA		04/21/01
1 8	C Kennedy R Dobrowolski	Trenton, NJ	01/08/00 04/10/01	R Mogel W Doherty	Tilghman Is., MD	34	04/21/01
	B Sampson	Montville, CT	04/10/01	B Cummings	Trenton, NJ	32	04/22/01
	V Galgano	Long Branch, NJ	11/18/00	R Bergman	N. Cape May, NJ Brant Beach, NJ	25	04/22/01
	T Marburger	Northport, NY	12/03/00	W Grubb	West Haven, CT	25	04/23/01
	G Clusman	Sandy Hook, NJ	05/14/98	D Barnes	Kent Is., MD	23 30	04/25/01 04/25/01
7	A Anderson	Block Is., RI	06/14/00	M Tutalo	Sandy Hook, NJ		04/26/01

Species Length	Tagger	Place Tagged	Date	Recapturer	Location	Length	n Date
9 I	2 Zurheide	Ellis Island, NY	07/12/94	J Cooper	Fishkill, NY		04/26/0
16	Blank	NY Harbor	11/25/00	J Cooper	Fishkill, NY		04/26/0
9 \	W Brett	Provincetown, MA	06/15/00	G Hecker	Philadelphia, PA		04/29/0
4 A	Anderson	Thames R., CT	12/29/00	T Marburger	Northport, NY		04/29/0
8 F	R Ries	Cold Spring Hbr., NY	10/14/00	T Marburger	Northport, NY		04/29/0
2 7	Γ Shaheen	Rumson, NJ	06/07/99	N Berkman	Keansburg, NJ		04/30/0
	Della Porta	Swampscott, MA	07/23/00	T Baum	Delaware Bay, NJ	21	04/30/0
	V Fiorillo Jr.	Sandy Hook, NJ	11/12/00	R Wilson	Ocean City, NJ Barnegat Bay, NJ	27	04/30/0
	A Anderson	Block Island, RI	10/22/00	C Steinmann R Wilson	Ocean City, NJ		04/30/0
	C Carroll Jr.	Shrewsbury Rocks, NJ Block Is., RI	11/07/00 06/21/99	T Baum	Delaware Bay, NJ	28	05/01/0
	A Anderson A Messina Jr.	Manhasset Bay, NY	09/24/99	J Malonado	East R., NYC	20	05/01/0
	A Anderson	Block Island, RI	10/25/00	K Pelczar	Old Orchard Lt., NY	38	05/01/0
	G Ottavio	Cape May, NJ	10/17/98	DE Div. of F & W	Pennsville, NJ	20	05/01/0
	A D'Amato	Cape May, NJ	11/01/00	B Faux	Barnegat Inlet, NJ	30	05/01/0
	A Anderson	Galilee, RI	10/29/98	E DeGrote	Eddyville, NY	26	05/02/
	F Stunkel	Stamford, CT	09/18/96	J Boland	S of Ches. Bay Brdg., MD	34	05/02/0
	C Wilcox III	Moriches Inlet, NY	10/26/00	J Dever	Island Beach St. Pk., NJ	27	05/02/
	G Blank	Verrazano Brdg., NY	11/20/00	J Balogh	Bear Mountain, NY		05/02/
	P Grippo	Merrick Bay, NY	09/13/99	W Werner	Germantown, NY	28	05/02/
	W Marker	E. Rockaway Inlet, NY	06/10/00	B Mathews	Pungoteague Cr., VA	24	05/03/
4 :	I Daly	Elberon, NJ	10/30/00	T Tesch	Raritan Reach Chan., NJ	28	05/03/
.7 1	L Gonnello	Flynn's Knoll, NJ	06/28/00	A Ciambrone	Rumson Brdg., NJ	30	05/03/
6	G Ottavio	Cape May, NJ	10/24/00	J Lee	Reeds Beach, DE Bay, NJ		05/03/
8	D Hoxsie	Charlestown, RI	06/29/00	B Picard	East Haddam, CT		05/04/
9	S Jakubowski	Old Orchard Lt., NY	05/16/00	J Kling	Ches. Bay Brdg., MD	36	05/04/
9	H Sweet	Providence, RI	09/15/99	C Williams	Seaside Pk., NJ	22	05/04
4.	A Anderson	Thames R., CT	11/26/00	M Richard	Montville, CT	••	05/04
3.	A Schweithelm	Eatons Neck, NY	06/14/99	A Crisci	Beacon, NY	19	05/05
4	K Hollins	Seaside Pk., NJ	12/16/97	C Sepkaski	Shelton, CT	34	05/05
8	S North	Long Branch, NJ	11/18/00	J Lambariello	N. Lavallette, NJ	27	05/05
	A Anderson	Block Is., RI	06/16/00	A Lino	Keyport, NJ	27	05/05/
	S Torpey	Keyport, NJ	04/18/01	D Preston	Shelter Is., NY	37	05/05
	R Conklin	Moriches Inlet, NY	10/11/00	B Thurman	Moriches Inlet, NY	37	05/05
	A Schweithelm	Northport, NY	02/10/01	I Ismailı	North Haven, CT		05/06
	R Gardrel	Block Island, RI	11/12/00	T Krause	Albany, NY	22	05/06
	H Sweet	Warren, RI	07/13/98	D Roberts G McPhee	Thames R., CT Thames R., CT	18	05/06
	A Anderson	Thames R., CT	11/26/00		W. Long Branch, NJ		05/06
	A Schweithelm	Eatons Neck, NY	08/05/00	G Epstein	Sandy Hook, NJ	29	05/06
	A Anderson	Block Is., RI	06/21/00	S Torpey J Svenda	Port Monmouth, NJ	29	05/07
	G Blank	East R., NYC	11/06/98 06/02/00	E Sciegel	Sandy Hook, NJ	24	05/07
	W Matuszak	Gilgo Bch., NY	07/09/00	C Foster	Upper Raritan Bay, NJ	30	05/07
	R Locke B Shillingford	Provincetown, MA Strathmere, NJ	10/03/99	D Quasney	Cove Pt., MD	27	05/07
		Little Neck Bay, NY	10/22/99	J Medina	F.D.R. Drive, NYC	19	05/07
	A Messina Jr. I Mittelmark	Jones Beach Inlet, NY	07/05/00	R Newallis Jr.	Keansburg, NJ	23	05/07
	A Messina	Little Neck Bay, NY	08/29/99	M Prete	Six Mi. Reef, Clinton, CT	25	05/08
	R Leja	Bridgeport, CT	10/23/98	J Colburn	Norwich, CT	31	05/09
	R Notine	Tin Can Grounds, NY	11/02/00	L Gonnello	Staten Is., NY	30	05/09
	B Masse	Narragansett Bay, RI	08/30/99	M Kahney	Island Beach St. Pk., NJ	29	05/09
3	S North	Atlantic Highlands, NJ	11/20/99	R Johnson	Island Beach St, Pk, NJ	26	05/09
9	M Simmons	Barnegat Light, NJ	11/19/97	B Rinelli	Sandy Hook, NJ	24	05/09
8	A Anderson	Block Is., RI	09/29/00	J McCombre	Island Beach St. Pk., NJ	29	05/10
6	P Johnson Sr.	Charlestown, RI	10/21/00	P Maranda	Cape Cod Canal, MA	28	05/11
5	D Kelly	Sag Harbor, NY	06/19/00	B Jemison	Sandy Hook Bay, NJ	27	05/17
4	S Jakubowski	Hoffman Is., NY	11/17/00	A Lino	Jamaica Bay, NY	28	05/1
3	C Carroll Jr.	Sandy Hook, NJ	09/30/00	L Gonnello	Old Orchard Lt., NY	26	05/1
3	J Delia Porta	Swampscott, MA	09/09/99	M Parks	Plum Gut, NY	29	05/13
5	A Teal	Raritan Bay, NJ	06/12/99	C Carroll Jr.	270 Bright, NJ	28	05/12
2	B Shillingford	Corson's Inlet, NJ	10/06/94	B Shillingford	Strathmere, NJ	25	05/12
6	R Conklin	Norwalk, CT	06/28/00	F Pena	158th St., Hudson R., NYO	18	05/1
10	H Sweet	Warren, RI	09/28/98	J Polando	Warren, RI		05/13
8	M Willey	Augustine Beach, DE	07/13/00	M Willey	Augustine Beach, DE	10	05/12
25	W Marker	E. Rockaway Inlet, NY	06/09/00	R Diefenbach	Keyport, NJ		05/13
19	M Strober	Hell Gate, NYC	10/09/00	F Shelton	U.N., East R., NYC	19	
17	E Petronio Jr.	Pt. Judith, RI	06/02/98	K Markow	Spring Lake, NJ	27	05/13
			07/13/00	B Simonetti	Rockaway Beach, NY	31	05/14

15

Spec Leng		Place Tagged	Date	Recapturer	Location	Leng	th Date
24	R Conklin	Moriches Inlet, NY	10/08/99	B Geres	Moriches Bay, NY	26	05/14/01
18	S Knapik	Jones Beach, NY	10/31/99	J Smith	Loveladies, NJ	25	05/14/01
26	A D'Amato	Cape May Hbr., NJ	03/30/00	M Costa	Westport R., MA	31	05/14/01
26	R Szellan	Verrazano Brdg., NY	11/02/00	M Binder	Lavallette, NJ	27	05/14/01
22	J Della Porta	Lynn, MA	08/10/99	K Murphy	Truro, MA	26	05/14/01
12	T Lake	Bay Ridge, NY	11/21/98	R Pancoast	Barnegat Lt., NJ	23	05/15/01
20	R Nystrom	Bridgeport, CT	04/14/01	L Fox	S. Windsor, CT		05/15/01
17	R Grobarz	Sea Bright, NJ	12/10/97	F Christenson	Hempstead Hbr, NY	30	05/15/01
19	W Perlman	Atlantic Beach, NY	09/12/92	R Bellington	Jamaica Bay, NY	30	05/15/01
22	C DeFoe	Deal, NJ	11/18/00	T Chiarappo	Race Pt., MA	22	05/15/01
22	GS Gray	Charlestown, RI	05/31/00	R Mrachek	Charlestown, RI		05/15/01
23	A D'Amato	5 mi. S Cape May, NJ	11/29/99	R Pockett	Niantic, CT		05/15/01
15	J Mahan	Jersey City, NJ	05/10/01	K Nelson	Essex, CT	18	05/15/01
37 32	A LoCascio	Manhasset Bay, NY	06/20/96	R Mrachek	Charlestown, RI		05/15/01
20	C Chechoski Jr.	Housatonic R, CT	05/09/01	J Verbanic	Derby dam, CT	34	05/16/01
20	A Anderson	Charlestown, RI	10/14/98	S Inthisone	E Haddam, CT	25	05/16/01
20	W Smagalski	Upper Hackensack R., NJ	10/19/00	R Koeppen P Chidyllo	Hackensack R., NJ		05/16/01
24	C Carroll Jr.	Normandy Beach, NJ	12/27/98	J Thummel	Newburgh, NY	24	05/16/01
26	S Jakubowski	Romer Shoal, NJ	06/27/00	T Sehnal	Barnegat Inlet, NJ	27	05/16/01
18	A D'Amato	Cape May Inlet, NJ	03/30/00 05/15/98	G Weber	Perth Amboy, NJ	26	05/17/01
14	E Petronio Jr.	Pt. Judith, RI	09/16/97	L Sehnal	Galilee, RI	28	05/17/01
30	G Kerkhan	Raritan Bay, NJ	06/10/00	R Coffey	Perth Amboy, NJ	24	05/18/01
22	W Marker	E. Rockaway Inlet, NY	04/21/01	R Connors	Sandy Hook, NJ		05/18/01
25	G Palmer	Island Beach St. Pk., NJ	10/03/98	J Wygand	Barnegat Bay, NJ		05/18/01
23 28	R Leja	Bridgeport, CT	05/13/00	B Biedinger	Cold Spring Hbr., NY		05/18/01
26 24	A Anderson	Montauk Pt., NY	10/20/00	P Haertel	Shrewsbury R., NJ	30	05/18/01
22	K Hollins	Island Bch. St. Pk., NJ	09/25/97	R Manera	Island Beach St. Pk., NJ	26	05/18/01
26	B Shillingford W Perlman	Flat Creek, NJ Rockaway, NY	11/18/99	R Popp	Cape May Inlet, NJ	24	05/18/01
20	R Leja	Bridgeport, CT	10/25/00	T Slaugenhaupt	Moriches Bay, NY East Haven, CT		05/18/01
24	T Rınaldi	Mattituck, NY	07/28/00	F Mildner	Mt. Sinai, NY	22	05/19/01
25	D Kelly	Sag Harbor, NY	06/01/00	A Matthers	Sag Harbor, NY	25	05/19/01
29	A Anderson	Block Is., RI	09/20/96	G Assenza	Sands Pt., NY	26	05/19/01
29	A Anderson	Montauk, NY	05/11/01	J Talbot	The Race, L.I. Sound	35 31	05/19/01
18	H Sweet	Providence, RI	07/29/99	R Piedmont	Democrat Pt., L I., NY	26	05/19/01
26	E Feret	Freeport, NY	05/18/99	A Casciano	Freeport, NY	29	05/19/01 05/19/01
21	A Schweithelm	Northport, NY	03/25/01	N Hursh	Watch Hill, RI	21	05/19/01
25	G Nigro	Sandy Hook, NJ	05/29/99	S Gabler	Little Egg Inlet, NJ	28	05/19/01
20	D Goodwin	Jones Inlet, NY	11/26/99	K Taffurelli	Bay Ridge Flats, NY	22	05/19/01
24	T Matraxia	Sandy Hook, NJ	09/26/99	V Sharma	Chesapeake Bay, VA	27	05/19/01
22	M Simmons	Barnegat Lt, NJ	10/31/00	J Fisette	Prudence Is., RI	22	05/20/01
24	R Pirone	Hart Is , NY	06/19/00	R Dolby	Kings Pt., NY	25	05/20/01
31	S Jakubowski	Old Orchard Lt., NY	05/17/00	R Polo	Atlantic Highlands, NJ	37	05/20/01
15	S Knapik	Jones Beach, NY	11/20/99	R Simon	Cape May Pt., NJ	17	05/20/01
27	J Beaver	7s, Sandy Hook, NJ	06/17/00	D Atkın	Orange Cty., Hudson R., NY	28	05/20/01
17	E Taylor	Sea Bright, NJ	05/06/00	J Dotsey	Long Beach, NY	20	05/20/01
28	C Carroll Jr.	Sandy Hook, NJ	09/16/00	M McCarthy	Sandy Hook, NJ		05/20/01
43	F Neuscheler	Fire Is., NY	10/25/00	R Bauer	Bourne, MA	43	05/21/01
23	G Horvath	Barnegat Inlet, NJ	08/23/00	J Gilkey	Island Beach St. Pk., NJ	25	05/21/01
22	D Kelly	Orient Pt., NY	06/25/00	H Wheelock	Haddam, CT	25	05/22/01
30	F Jessup II	Quogue, NY	10/15/00	B Elliott	Indian R. Inlet, DE	31	05/22/01
28	A Anderson	Block Is., RI	06/15/00	P Rosetta	Haddam, CT	29	05/23/01
25	M Tabasso	Ventnor, NJ	05/01/01	D Talerico	Island Beach St. Pk., NJ		05/23/01
19	H Sweet	Warren, RI	06/07/99	J Polando	Warren R., RI		05/23/01
26	A Anderson	Block Is., RI	09/29/00	J Den Bleyker	Island Beach St. Pk., NJ	27	05/23/01
20	W Anderson	Provincetown, MA	10/17/00	M Peden	Montauk Pt., NY		05/23/01
13	H Sweet	Warren, RI	06/12/98	J Polando	Warren R., RI		05/23/01
23	G Cıriello	Pt. of Sandy Hook, NJ	11/06/97	D Bier	Raritan Bay, NJ	27	05/24/01
17	D Hoxsie	Pt Judith, RI	08/19/97	H Kampton	Pt. Lookout, NY	29	05/24/01
21	M Simmons	Barnegat Lt., NJ	09/30/97	T Andreasen	Flynn's Knoll, NJ	33	05/24/01
27	P Grippo	Jones Beach, NY	11/19/00	J Johnston	Sagamore, MA	27	05/24/01
26	R Conklin	Moriches Inlet, NY	06/03/00	C Pulver	Moriches Bay, NY	28	05/25/01
23	G Blank	East R., NYC	10/12/97	D Rodriguez	96th St, East R., NYC	28	05/25/01
30	F Coronato	Flynn's Knoll, NJ	06/15/98	N Petrou	Jamaica Bay, NY	36	05/25/01
	T 16	Shinnecock Inlet, NY	06/22/99	B Ferro	Seaford, NY		05/25/01
23	T Marburger					28	03/43/01
23 21	F Stunkel	Stamford, CT Black Bks., Wantagh, NY	07/24/98 06/16/00	J Verbanic Jr. V Gangi	Derby, CT Black Bks., Wantagh, NY	28	05/25/01

Specie Lengti	_	Place Tagged	Date	Recapturer	Location	Lengt	h Date
10	H Sweet	Warren, RI	10/31/99	D Wilson	Taunton R., MA	22	05/26/01
18 20	G Canning	Atlantic City, NJ	05/20/00	S Scopoulis	Beach Haven, NJ	24	05/26/01
26	C Jazmin Jr.	Great Egg Bay, NJ	05/11/95	L Esposito	Great Egg Hbr. R., NJ	32	05/26/01
30	C Wilcox III	Moriches Inlet, NY	11/23/99	M Zajicek	Moriches Bay, NY	35	05/26/01
22	C Carroll Jr.	Sandy Hook, NJ	09/25/00	E Senz	Sandy Hook, NJ	22	05/26/01
27	R Thestrup	Rhinecliff, NY	05/04/01	K Carson	East R., NYC	27	05/26/01 05/26/01
23	P Grippo	Merrick Bay, NY	11/10/99	W Firtion	RI waters	27 26	05/26/01
17	T Shaheen	Rumson, NJ	04/18/99	G Sacco G Nilsen	Flynn's Knoll, NJ Fire Is. Inlet, NY	23	05/26/01
17 10	J Casey G Horvath	Sca Girt, NJ Trenton, NJ	06/08/00 05/10/01	M Virgulti	Bristol, PA		05/26/01
20	R Kyker	Norwalk, CT	11/06/99	E Mulak	Yarmouth Port, MA	24	05/27/01
23	G Karr	Island Beach St. Pk., NJ	05/20/01	P Langenbach	Sandy Hook, NJ		05/27/01
21	R Stroz	Sandy Hook, NJ	11/08/00	R Edward	Atlantic Beach Brdg., NY		05/27/01
23	W Perlman	Atlantic Bch., NY	05/09/99	R Hirschberg	Reynold's Chan., NY	28	05/27/01
15	A Anderson	Thames R., CT	04/07/01	P Maglio	E. Boston, MA	25	05/27/01
14	J Yamakaitis	Sandy Hook, NJ	10/31/97	R Johnson	Island Beach St. Pk., NJ	25 27	05/27/01 05/27/01
19	J Calamia	East R., NY	01/07/98	M Monem M Riesz	Canarsie, NY Raritan Bay, NJ	27	05/27/01
19 23	P Chowansky R Kyker	Sea Girt, NJ Norwalk, CT	06/21/99 10/27/99	B Odon	Deal, NJ	26	05/28/01
23	R Pirone	Hart Is., NY	06/19/00	W Koschak	Hart Is., NY	25	05/28/01
26	L Gonnello	Flynn's Knoll, NJ	06/27/00	R Sarinelli	Flynn's Knoll, NJ	26	05/28/01
25	D Kelly	Fishers Is., NY	06/24/00	N Steinmeyer	Salisbury Beach, MA	28	05/28/01
27	R Thulin	Norwalk Islands, CT	08/03/98	H Bussem	Highlands Brdg., NJ	31	05/28/01
24	F Heal	West Bank Lt., NY	11/20/99	A Solana	Flynn's Knoll, NJ	27	05/28/01
25	R Stroz	Flynn's Knoll, NJ	07/08/00	H Nabas	Flynn's Knoll, NJ	29	05/28/01
20	G Blank	Hell Gate, NY	09/23/00	W Ackerman	63rd St , East R., NYC	27	05/29/01 05/29/01
25	M Strober	Upper East R., NYC	06/17/00	B Kondracki C Moran	East R., NYC Dennis, MA	30	05/29/01
26 17	A D'Amato	Cape May Inlet, NJ Ches. Bay Brdg. Tun., VA	12/04/99 12/21/00	D Benhoff	Tilghman Is., MD	21	05/29/01
27	JC Wright W Perlman	Rockaways, NY	11/20/00	N Calheta	Fairhaven, MA	29	05/29/01
22	R Conklin	Moriches Inlet, NY	11/19/99	D Sherry	Seaside Pk., NJ	28	05/29/01
29	J Balicki	Lavallette, NJ	11/06/00	F Massaro	Lavallette, NJ	31	05/29/01
27	L Gonnello	Belford, NJ	10/27/99	A Beaudoin	Salisbury, MA	29	05/29/01
26	A LoCascio	Larchmont, NY	09/17/99	E Eichin	Hempstead Hbr., NY	28	05/29/01
23	J Casey	Old Field, NY	11/09/00	L Thai B Wazek	Westport, CT	35	05/30/01 05/30/01
34	S Jakubowski	Raritan Reach, NJ	05/10/99 07/04/00	R Lay	Block Is., RI Raritan Bay, NJ	26	05/30/01
23 27	R Stroz W Perlman	Flynn's Knoll, NJ Long Beach, NY	10/24/00	J Campbell	Bourne, MA	30	05/30/01
21	T Baricevich	Flynn's Knoll, NJ	11/20/99	D Ross	Waquoit Bay, MA	22	05/30/01
20	R Slobodian	Trenton, NJ	06/25/00	F Dringos	Trenton, NJ		05/31/01
22	H Sweet	Warren, RI	05/31/98	G Richard	Warren, RI	27	05/31/01
27	R Villella	Warren R., RI	06/22/00	J Morrison	Warren, RI	29	05/31/01
15	H Sweet	Warren, RI	07/29/98	F Maciel	Warren, RI	27	05/31/01
24	M Strober	Hell Gate, NY	04/22/00	D Lyons	Fishers Is., NY	24	06/01/01 06/01/01
23	W Perlman	Romer Shoal, NJ	04/27/01	R Parabicoli	Bourne, MA Fire Is. Inlet, NY	24	06/01/01
23	H Bowman III	Fire Is. Inlet, NY	05/10/01 11/14/00	M Fedora M Haight	Guilford, CT	28	06/01/01
28 26	C Kennedy A Anderson	2 mi. SE Cape May Inlet, NJ Block Is., RI	05/15/01	L Winston	Orient Pt., NY	29	06/01/01
21	R Slobodian	Bristol, PA	05/20/01	P Steiner	Lambertville, NJ		06/01/01
19	GS Gray	Charlestown, RI	05/30/98	L McCarthy Jr.	Wantagh Brdg, L.I., NY	24	06/01/01
21	R Kyker	Norwalk, CT	10/18/97	W Ellison	Raritan Bay, NJ	30	06/02/01
27	K Carrigan	Rockport, MA	10/05/00	P Lobozza	Gilgo Beach, NY	28	06/02/01
26	R Conklin	Moriches Inlet, NY	11/21/99	H Edwards	Moriches Inlet, NY	31	06/02/01
27	R Villella	Warren R., RI	06/16/00	J Velardo	Warren, RI Sandy Hook, NJ	26	06/02/01 06/03/01
24	W Marker	Atlantic Beach, NY	06/05/00	C Gerstner W McGinley	Indian R. Inlet, DE	29	06/03/01
25	A Anderson	Block Is, RI Connecticut R., CT	06/25/00 05/10/01	M McCabe	Mystic R., CT	16	06/03/01
16 22	A Anderson K Hollins	Island Beach St. Pk., NJ	11/04/00	R Fadrowski	Jones Inlet, NY	23	06/03/01
24	T Leonardis	Sea Isle City, NJ	05/25/01	G Smith	Pt. Pleasant Beach, NJ	25	06/03/01
29	J Daly	Deal, NJ	10/02/00	V Gathmann	Deal, NJ	31	06/03/01
27	A Anderson	Block Is., RI	07/18/00	C Erdmann	Wantagh, NY	30	
17	A Anderson	Thames R., CT	01/07/01	D Terwilliger	Saco R., ME		06/03/01
26	T Leonardis	Sea Isle City, NJ	07/17/00	M Robey	Island Beach St. Pk., NJ	29	06/04/01
28	E Feret	Freeport, NY	09/10/99	M Holtz R Groh	Freeport, NY Rellport, NV	31	06/04/01 06/04/01
26	E Brachman	Plum Gut, NY Charlestown, RI	08/17/00 05/03/98	J Polando	Bellport, NY Warren, RI	20	
15 26	D Hoxsie A Anderson	Block Is., RI	06/18/00	P Zega	Perth Amboy, NJ	28	
20	A AMERICA	2100R 10., 114					

	ecies igth Tagger	Place Tagged	Date	Recapturer	Location	Length Da
16	H Sweet	Warran DI	10/04/00			
18	T McCandless	Warren, RI Jamestown, RI	10/04/98 09/28/98	J Polando	Warren, RI	19 06/05/
18	H Sweet	Bristol, RI	06/29/00	P Grippo	Jones Beach, NY	23 06/05/
23	R Pirone	Hart Is., NY	07/08/00	S Maggiacomo R Testasecça	Warren, RI	20 06/05/
11	T Lake	Robbins Reef, NJ	11/26/99	D Crepeau	SW of Hart Is , NY	24 06/05/
24	S Jakubowski	West Bank Lt., NY	06/10/00	D Watson	Narragansett, RI	16 06/06/
30	A LoCascio	Throgs Neck Brdg., NY	11/12/00	G Petschauer	Wellfleet, MA Glen Cove, NY	06/06/
27	E Scola	Lower Hudson R., NY	06/02/01	J Mahan	Statue of Liberty, NY	35 06/06/
23	P Chowansky	Island Bch. St. Pk., NJ	06/20/99	R Williams	Wantagh Pkwy. Brdg., NY	27 06/06/
23	R Pirone	Manhasset Bay, NY	07/13/00	L Madura	Manhasssat Bay, NY	28 06/06/
25	T Marburger	Shinnecock Inlet, NY	06/13/99	T Pıleski	Moriches Inlet, NY	06/06/0 30 06/06/0
22	R Stroz	Sea Bright, NJ	11/17/99	M Harrington	Branford, CT	24 06/06/0
21	F Adams	Hudson R., NJ	11/08/00	R Marcel	Jones Beach, NY	06/06/0
20	A Schweithelm	Asharoken, NY	07/20/00	R Cedar	Eatons Neck, NY	23 06/06/0
30 18	H Sweet	Warren, RI	09/18/00	J Wojtyto	Barrington, RI	31 06/06/0
28	R Grobarz R Gardrel	Sandy Hook, NJ	06/04/97	J Colucci	Raritan Bay, NJ	27 06/07/0
23	J Dickinson	Block Island, RI	07/12/00	M Morrin	Little Egg Inlet, NJ	29 06/07/0
17	M Strober	Susquehanna flats, MD	03/27/00	J Shub	Baltimore Lt., MD	25 06/07/0
24	A Anderson	Robbins Reef, NY	08/30/98	S Gendi	Bayonne, NJ	06/08/0
22	S North	Block Island, RI	07/05/00	R Meola	Island Beach St. Pk., NJ	25 06/08/0
26	L Gonnello	Long Branch, NJ	11/18/00	J Spahr	Rockaway Reef, NY	23 06/08/0
16	A Schweithelm	Romer Shoal, NJ Northport, NY	10/11/99 04/13/00	A Dzikowicz G Karas	Bay Ridge, Bklyn., NY	28 06/08/0
28	A Anderson	Block Is, RI	06/02/00	T Cirillo	Naugatuck R., Derby, CT	06/09/0
17	D Hoxsie	Charlestown, RI	06/03/99	E Dingee	Muskeget Chan., MA	06/09/0
29	W Marker	E. Rockaway Inlet, NY	05/30/00	K DuPrey Jr.	Montauk Lt., NY	06/09/0
23	J Dalder	Hampton Bays, NY	08/25/00	J Zage	E. Rockaway Inlet, NY	35 06/09/0
23	W Marker	Atlantic Beach, NY	06/09/99	V Fiscella	Southampton, NY	25 06/09/0
20	F Stunkel	Stamford, CT	10/25/93	A Goncalves	Montauk, NY Chicopee, MA	28 06/09/0
25	H Bowman III	Fire Is. Inlet, NY	05/08/01	B O'Halloran	Boston, MA	06/09/0
17	K Grover III	Atlantic Highlands, NJ	10/12/00	C Rowe	Sagadchoc Bay, ME	26 06/09/0
31	C Chechoski Jr.	Housatonic R., CT	05/26/01	J Verbanic Jr.	Derby, CT	06/10/0
28	M Murray	Gloucester, MA	06/21/00	J Manzi	Gloucester, MA	32 06/10/0
25	P Johnson Sr.	Block Island, RI	10/01/00	R Grillo	Barnegat Lt., NJ	30 06/10/0: 26 06/10/0:
27	R Conklin	Moriches Inlet, NY	10/08/99	M Smith	Massapequa, NY	
28	A Anderson	Block Island, RI	10/26/00	R Phelan	Charlestown, RI	30 06/10/01 30 06/10/01
22	R Conklin	Peconic R., NY	05/11/01	P Nguyen	I mi. S Block Is., RI	23 06/10/01
21	P Grippo	Swift Cr., Freeport, NY	09/15/00	В Геттагі	Fire Is. Inlet, NY	24 06/10/01
16	A Messina	Kings Pt., NY	08/18/99	W Romeyko	Kings Pt., NY	21 06/10/01
25 21	GS Gray	Charlestown, RI	10/05/98	S Chirdon	Charlestown, RI	29 06/11/01
25	J Foti	Staten Is., NY	08/14/98	R Leyrer	Flynn's Knoll, NJ	24 06/11/01
3	P Grippo T Matraxia	2nd Wantagh Brdg., NY	07/18/00	T Prokop	Barnegat Lt., NJ	28 06/11/01
9	S Jakubowski	Sandy Hook, NJ Breezy Pt., NY	06/10/01	J Dotsey	Rockaway, NY	23 06/11/01
7	H Sweet	Barrington, RI	10/23/00 06/10/98	J Van Baalen J Steneck	N of Sesuit Hbr, MA	31 06/11/01
8	J Beaver	7s, Sandy Hook, NJ	06/17/00	M Pimpinelli	Oyster Bay, NY	30 06/12/01
0	T Marburger	Northport, NY	04/22/01	W Purrier	Flynn's Knoll, NJ	30 06/12/01
9	F Casey	Boston, MA	05/29/01	A Campello	Sandwich, MA	20 06/12/01
9	R Szellan	Sandy Hook Bay, NJ	05/18/00	G Lake	Mouth of Charles R., MA	30 06/12/01
4	K Carrigan	Rockport, MA	07/08/00	F Cordero	E. Rockaway Inlet, NY	33 06/12/01
0	A Anderson	Thames R., CT	12/29/00	A Messina Jr.	Lawrence, MA	26 06/13/01
5	G Blank	NY Harbor	10/26/00	J Rhein	Little Neck Bay, NY Glen Cove, NY	20 06/13/01
7	E Rodak Jr.	Island Bch. St. Pk., NJ	11/05/00	S Goodman	Topsham, ME	38 06/13/01
7	A Schweithelm	Eatons Neck, NY	09/06/00	D Railo	Northport, NY	27 06/13/01
7	L Gonnello	Flynn's Knoll, NJ	04/24/01	R Newallis Jr.	Flynn's Knoll, NJ	06/13/01
9	R Guttadauro	Princess Bay, NY	10/22/00	C Dandrow	Flynn's Knoll, NJ	28 06/13/01
)	R Conklin	Moriches Inlet, NY		J De Mio	Sandy Hook Chan., NJ	29 06/14/01
)	A Anderson	Charlestown, RI		H Roeck	Hoffman Is., NY	28 06/14/01
3	M Strober	East R., NYC		T Zemianek	Narragansett, RI	29 06/14/01
)	J Mulkerin	Union Beach, NJ		B Roberts	Sandy Hook, NJ	14 06/14/01
5	B Shillingford	Corson's Inlet, NJ		C Nardo	Somers Pt., NJ	20 06/14/01
:	S Jakubowski	Romer Shoal, NJ	06/01/01	D Mundy	Jamaica Bay, NY	23 06/14/01 06/14/01
	W Perlman	Rockaways, NY	05/28/01	R Miclette	Block Is., RI	06/14/01
	L Gonnello	Flynn's Knoll, NJ	04/28/01	R Dreyer	l mi. E Sandy Hook, NJ	25 06/15/01
•	T McConnell	Provincetown, MA		D Detwiler	Little Egg Inlet, NJ	22 06/15/01
	G Kerkhan	Elberon, NJ		M Noll	Deal, NJ	25 06/15/01
	L Vosseller	Island Beach, NJ	11/18/99 .	J Dotsey	Rockaway, NY	24 06/15/01

Leng	cies gth Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
16	A Anderson	Matunuck, RI	11/09/00	J Shampang	Provincetown, MA		06/15/01
20	H Bowman III	Fire Island Inlet, NY	05/18/00	J Coleman	Reynold's Chan., NY	22	
29	S Jakubowski	Hoffman Is., NY	11/20/00	R Carılli	Verrazano Brdg., NY	30	
29	R Chmiel	Stonington, CT	05/28/00	A Fee	Fishers Is., NY	29	
23	L Gonnello	Flynn's Knoll, NJ	08/09/00	J De Mio	Flynn's Knoll, NJ	24	
20	H Sweet	Warren, RI	09/27/00	F Maciel	Warren, RI	24	
22	T Shaheen	Locust, NJ	05/26/01	R Rice	Provincetown, MA	24	06/15/0
16	A Perednia	East R., NY	11/12/96	J Medina	Pier 35, NYC	22	
25	A Anderson	Block Is, RI	07/02/00	M Amodeo	Block Is., RI	28	
31	C Chechoski Jr	Derby Dam, CT	05/02/01	R Hadden	Derby Dam, CT	31	06/16/0
28	B Bottino	Spring Lake, NJ	06/27/99	M Yajcaji		31	06/16/0
23	S Jakubowski	West Bank Lt., NY	06/17/00	G Maimone	Shark R., NJ Flynn's Knoll, NJ	25	06/16/0
27	G Kerkhan	Sandy Hook, NJ	09/30/00	A Bencivenga	· · · · · · · · · · · · · · · · · · ·	29	06/16/0
30	R Thestrup	Kingston, NY	04/30/01	T Hansen	Sandy Hook, NJ	30	
21	G Kerkhan	Sandy Hook, NJ	10/11/97	T O'Donnell	Island Beach St. Pk., NJ	31	06/16/01
20	G Horvath	Barnegat Inlet, NJ	11/14/00	M Stafford	Sea Bright, NJ	31	06/16/01
24	P Lowcher	Sea Bright, NJ	05/03/98		Barnstable Hbr., MA	20	06/17/01
24	I Mittelmark	Wantagh, NY	07/30/99	R Mahoney	Lower NY Bay	28	06/17/01
30	G Blank	NY Harbor		B Gottlieb	Meadowbrook Brdg., NY	30	06/17/01
24	L Gonnello	Flynn's Knoll, NJ	10/27/00	S Kasabula H Bussem	Block Is., RI	30	06/17/01
20	R Nystrom	Bridgeport, CT	06/29/00		Sandy Hook Rip, NJ	25	06/17/01
36	D Kelly		07/01/00	R Katz	Bridgeport, CT	23	06/18/01
27	D Kelly	Sag Harbor, NY	05/08/99	R Drew	Shelter Is., NY	44	06/18/01
23	•	Orient Pt., NY	09/28/99	R Winton	Norwich, CT	32	06/18/01
27	R Nystrom	Bridgeport, CT	08/27/00	R Nystrom	Bridgeport, CT	25	06/18/01
	M Berger	Atlantic Beach Brdg., NY	05/30/01	J Thorne	Atlantic Beach Brdg., NY	28	06/18/01
19 20	G Kerkhan	Sea Bright, NJ	06/11/01	N Pauels	Sea Bright, NJ	20	06/19/01
24	R Pearson Jr.	Breezy Pt., NY	10/12/98	P Newman	East R., Astoria, NY	20	06/19/01
	L Gonnello	Romer Shoals, NJ	06/18/01	G Maimone	Flynn's Knoll, NJ	24	06/19/01
16	R Pearson Jr.	Upper Croton R., NY	05/27/01	R Pearson Jr.	Upper Croton R., NY	16	06/19/01
20	K Hollins	Island Beach St. Pk., NJ	05/07/98	J Zema	Sandy Hook, NJ	29	06/19/01
20	G Horvath	Barnegat Inlet, NJ	05/30/01	C Krencicki	Island Beach St. Pk., NJ	22	06/20/01
23	L Gonnello	Flynn's Knoll, NJ	08/08/00	R Newallis Jr.	Flynn's Knoll, NJ	25	06/20/01
22	G Kerkhan	Sandy Hook, NJ	09/17/00	E Kleiner	Sandy Hook, NJ	24	06/20/01
29	S Jakubowski	Raritan Reach, NJ	10/26/99	L Clement	Jamaica Bay, NY	33	06/20/01
26	W Perlman	Highlands, NJ	11/04/00	W Brown	Deal, NJ	29	06/20/01
17	A LoCascio	Manhasset Bay, NY	10/09/95	J Murnan	New Rochelle, NY	34	06/20/01
25	K Carrigan	Rockport, MA	05/29/01	S Piraino	Rockport, MA	25	06/20/01
27	J Foti	Staten Is., NY	05/30/01	F Casey	Boston, MA	27	06/20/01
:5	G Kerkhan	Provincetown, MA	05/26/01	K Mullen	Brewster flats, MA	25	06/20/01
2	J Karolides	Danvers, MA	05/16/01	J Karolides	Danvers, MA	22	06/21/01
6	S Jakubowski	Hoffman Is., NY	11/26/99	R Gibson	Brunswick, ME	27	06/21/01
5	F Jessup II	Moriches Inlet, NY	10/29/00	J Loyer Jr.	Flynn's Knoll, NJ		06/21/01
6	R Pearson Jr.	Croton Bay, NY	10/27/00	R Pearson Jr.	Upper Croton R., NY	16	06/21/01
8	C Maxon	Hull, MA	08/01/00	D Fantasia	Salisbury, MA	30	06/21/01
5	L Gonnello	Flynn's Knoll, NJ	08/02/00	M Hanas	Flynn's Knoll, NJ		06/21/01
8	R Pearson Jr.	Croton Bay, NY	03/01/00	J Loyer	Flynn's Knoll, NJ	23	06/21/01
3	J Mills	Flynn's Knoll, NJ	07/16/97	F Tenore	Sandy Hook, NJ	27	06/21/01
i	C Bellinzoni	Jones Inlet, NY	05/20/01	E Smith	Nauset Beach, MA	31	06/21/01
5	A Anderson	Thames R., CT	01/07/01	R Parsons	Barnstable Hbr., MA	16	06/22/01
8	M Strober	Rikers Is., NY	11/19/00	A Long	Chatham, MA		06/22/01
3	A LoCascio	Throgs Neck Brdg., NY	11/19/00	M Chiapperino	Rikers Is., NY	24	06/22/01
4	R Leja	Bridgeport, CT	04/15/00	A Coster	Boston, MA		06/22/01
2	R Leja	Bridgeport, CT	09/30/00	T Rinaldı	Cutchogue, NY	23	06/22/01
0	G Blank	NY Harbor	10/26/00	M Bracamonte	Pt. Washington, NY	30	06/22/01
3	W Woodroffe Sr.	Riis Park, NY	09/29/00	P Mestichelli	Romer Shoal Lt., NJ	24	
5	G Nigro	Sandy Hook, NJ	07/25/98	R Mansfield	Offshr., Sea Bright, NJ		06/22/01
i	R Nystrom	Bridgeport, CT	09/17/00	R Leja	Bridgeport, CT	32	06/22/01
3	D Hoxsie	Charlestown, RI	05/23/99	S Maggiacomo	Narragansett, RI	22	06/23/01
3	A LoCascio	New Rochelle, NY	08/09/97	R Montchal	Kings Pt., NY	27	06/23/01
)	D Kelly	Sag Harbor, NY	06/01/00	A Rosenthal	_	25	06/23/01
, )	P Grippo	Montauk Pt., NY			E. Rockaway Reef, NY	23	06/23/01
:	A LoCascio		07/12/99	M Cusanelli	Sandy Hook, NJ	33	06/24/01
		Throgs Neck Brdg., NY	11/14/99	R Decker	N of Execution Lt., NY		06/24/01
! •	J Casey	Sea Girt, NJ	06/22/00	C Stamm	East R., NYC	25	06/24/01
	C Wilcox III	Moriches Inlet, NY	11/11/00	J Thompson	Cohasset, MA		06/24/01
3	B Semasek	Indian R., DE	05/31/01	F White	Weir R., Hull, MA		06/25/01
i	A Anderson	Block Is., RI	07/14/00	R Bellavance	Block Is., RI	28	06/25/01
3	G O'Driscoll	Wildwood, NJ	11/13/00	E Noll	Newport, RI		

Spe	cies						
Len		Place Tagged	Date	Recapturer	Location	Leng	th Date
25 15	L Gonnello A Anderson	Flynn's Knoll, NJ	06/01/01	A Rissin	Sandy Hook, NJ	26	06/25/01
21	F Stunkel	Pt. Judith Pond, RI Stamford, CT	06/12/01 10/06/98	G Champlin G Nigro	U.R.I. Campus, RI		06/25/01
25	G Kerkhan	Sea Bright, NJ	04/29/01	D Galligan	Flynn's Knoll, NJ	27	06/25/01
23	M Russo	Water Is., F.I., NY	10/26/00	R Miglino	Watch Hill, RI E. Rockaway Inlet, NY	28	06/26/01
20	G Nigro	Sandy Hook, NJ	11/20/99	M Placido	Jamaica Bay, NY	24 24	06/26/01 06/26/01
24	D Kelly	Sag Harbor, NY	05/20/01	J Hellerbach	Gardiner's Is., NY	24	06/26/01
26	J Della Porta	Swampscott, MA	09/05/00	G Graham	Newburyport, MA		06/26/01
15	A Schweithelm	Northport, NY	02/24/01	B Peterson	Niantic, CT	16	06/26/01
22 19	R Stroz A D'Amato	Sandy Hook, NJ	10/07/99	G Incorvaia	Sandy Hook, NJ	28	06/26/01
25	P Grippo	Cape May Rips, NJ Haunts Cr., L.I., NY	01/08/00 06/15/01	NY Bur. Marine Res. R Marcel	Jamaica Bay, NY	23	06/26/01
28	D Kelly	Fishers Is., NY	06/26/01	A Lemieux	Jones Beach, NY Old Lyme, CT	•	06/27/01
24	A Bencivenga	Sandy Hook, NJ	06/23/01	R Newallis Jr.	Flynn's Knoll, NJ	28	06/27/01
25	J Posh	Stratford, CT	10/19/99	J Sigona	Stratford, CT	25 28	06/27/01 06/27/01
28	A Anderson	Block Is., RI	07/03/00	V Mineo Jr.	Block Is., RI	36	06/27/01
18	J Gibbons	Atlantic Bch, NY	11/20/99	R Fink	Hoffman Is., NY	22	06/27/01
21	B Garfield	Portland, ME	07/31/99	B Garfield	Portland, ME	25	06/27/01
26 29	K Carrigan B White	Rockport, MA	05/27/01	M Jordan Sr. D Costa	Merrimack R., MA	27	06/27/01
30	A LoCascio	Wakefield, RI Hart Is., NY	10/18/00 10/19/01	A Rodriguez	Wellfleet, MA	30	06/28/01
27	A Anderson	Montauk, NY	05/17/00	D Monaco	Execution Lt., NY		06/28/01
21	D Kelly	Orient Pt., NY	10/26/00	C Brown	Westbrook, CT Narragansett Bay, RI	32	06/28/01
24	L Gonnello	Breezy Pt., NY	07/16/99	S Goldsen	Breezy Pt., NY	21 26	06/28/01 06/28/01
21	R Leja	Bridgeport, CT	07/29/00	E Reisinger	Bridgeport, CT	20	06/28/01
33	J Posh	Block Is., RI	06/29/00	E Palanzo	Block Is., RI		06/29/01
25	A D'Amato	3 mi SE Cape May, NJ	11/09/00	T Estona	York, ME	26	06/29/01
27 27	A Schweithelm	Hampton Bays, NY	06/15/01	J Vanderweyde	Hampton Bays, NY	29	06/29/01
26	A Anderson K Carrigan	Montauk Pt., NY Rockport, MA	07/18/98	J Giordano	Jones Inlet, NY	34	06/29/01
21	R Nystrom	Stratford, CT	06/22/00 05/18/00	S Lula M Dobosz	Newburyport, MA	28	06/29/01
27	A LoCascio	Throgs Neck Brdg., NY	10/27/00	J Bacchi	Milford, CT East R., NY	23	06/30/01
16	A Perednia	East R., NY	05/08/97	J Bacchi	East R., NY	27 26	06/30/01
20	J Cairns	Charlestown, RI	05/26/00	R Clark	Waterford, CT	22	06/30/01 06/30/01
24	D Kelly	Orient Pt., NY	10/13/00	C Cisterino	Greenport, NY		06/30/01
26	B Garfield	Portland, ME	07/29/00	B Tiner	Cundy Hbr., ME		06/30/01
31 20	W Marker	The Race, L.I. Sound	05/18/01	E Borsari	The Race, L.I. Sound		06/30/01
26	A Schweithelm R Conklin	Asharoken, NY Moriches Inlet, NY	05/29/00 08/21/99	F Jansen J Ogren	Kennebec R., ME	20	07/01/01
20	D Hoxsie	Charlestown, RI	05/22/98	C Knott	Salisbury, MA	32	07/01/01
24	R Conklin	Moriches Inlet, NY	06/25/99	W Starkjohann	Ship Bottom, NJ E. Rockaway Inlet, NY	28 29	07/01/01
26	L Gonnello	Romer Shoal, NJ	07/12/00	B Ehling	Sandy Hook, NJ	29	07/01/01 07/02/01
21	G Nigro	Sandy Hook, NJ	11/15/98	L Silvia	Fall River, MA	27	07/02/01
29	D Kelly	Orient Pt., NY	09/25/98	K Reda	Plum Gut, NY		07/02/01
30	K Carrigan	Rockport, MA	09/01/00	W Hadley	Merrimack R., MA	30	07/02/01
28 25	R Croteau R Pirone	The Race, L.I. Sound Manhasset Bay, NY	05/27/00 07/13/00	M Hamilton  D Burke	Branford Reef, CT	30	07/03/01
29	F Casey	Boston, MA	05/25/00	M Janiak Jr.	Gangway Rock, L.I. Sound		07/03/01
25	J Caputo	Manhasset Bay, NY	06/30/01	P Apuzzi	Beverly, MA		07/03/01
24	R Pirone	Manhasset Bay, NY	06/28/00	D Burke	Manhasset Bay, NY Gangway Rock, L.I. Sound		07/03/01
21	R Pirone	Harts Is., NY	06/17/01	T Foster	Pelham Bay, NY	24	07/03/01 07/04/01
29	R Conklin	Moriches Inlet, NY	11/12/00	J Economy	Scarborough, ME	31	07/04/01
15	A Anderson	Thames R., CT	01/07/01	A Bushman	Brunswick, ME		07/04/01
26	R Conklin	Moriches Inlet, NY	10/16/98	Unknown Fisherman	Moriches Inlet, NY	35	07/04/01
28	B White	Wakefield, RI Moriches Inlet, NY	05/01/01	B Gauthier	Potters Pond, RI		07/04/01
26 32	C Wilcox III A Anderson	Block Is., RI	09/29/00 05/27/00	C Robinson K Ludwig	Friendship, ME	28	07/05/01
25	D Kelly	Onent Pt., NY	10/13/00	J Haran III	Martha's Vineyard, MA Newburyport, MA		07/05/01
17	A LoCascio	Manhasset Bay, NY	11/16/98	D Burke	Gangway Rock, L.I. Sound	28	07/05/01 07/05/01
26	F Casey	Boston, MA	09/30/00	E Santerre	Scarborough, ME	26	07/05/01
24	G Kerkhan	Truro, MA	05/28/00	R Collins	2 mi. E Rye, NH		07/05/01
27	E Petronio Jr.	Block Is., RI	07/11/99	B Snyder	West Bank Lt., NY		07/07/01
24	S Jakubowski	Breezy Pt., NY	10/24/00	A Malvito	4 m1. S Montauk Pt., NY		07/07/01
23	R Nystrom	Stratford, CT	11/06/98	S Inthavong	Stratford, CT		07/07/01
30 24	F Casey A Anderson	Boston, MA Montauk Pt., NY	09/08/00 05/13/00	R Bergman H Lena	Boston, MA		07/07/01
19	B Shillingford	Corson Sound, NJ	06/28/98	C Conroy	Plum Is., NY Corson's Inlet NI		07/07/01
			25.20170		Corson's Inlet, NJ	25	07/08/01

Leng	th Tagger	Place Tagged	Date	Recapturer	Location	Lengt	h Date
20	R Nystrom	Bridgeport, CT	05/29/01	B Deraleau	Bridgeport, CT		07/08/01
19	T Burden	Sea Isle City, NJ	05/12/01	B Shillingford	I.C W., Strathmere, NJ	20	07/09/01
15	A Anderson	Thames R., CT	11/26/00	R Crafts	Barnstable Hbr, MA		07/09/01
18	A Schweithelm	Northport, NY	04/17/01	T Revicki	Mystic, CT	18	07/09/01
15	K Hollins	Island Beach St. Pk., NJ	11/27/98	K Hickey	Weymouth, MA	19	07/10/01
26	A Anderson	Montauk Pt., NY	10/21/00	T Watson	Cundy's Hbr., ME	28 38	07/10/01 07/10/01
31 24	S Fries A Mendes	Rockaway Inlet, NY	11/29/97 06/06/95	D Vosgien W Pına	Niantic, CT Cape Cod Canal, MA	30	07/10/01
27	R Kyker	Marion, MA Norwalk, CT	09/23/99	R Canfield	Norwalk, CT	28	07/10/01
18	J Mahan	Jersey City, NJ	02/13/00	B Brinkman	Sandy Hook, NJ	22	07/11/01
25	H Bowman III	Robert Moses Brdg., NY	05/08/01	D Hochberger	Sakonnet Pt., RI	27	07/11/01
22	A Anderson	Thames R., CT	01/02/00	C Crue	Newburyport, MA	26	07/11/01
26	D Kelly	Orient Pt., NY	06/16/00	A Bagliano	Lower NY Bay	29	07/11/01
36	R Szellan	Raritan Bay, NY	05/14/01	D Foley	Nantucket, MA	37	07/11/01
15	R Guttadauro	Princess Bay, NY	10/15/00	R Guttadauro	Princess Bay, NY	18 34	07/11/01 07/12/01
30 28	C Kennedy	Offshr., Cape May, NJ	05/01/00	S Berner R Lattime	The Race, L.I. Sound Newburyport, MA	34	07/13/01
31	S Jakubowski J Posh	West Bank Lt., NY Stratford, CT	11/05/99 10/07/95	J Sigona	Stratford, CT	34	07/13/01
27	D Kelly	Orient Pt., NY	10/01/00	J Nolan	Scarborough, ME	31	07/13/01
27	F Casey	Boston, MA	06/05/01	R Botolino	Massachusetts Bay	28	07/13/01
23	R Leja	Bridgeport, CT	10/30/99	J Simes	Plum Gut, NY		07/14/01
21	J Della Porta	Swampscott, MA	10/01/99	M Carter	S. Gardiner, ME	24	07/14/01
19	T Marburger	Northport, NY	12/13/98	R Lena	Niantic, CT	25	07/14/01
20	A Evangelista	Sandy Hook, NJ	04/30/00	A Arce	Verrazano Brdg., NY	28	07/15/01 07/15/01
26	J Gibbons	Sea Bright, NJ	11/17/99	E Baker	Montauk Pt., NY		07/15/01
22 22	C Carroll Jr W Perlman	Shrewsbury Rocks, NJ Atlantic Beach, NY	11/07/00 06/29/97	B Keane W Marker	Boston, MA E. Rockaway Inlet, NY	25	07/15/01
30	A Anderson	Block Island, RI	06/20/98	B Della Valle	Block Is., RI		07/15/01
19	R Conklin	Moriches Inlet, NY	08/02/99	M Waring Jr.	Mt. Hope Bay, RI	27	07/15/01
31	S Jakubowski	West Bank Lt., NJ	05/24/01	S Gacho	Montauk, NY		07/15/01
21	G D'Amato	Stratford, CT	06/01/95	L Lam	Manasquan, NJ	27	07/15/01
31	S Jakubowski	Old Orchard Lt., NY	05/16/01	R Jobin	Westerly, RI	35	07/16/01
27	A Anderson	Montauk Pt., NY	05/21/01	R Hanke	Jones Inlet, NY	27 35	07/16/01 07/16/01
31	A Anderson	Montauk Pt., NY	10/24/97	E Coggeshall R Ramos	S Martha's Vineyard, MA	33	07/17/01
25 21	S Jakubowski A Anderson	Robins Reef Lt., NY Thames R., CT	06/30/01 03/13/99	J Johnson Sr.	Kill Van Kull, NY Salt Pond, RI	24	07/17/01
26	F Stunkel	Stamford, CT	09/06/99	D Cameron	Charlestown, RI	33	07/18/01
31	J Economy	Scarborough, ME	07/04/01	C Swope Jr.	Scarborough, ME	31	07/18/01
23	A Anderson	Thames R., CT	02/15/99	A Patrizzo	Watch Hill, RI	33	07/18/01
24	E Petronio Jr.	Block Is., RI	08/02/99	C Snowden	Block Is., RI	24	07/19/01
21	P Grippo	Jones Beach, NY	06/03/01	J Carle	Fire Is. Inlet, NY	24 17	07/19/01 07/19/01
15	A Schweithelm	Eatons Neck, NY	09/04/00	A Schweithelm	Eatons Neck, NY	24	07/19/01
20	R Stroz	Monmouth Beach, NJ	12/13/99 05/07/99	S Berner J Machado	Waterford, CT Cape Cod Canal, MA	38	07/19/01
34 24	F Heal B Garfield	Staten Is., NY Portland, ME	07/26/00	R Beresford	Block Is., RI		07/20/01
26	A Anderson	Montauk, NY	05/15/00	G Fantal	Rockaway, NY	26	07/20/01
20	R Pirone	Hart Is., NY	07/24/00	R Pirone	Hart Is., NY	21	07/20/01
29	J Beaver	Flynn's Knoll, NJ	06/18/00	G Fantal	Rockaway, NY	31	07/20/01
34	Р Спрро	Montauk Pt., NY	09/24/98	A Golfo	Montauk Pt., NY	••	07/20/01
25	P Kozak	Esopus, NY	05/19/01	D Verdino	Jones Inlet, NY	28	07/21/01
23	T Shaheen	Rumson, NJ	10/13/00	A Lark	Rumson, NJ	24 33	07/21/01 07/21/01
29	F Stunkel	Stamford, CT	09/27/99	J Bees	Chatham, MA Middle Gr., L.I. Sound	38	07/21/01
36	D Kelly G Ottavio	Orient Pt., NY	06/25/00 11/02/00	F Mildner G Alcantara	Deale, MD	21	07/22/01
21 23	F Casev	Cape May Pt., NJ Boston, MA	06/08/00	J Earner	Boston, MA	24	07/22/01
17	A Anderson	Thames R., CT	12/29/00	M O'Brien	Falmouth, MA	19	07/22/01
23	J Foti	Staten Is., NY	09/07/97	J Foti	Hoffman Is., NY	31	07/22/01
29	E Scola	Lower NY Harbor	10/14/00	C Stamm	49th St., East R., NYC		07/22/01
33	F Montz Sr.	New Haven, CT	07/03/01	B Winsch	Madison, CT	32	07/22/01
27	F Laskowski	Fairfield, CT	07/23/99	R Mrowka Sr.	The Race, L.I. Sound	32	07/23/01
32	A LoCascio	Execution Lt., NY	05/22/99	P King	Nomans Is., MA Eatons Neck, NY	35 21	07/23/01 07/23/01
18	A Messina Jr.	Cold Spring Hbr., NY	07/20/00 10/15/00	E Hofmann C Rhee	Housatonic R., CT	31	07/23/01
24	J Posh	Stratford, CT Flynn's Knoll, NJ	10/15/00 04/24/01	E Nichols	Hampton Bays, NY	22	07/23/01
21	L Gonnello P Grippo	Jones Inlet, NY	11/13/00	B Bodner	Flynn's Knoll, NJ	25	07/23/01
	i Grippo				•		
23 21	P Grippo	Wantagh, NY	05/11/01	L Clement	Merrick Bay, NY		07/23/01

Sp	ecies						
Lei	ngth Tagger	Place Tagged	Date	Recapturer	Location	Len	gth Date
23	C Carroll Jr.	Sandy Hook MI	10/11/00	n nacita			
22	M Simmons	Sandy Hook, NJ Barnegat Lt., NJ	10/11/99		Sandy Hook, NJ	2	
20	F Stunkel	Stamford, CT	11/02/00 11/07/96		Randall Is., East R., NY	2	
31	A Anderson	Block Is., RI	06/19/01	A Anderson	Milford, CT	3.	
31	W Perlman	Rockaways, NY	11/20/00	M DellaRocco	Block Is., RI	3	
23	R Grobarz	Deal, NJ	06/10/01	B Sistad	Chatham, MA Shark R., NJ	3:	
32	C Wilcox III	Moriches Inlet, NY	09/29/00	M Letizia	Captree, NY	2:	
22	R Conklin	Moriches Inlet, NY	05/19/01	J Golebiewski	Old Lyme, CT	3- 2:	
24	M Strucich	Raritan Bay, NJ	11/04/00	M Ginolfi	Newburyport, MA	24	
26	S Jakubowski	Breezy Pt., NY	10/24/00	B Lewis	N. Scituate, MA	29	
27	T Rinaldi	Mattituck, NY	06/30/00	T Rınaldi	Cuthogue, NY	30	
28	A Anderson	Block Is., RI	06/04/00	D Champion	Brenton Pt., RI	31	
23	V Galgano	Long Branch, NJ	11/18/00	H Ingle	Provincetown, MA		07/27/01
28 28	R Pearson Jr.	Croton Bay, NY	05/02/01	R Sawash	Martha's Vineyard, MA		07/27/01
28	A Anderson A Anderson	Block Is , RI	06/02/00	J Girard	Block Is., RI	29	07/28/01
24	R Conklin	Block Is., RI	06/01/01	C Robb	Block Is., RI	28	07/28/01
19	F Stunkel	Moriches Inlet, NY	05/24/99	M Altizer	Moriches Bay, NY	33	07/28/01
28	A Brown	Stamford, CT	10/12/98	F Lamenstein G Stockley	Monomoy Is., MA	27	07/28/01
30	A Brown	Block Is., RI Block Is., RI	06/16/01 06/16/01	G Stockley	Block Is., RI		07/28/01
23	E Scola	Verrazano Brdg., NY	05/22/99	R Sorbara	Block Is., RI		07/28/01
28	A Brown	Block Is., RI	06/27/01	P Martin	New Haven, CT Block Is., RI	30	
26	R Conklin	Moriches Inlet, NY	09/29/00	M Strober	U.N., East R., NYC	32	
30	F Casey	Boston, MA	09/23/99	Unknown Fisherman	Lynn, MA	28	
26	A LoCascio	Throgs Neck Brdg., NY	11/28/00	R Thayer	Provincetown, MA	35	
25	R Conklin	Moriches Inlet, NY	09/21/99	R Tucker	Moriches Inlet, NY	30 30	
33	G Blank	NY Harbor	10/17/00	E Winslow	Nantucket, MA	34	
14	R Pearson Jr.	Upper Croton R., NY	06/20/01	C Howard	Liberty St. Pk., NJ	16	
27	K Carrigan	Rockport, MA	07/08/01	W Tenney	Salisbury, MA	27	
24	P Johnson Sr.	Charlestown, RI	10/14/00	B Damour	Chatham, MA	27	07/31/01
21	M Simmons	Barnegat Lt., NJ	11/21/00	K O'Leary	Plum Is. Pt., MA	23	07/31/01
16	P Grippo	Wantagh, NY	09/21/00	L Clement	Merrick, NY	19	07/31/01
25 28	M Simmons	Barnegat Lt., NJ	11/09/99	A Pelletier	Westport, MA	33	08/01/01
13	A Anderson R Carlson Jr.	Block Is., RI	07/12/00	C Stroh	Block Is., RI	31	08/01/01
24	G Kerkhan	Charlestown, RI Provincetown, MA	11/04/95 05/24/01	P Curcio F DeCosta	Norwalk, CT	29	08/01/01
16	G Blank	Alpine, NJ	04/04/98	J Rade	Nashawena Is , MA	25	08/01/01
30	C Kennedy	S. Hereford Inlet, NJ	12/15/00	G Allen	Montauk Pt., NY	31	08/02/01
29	A Anderson	Block Is., RI	05/15/01	C Rajsavony	Breton Reef, RI	32	08/02/01
16	A Anderson	Thames R., CT	12/05/00	T Provost	Perth Amboy, NJ Merrimack R., MA	29	08/03/01
30	R Szellan	Raritan Bay, NJ	05/09/01	M Armstrong	Bayonne, NJ	21	08/03/01
19	W Marker	E.Rockaway Inlet, NY	07/23/00	W Marker	Atlantic Beach, NY	33 24	08/03/01
30	A Anderson	Block Is., RI	11/01/99	T Birch	Chatham, MA	33	08/04/01 08/04/01
22	W Perlman	Rockaway, NY	06/18/99	C Bofinger	Fishers Is., NY	30	08/04/01
25	H Bowman III	Fire Is. Inlet, NY	05/18/01	R Gange	Fishers Is., NY	20	08/04/01
23	R Nystrom	Bridgeport, CT	06/16/01	J Demby	Bridgeport, CT	24	08/04/01
23	K Carrigan	Rockport, MA	06/02/01	P Nguyen	Parson's Beach, ME	24	08/04/01
22	R Nystrom	Bridgeport, CT	09/19/99	T Daniels	Bridgeport, CT	25	08/05/01
26	A D'Amato	Offshr., Cape May, NJ	04/20/00	G Bonacorsi	Salisbury, MA		08/05/01
24	S Fries	Little Gull Is , NY	07/31/01	P Kopacz	Montauk Pt., NY	26	08/05/01
21	R Kyker	Norwalk, CT	06/13/01	R Nystrom	Fairfield, CT	21	08/05/01
20 27	W Perlman A Anderson	Atlantic Beach, NY	05/13/98	J Fabryka	Indian R. Inlet, DE	22	08/05/01
26	K Hollins	Block Is., RI Island Bch St. Pk., NJ	06/20/01	R Sard	Shinnecock Inlet, NY	29	08/06/01
22	J Myers	Nauset Beach, MA	11/10/00 07/09/01	T Whiteside	Scituate, MA	29	08/06/01
16	H Sweet	Warren, RI	10/18/98	B Damour J Peloquin	Chatham, MA		08/06/01
24	S Fries	Rockaway, NY	06/09/01	C DeCrescenzo	Warren R., RI	22	08/06/01
24	K Carrigan	Rockport, MA	07/28/01	S Parisi	Rockaway, NY	26	08/06/01
20	H Sweet	Warren, RI	10/19/99	M Weaver	Gloucester, MA Narragansett Bay, RI	24	10/60/80
	K Carrigan	Rockport, MA	08/06/00	J Rose	Rockport, MA	29	08/06/01
25	L Gonnello	Flynns Knoll, NJ	04/24/01	M Wessling	Martha's Vineyard, MA	23 26	08/07/01
27	J Della Porta	Winthrop, MA	07/18/01	F Szczawinski	Winthrop, MA	28	08/07/01 08/07/01
28	A Anderson	Block Is., RI	05/23/00	A Seltzer	Coney Is., NY	40	08/07/01
27	A Anderson	Block Is., RI	06/05/00	B Platzman	Chatham, MA	29	08/08/01
30	A D'Amato	Cape May, NJ	11/01/00	M Lombardi	Indian R. Inlet, DE	2,	08/08/01
29	C Bellinzoni	Jones Inlet, NY	05/20/01	H Sternberg	Jones Inlet, NY	30	08/08/01
29	S Fries	Little Gull Is., NY	07/31/01	J Faszczewski	The Race, L.I. Sound	31	08/08/01

Specie							
Length	n Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
			0.400.01	D.O			
26 25	A Loye A D'Amato	Long Beach, NY 3 mi SE Cape May, NJ	04/29/01 11/08/00	R Courtemanche G Marston	Merrimack R., MA Durham, NH	25	08/08/01 08/08/01
25	M Simmons	Barnegat Lt., NJ	11/09/99	J Mele	Narragansett Bay, RI	2,7	08/09/01
24	G White	Piscataqua R., NH	07/01/01	C O'Neil	Smuttynose Is., NH	24	08/09/01
25	W Perlman	Tin Can Grounds, NY	11/02/00	G Moring	Cold Spring Hbr., NY	37	08/10/01
22	T Shaheen	Rumson, NJ	06/08/00	S Desharrais	Cape Cod Canal, MA	26	08/10/01
16 18	A LoCascio W Perlman	Manhasset Bay, NY Atlantic Beach, NY	12/06/94 06/22/97	W Haddock W Perlman	Manhattan, NY Rockaways, NY	29 24	08/10/01 08/10/01
34	G Blank	NY Harbor	09/27/00	L Menard	Cuttyhunk, MA	37	08/11/01
19	R Stasinos	Stamford, CT	08/23/98	F Stunkel	Stamford, CT	22	08/11/01
27	A Anderson	Block Is., RI	06/01/00	E Carlisle	Narragansett pier, RI	28	08/11/01
33	P Falotico	Raritan Bay, NJ	05/19/01	M Jones	Montauk, NY		08/11/01
26	S Fries	1 1/2 mi. E Rockaway, NY	06/21/01 07/23/99	M Timmerman R Leja	SSE Martha's Vineyard, MA Bridgeport, CT	27	08/11/01
20 28	B Garfield A LoCascio	Portland, ME Throgs Neck Brdg., NY	11/13/00	J Heinrich	Throgs Neck Brdg., Ny	26 29	08/12/01 08/12/01
32	F Heal	Old Orchard Lt., NY	05/19/99	M Halliwell	Westport, MA	33	08/12/01
17	A Schweithelm	Northport, NY	04/08/01	C Bennett	Newburyport, MA	17	08/12/01
28	J Della Porta	Winthrop, MA	07/16/01	F Szczawinski	Winthrop, MA	28	08/13/01
26	G White	Piscataqua R., NH	07/01/01	E McGonagle	Boston, MA	30	08/13/01
26	R Conklin	Moriches Inlet, NY	11/02/00	S Pope R Celiberti	Saco Bay, ME Montauk Lt., NY	28 38	08/13/01
36 29	A Meyer	Jamaica Bay, NY Little Gull Is., NY	05/14/01 07/31/01	A Letavec	Little Gull Lt., NY	29	08/13/01 08/14/01
29 29	S Fries P Grippo	Montauk Pt., NY	09/09/00	S Brooks	Block Is., RI	32	08/14/01
31	S Jakubowski	Old Orchard Lt., NY	05/14/01	M Seppe	Montauk, NY		08/15/01
23	F Stunkel	Stamford, CT	09/27/99	R Brunquell	Stratford Shoal, CT	25	08/15/01
26	P Bonneau	Cape Cod Bay, MA	05/26/01	D Hindson	Provincetown, MA	29	08/15/01
24	P Grippo	Haunts Creek, NY	06/28/00	R Marcel	Jones Beach, NY	27	08/15/01
30	B Garfield	Saco, ME	07/14/01	B Bonica J Stuart	Scituate, MA Provincetown, MA	32 30	08/15/01 08/16/01
28 26	G O'Driscoll A Anderson	Race Pt., MA	06/24/01 06/21/00	H Waxman	Block Is., RI	29	08/17/01
28	S Hartmann	Block Is., RI Eatons Neck, NY	07/01/01	S Hartmann	Eatons Neck, NY	28	08/17/01
24	G Kerkhan	Sandy Hook, NJ	10/17/99	W Dodd Jr.	Buzzard's Bay, MA	27	08/18/01
25	S North	Long Branch, NJ	11/18/00	C MacDonald	Boston, MA	29	08/18/01
24	C Chechoski Jr	Housatonic R., CT	06/24/00	H Anderson	Milford, CT	27	08/19/01
20	R Leja	Bridgeport, CT	07/20/96	D Wells M McConnell	2 mi. off Stratford, CT Plum Gut, NY	29 26	08/19/01 08/19/01
20 28	A LoCascio	Manhasset Bay, NY	11/04/98 07/08/01	F Hubner	Montauk Pt., NY	20	08/19/01
28 24	A Anderson A Schweithelm	Block Is., RI Eatons Neck, NY	05/15/99	J Brierley	Cape Cod Canal, MA	28	08/19/01
24	W Anderson	Provincetown, MA	10/14/00	T Morabito	Quincy Bay, MA	27	08/19/01
19	A Perednia	East R., NY	11/11/96	A LaBonne	Popponsette Beach, MA	29	08/19/01
24	M Simmons	Barnegat Lt., NJ	10/28/99	C Esperon	Coney Is., NY		08/20/01
27	A Bencivenga	Keyport, NJ	05/05/01	D Schroer S White	Nantucket, MA Nantucket, MA	27	08/20/01
22 15	G Ministeri R Stasinos	Cape Cod Bay, MA Stamford, CT	06/15/01 08/30/98	M Layer	Massapequa, NY	25	08/20/01 08/20/01
24	A Anderson	Block Island, RI	06/12/97	L Clement	Merrick Bay, NY	33	08/21/01
23	R Kyker	Norwalk, CT	07/29/00	R Kyker	Norwalk, CT	25	08/22/01
28	G White	Piscataqua R., NH	07/14/01	J Evans	Appledore Is., NH	30	08/22/01
35	R Szellan	Raritan Bay, NJ	05/18/01	J Skrzypek	Provincetown, MA	35	08/22/01
30	K Carrigan	Rockport, MA	07/12/01	R Gilardi P Grima	Boston Hbr., MA Barrington, RI	34 32	08/23/01
19 25	H Sweet D Mann	Bristol, RI	07/06/98 10/07/98	I Katsaros	Pt. Jefferson, NY	32	08/23/01 08/23/01
28	A Anderson	Pt. Jefferson, NY Block Island, RI	07/05/00	P Wotkiewich	The Race, L.I. Sound	32	08/24/01
28	A Anderson	Block Island, RI	06/11/01	R Castellano	2 mi. S Block Is., RI	31	08/24/01
30	B Shillingford	Cape May Rips, NJ	11/10/00	G Wright	Winthrop, MA	32	08/25/01
34	R Conklin	Eatons Neck, NY	06/28/00	J Ronick	Eatons Neck, NY	34	08/25/01
29	A Anderson	Block Is., RI	11/04/00	S Pietruska R LaPak	Vineyard Sound, MA Norwalk, CT	32	08/25/01
19	F Stunkel	Norwalk, CT	08/08/01 09/12/00	R LaPak W Crowe	Atlantic Beach Brdg., NY	21 30	08/25/01
26 22	D Kelly C Carroll Jr.	Orient Pt., NY Sea Bright, NJ	05/10/01	G Owanesian	Cape Cod Canal, MA	24	08/25/01 08/26/01
20	G Wetmore	Norwalk, CT	10/01/99	R Kilfoyle	Milford, CT	25	08/26/01
36	A Anderson	Block Is., RI	06/28/01	B Tatro	Cape Cod Canal, MA	39	08/27/01
24	A Anderson	Thames R., CT	04/22/01	S Parenteau	Stonington, CT	27	08/27/01
15	A Anderson	Thames R., CT	12/05/00	A Matthews NY Bur. Marine Res.	Scarborough R., ME	18	08/27/01
19 25	A Messina Jr. J Posh	Cold Spring Hbr., NY Bridgeport, CT	07/21/00 11/08/00	R Thayer	Oyster Bay, NY Stratford, CT	23 26	08/28/01 08/28/01
23 17	A Schweithelm	Crab Meadow Beach, NY	05/07/00	NY Bur. Marine Res.	Oyster Bay, NY	23	08/28/01
15	A Schweithelm	Eatons Neck, NY	05/16/99	NY Bur. Marine Res.	Oyster Bay, NY	24	08/28/01

. •	ecies gth Tagger	Place Tagged	Date	Recapturer	Location	Leng	gth Date
19	F Stunkel	Stamford, CT	08/25/98	W Yackel	Pt. Jefferson, NY	26	08/29/01
29 16	C Carroll Jr.  A Messina Jr.	Sea Bright, NJ	05/06/01	E Culhane	Biddeford, ME	31	08/29/01
27	W Perlman	Cold Spring Hbr., NY	10/10/00	A Messina Jr	Cold Spring Harbor, NY	18	
24	R Conklin	Sandy Hook, NJ Morisher Inlet NV	11/13/00	M McCourt	Bath, ME	32	
22	R Nystrom	Moriches Inlet, NY	11/20/96	P Retano	Mouth of CT River	36	
23	L Gonnello	New Haven, CT	06/10/01	L Quinn	New Haven, CT	25	
27	T Shaheen	Flynn's Knoll, NJ	06/02/01	J Davenport	Westport, MA	24	
23	A LoCascio	Navesink R., NJ Throgs Neck Brdg., NY	04/24/01 11/21/99	M Gnad	Rockaway Pt., NY	28	
25	G White	Piscataqua R., NH	07/22/01	M Harrington B Preble	Branford, CT	25	09/01/01
25	W Marker	The Race, L.I. Sound	07/13/01	J Savas	Isles of Shoals, ME		09/02/01
23	T Leonardis	Sea Isle City, NJ	11/04/00	B Berry	Orient Pt., NY	26	
22	W Kobel Jr.	Moriches Inlet, NY	05/30/98	V Finalborgo	North Bath, ME	25	09/03/01
19	F Norton	Phippsburg, ME	06/26/01	J Moody	Shinnecock Bay, NY	26	
28	G White	Piscataqua R., NH	07/04/01	P Whelan	Casco Bay, ME		09/03/01
23	T Leonardis	Sea Isle City, NJ	08/27/00	J Johnston	Hampton, NH	28	09/03/01
28	A Anderson	Block Is., RI	06/22/01	S Phillipi	Boston, MA	25	09/04/01
20	M Simmons	Barnegat Lt., NJ	11/23/00	L Ewers	Montauk Pt., NY	••	09/04/01
22	P Grippo	Haunts Cr., NY	06/03/99	J Focone	Mousam R., ME	22	09/05/01
28	S Fries	Little Gull Is., NY	07/31/01	A Letavec	Northport, NY	26	09/06/01
26	A Anderson	Block Is., RI	07/02/01	D DeSimone	Little Gull Is., NY	28	09/06/01
27	G Blank	East R., NYC	11/20/00	R Ferraro	Shinnecock Inlet, NY	29	09/06/01
31	D Kelly	Orient Pt., NY	09/20/99	F Kretschmer	Montauk Inlet, NY	29	09/07/01
22	R Leja	Bridgeport, CT	10/16/98	M Sulkazi	Fishers Is, NY	34	09/07/01
24	D Kelly	Orient Pt., NY	10/14/00	D Politi	Stratford, CT	28	09/07/01
26	J Rose	Rockport, MA	10/04/00	G White	Southport, CT Hampton, NH	28	09/08/01
29	G Blank	NY Harbor, NY	11/21/99	S Caron	• •	27	09/09/01
19	F Stunkel	Stamford, CT	10/19/99	P Loesch	Higgins Beach, ME	30	09/09/01
16	J Karolides	Danvers, MA	07/25/96	J Gargiula	Cold Spring Hbr., NY Montauk Pt., NY	22	09/09/01
26	B Garfield	Portland, ME	08/05/01	B Garfield	Portland, ME	30	09/11/01
26	D Kelly	Sag Harbor, NY	05/11/01	J Rade	Montauk, NY	26	09/11/01
22	S Jakubowski	Romer Shoal, NJ	06/08/01	R Brinkman	Sandy Hook, NJ	26	09/11/01
36	D Kelly	Orient Pt., NY	07/03/01	T Monahan	Orient Pt., NY		09/11/01
30	A Blair	Avalon, NJ	10/05/00	M Longhran	Avalon, NJ	21	09/13/01
22	S Jakubowski	Breezy Pt., NY	10/24/00	M Callaghan	Sandy Hook, NJ	31	09/13/01
28	M Strober	East R., NYC	11/07/99	P Stanton	Woods Hole, MA	##35 2A	09/13/01
25	B Garfield	Portland, ME	07/19/01	B Garfield	Portland, ME	30 26	09/14/01
17	P Grippo	Wantagh, NY	07/24/00	G Muller Jr.	Breezy Pt., NY	20	09/14/01 09/14/01
25	P Twohig	Merrimack R., MA	08/31/01	J Butt	Newburyport, MA	25	09/14/01
27	J Della Porta	Swampscott, MA	09/01/01	M Viglione	Newbury, MA	28	09/14/01
33	B Garfield	Portland, ME	08/31/99	B Simpson	Cape Elizabeth, ME	36	09/15/01
24	J Angelini	Sandy Hook, NJ	10/23/98	F Cox	Cape Cod Canal, MA	29	09/16/01
27	A Anderson	Block Is., RI	07/01/00	N Valente	Shinnecock Inlet, NY	28	09/16/01
21	S Radossi	New York Harbor, NY	11/20/99	R Stroz	Belford, NJ	23	09/16/01
29	A Brown	Block Is., RI	06/27/01	T Greene	Block Is., RI	29	09/16/01
19	A Perednia	East R., NYC	11/02/98	W Neumann	NY Harbor	28	09/16/01
22	G Kerkhan	Sea Bright, NJ	05/07/01	M Moulton	Newbury, MA	23	09/17/01
26	F Casey	Boston, MA	07/30/01	D Hindson	Provincetown, MA		09/17/01
20	W Perlman	Atlantic Beach, NY	05/16/98	S Nockler	Plum Is., NY	30	09/18/01
18	P Grippo	Jones Inlet, NY	11/21/98	B Blanchard Jr.	Plum Gut, NY	26	09/18/01
24	E Feret	Freeport, NY	05/18/99	G Fonseca	Lower NY Bay, NY		09/19/01
30	B Azzariti	Quincy Bay, MA	08/04/01	P Jakits	1 mt. E Montauk Pt., NY	30	09/19/01
19	H Sweet	Providence, RI	07/31/99	P Grima	Barrington, RI	25	09/19/01
32	B Azzariti	Quincy Bay, MA	06/16/01	T Davidson	Boston, MA	35	09/19/01
22	R Nystrom	Bridgeport, CT	07/22/01	G DeLucia	Long Island City, NY	33	09/20/01
22	P Lowcher	Sea Bright, NJ	04/18/98	R Mikavica	Roosevelt Is., NY	31	09/20/01
21	B Shillingford	Strathmere, NJ	10/08/99	T Adams	Ocean City, NJ	26	09/20/01
15	E Petronio Jr.	Pt. Judith, RI	09/12/00	R Stevens	Narragansett, RI	15	09/20/01
19	H Sweet	Providence, RI	07/29/99	V Viola	Montauk, NY	27	09/20/01
26	S Jakubowski	Hoffman Is., NY	11/18/00	J Fitzback	Chatham, MA	30	09/21/01
12	A Perednia	East R., NYC	10/12/00	L Alieva	New Rochelle, NY	14	09/21/01
19	B Shillingford	Strathmere, NJ	07/06/00	B Seabrook	Ocean City, NJ	23	09/21/01
22	D Kelly	Sag Harbor, NY	05/04/01	T Buli	Hammonasset Bch. St. Pk.,		09/23/01
20	G Kerkhan	York, ME	09/11/01	R MacDougall	Rye, NH	20	09/23/01
16	R Maimone	Rye, NH	08/12/01	J Cohan	Scituate Hbr., MA	36	09/23/01
28	F Casey	Boston, MA	09/23/99	J Cimino	Boston, MA	34	09/23/01
22	T Marburger	Northport, NY	06/03/95	J Smith	Martha's Vineyard, MA	31	09/23/01
					manua s vincyaru, MA	31	09/23/01

Lengt	es h Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
33	A Piszczatowski	Glen Cove, NY	05/29/01	R Gamble	Matunuck, RI	34	09/25/01
24 19	A Hoydich	Sandy Hook, NJ	06/26/00	T Kukulski	Raritan R., NJ	26 21	09/25/01 09/25/01
19	A Anderson  D Paulick	Thames R., CT Barnegat Inlet, NJ	12/05/00 08/31/01	A Molina J Hand	Brunswick, ME Island Beach St. Pk., NJ	25	09/26/01
21	W Smagalski	Upper Hackensack R., NJ	09/18/01	R Koeppen	Secaucus, NJ	21	09/26/01
26	L Gonnello	Flynn's Knoll, NJ	05/04/01	J Brierley	Mashpee, MA	29	09/26/01
40	A Anderson	Block Is., RI	06/02/00	T Marks	Cuttyhunk Is., MA	42	09/27/01
25	A Anderson	Block Is., RI	07/18/00	T Doyen	Fishers Is., NY	28	09/27/01
27	M Strober	East R., NYC	10/24/98	T Spurge	East R., NYC	34	09/28/01
22	C Peszka	Oregon Inlet, NC	06/06/01	R Haak	Roanoke Is., NC	27 33	09/28/01
30 28	P Grippo A Anderson	Wantagh, NY Block Is., RI	05/31/01	D Solomon C Shea	Wantagh, NY	29	09/28/01 09/29/01
26	R Nystrom	Stratford, CT	10/15/00 11/01/99	T Doyen	Charlestown, RI Fishers Is., NY	30	09/29/01
19	D Goodwin	Jones Inlet, NY	11/26/99	S Whitting Jr.	Montauk Lt., NY	25	09/29/01
26	K Morgan	Rikers Is., NY	11/05/99	G Blank	Rikers Is., NY	27	09/29/01
24	D Kelly	Orient Pt., NY	09/10/01	W Allen	Passaic R., Nutley, NJ	26	10/01/01
15	A Anderson	Thames R., CT	12/29/00	K Jalili	Norwich, CT		10/01/01
17	C Husta	Mullica R., NJ	04/08/98	R Mann	Mullica R., NJ	26	10/02/01
31	J Della Porta	Nahant, MA	09/26/01	S Darmofalski	Cape Cod Canal, MA		10/02/01
16 18	A Anderson C Kennedy	Thames R., CT I.C.W. #479, NJ	12/29/00	C Florentino	Norwich, CT	19 18	10/03/01
28	A Anderson	Block Island, RI	09/13/01 10/26/00	C Kennedy B Lotufo	I.C.W. #479, NJ Montauk Lt., NY	30	10/03/01
25	A Anderson	Block Is., RI	06/18/00	R Frey	Moriches Bay, NY	28	10/04/01
19	W Woodroffe	Jamaica Bay, NY	06/15/00	P Murphy	Rockaway Beach, NY		10/04/01
18	A Messina Jr.	Little Neck Bay, NY	09/01/00	J Maleno	Kings Pt., NY	22	10/04/01
27	V DeLisi	Warren R., RI	06/06/00	J Polando	Warren, RI		10/05/01
11	A Anderson	Connecticut R., CT	05/10/01	D Remigino Sr.	Deep River, CT		10/05/01
26 19	A Schweithelm	Westhampton Beach, NY	07/07/00	M Alt	Windmill Pt., VA	27	10/05/01
19 29	H Sweet D Kelly	Barrington, RI Orient Pt., NY	07/10/98 07/03/01	J Samsel J Feltovich	Westport, CT	27 30	10/05/01
14	H Sweet	Warren, RI	07/24/98	F Maciel	Derby, CT Warren, RI	24	10/05/01
20	M Vargas	Milford, CT	06/25/96	W Edwards	Milford, CT		10/06/01
22	R Leja	Bridgeport, CT	07/21/00	W Edwards	Milford, CT		10/06/01
23	P Bonneau	Cape Cod Bay, MA	05/27/01	J Monast	Cape Cod Canal, MA	26	10/06/01
15	R Conklin	Norwalk, CT	07/24/98	R Roth	Hell Gate, NY	25	10/08/01
15 31	A Schweithelm	Asharoken, NY	09/13/00	M Bernstein	Northport, NY	16 33	10/08/01
23	G O'Driscoll G Horvath	Penns Grove, NJ Barnegat Inlet, NJ	04/25/01 06/14/01	T Clayton  J Sanchez	Manasquan R., NJ	26	10/08/01
15	A Anderson	Thames R., CT	01/07/01	S Durkee	N. Wildwood, NJ Norwich, CT	18	10/10/01
29	N Fionilo Jr.	Rantan Bay, NJ	11/12/99	J Leonard	Nauset Beach, MA	33	10/10/01
27	J Posh	Watch Hill, RI	07/16/95	M Russo	Moriches Bay, NY	35	10/10/01
31	R Kyker	Norwalk, CT	08/26/00	J Adamowicz	Shinnecock Inlet, NY	33	10/10/01
21	T Shaheen	Raritan Bay, NJ	09/07/01	R Koeppen	Secaucus, NJ	24	10/10/01
27	S Jakubowski	Hoffman Is., NY	11/14/00	J Higgs Jr.	Potomac R., VA	20	10/10/01
28 18	F Casey P Orenzo	Boston, MA	05/29/01	B Lotufo	Montauk Lt., NY	30 24	10/10/01
28	W Marker	East R., NYC  E. Rockaway Inlet, NY	11/05/98 11/05/99	J Roman H Silverberg	Canarsie Beach Pk., NY Atlantic Beach, NY	31	10/11/01
18	J Mahan	S. Kearny, NJ	11/24/00	R Koeppen	Secaucus, NJ	20	10/11/01
23	L Gonnello	Flynn's Knoll, NJ	08/16/00	F Tenore	Sandy Hook, NJ	29	10/11/01
27	A Fox	Avalon, NJ	09/12/01	K Baldıni	Avalon, NJ	27	10/11/01
37	R Gardrel	Block Is., RI	08/23/98	W Craig	Cape May, NJ		10/12/01
21	P Hartsgrove	Shrewsbury R., NJ	09/11/97	R Heller	Atlantic Beach Brdg., NY	30	10/12/01
30	D Nova	Cape Charles, VA	11/13/00	C Bailey	Montauk, NY	32	10/12/01
28	F Ryan	Darien, CT	10/02/01	D Jackson	Norwalk, CT Plum Gut, NY	31 30	10/12/01 10/12/01
25 32	T Rinaldi A Messina	Mattituck, NY Little Neck Bay, NY	07/13/00	S Morawski J Medina	F.D.R. Park, NYC	32	10/12/01
26	A Anderson	Block Is., RI	09/21/01 06/22/01	H Yenkinson	Cape May, NJ	26	10/12/01
30	R Szellan	Raritan Bay, NJ	05/09/01	A Giori	Nantucket Hbr., MA	32	10/12/01
31	J Foti	Great Kills, NY	06/10/01	R Robbins	Montauk Pt., NY		10/12/01
19	H Sweet	Warren, RI	06/23/01	E Easterday	Dighton, MA	19	10/12/01
19	B Shillingford	Strathmere, NJ	07/11/96	J Paschal	Townsend's Inlet, NJ	28	10/13/01
22	N Fiorillo Jr.	Navesink R., NJ	05/02/98	G Stoddard	Sandy Hook, NJ	29	10/13/01
14	S Bosworth	Block Is., RI	07/20/01	B Benzenberg	Lido Beach, NY Nantucket Is., MA		10/13/01
14 16	R Maimone  A Messina Jr.	Rye, NH	09/04/01 04/21/99	J Malcouronne T Wirkus	Naugatuck R., CT	20	10/13/01
17	A Messina Jr.	Little Neck Bay, NY Cold Spring Hbr., NY	10/10/00	R Montecalvo	Pawtucket, RI	23	10/14/01 10/14/01

Specie							
Length	Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
28	R Templeton	Block Is., RI	08/27/00	M Renner	Moriches Bay, NY	28	10/15/01
27 25	D Kelly F Stunkel	Orient Pt., NY Stamford, CT	07/03/01	J Heckel C Zeoli	Keyport, NJ	29 28	10/15/01
27	A Anderson	Block Is., RI	06/27/01 06/24/01	J Scrocca	Fire Is. Inlet, NY Cape May, NJ	29	10/15/01 10/15/01
26	A Anderson	Block Is., RI	06/29/01	S Reitz	Overfalls Shoal, DE	27	10/15/01
27	B Shillingford	DE Bay, NJ	11/09/98	W Finn	Provincetown, MA	32	10/15/01
23	L Gonnello	Sandy Hook Bay, NJ	06/27/00	A Fisherman	Sandy Hook, NJ	26	10/15/01
18	E Petronio Jr.	Pt. Judith, RI	08/28/00	W Wyatt	Westerly, RI	20	10/15/01
16	A Anderson	Thames R., CT	04/15/00	C Florentino	Norwich, CT	21	10/16/01
32 21	G Blank	East R., NYC	11/12/00	E Kurilew	Shrewsbury R., NJ	34	10/16/01
34	R Nystrom B Szela	Stratford, CT	10/19/99	T Wirkus M Sykes	Naugatuck R., CT	24	10/16/01 10/16/01
15	A Anderson	Watch Hill, RI Thames R., CT	08/14/01 12/15/00	C Florentino	Absecon Bay, NJ Norwich, CT	19	10/16/01
19	A Messina Jr.	Little Neck Bay, NY	05/02/01	C Florentino	Norwich, CT	21	10/17/01
26	R Nystrom	Stratford, CT	11/06/98	Unknown Fisherman	Old Saybrook, CT	32	10/18/01
21	A Anderson	Thames R., CT	12/19/99	T Wirkus	Ansonia, CT	24	10/18/01
19	R Pearson Jr.	Croton Bay, NY	03/01/00	D Zurheide	Secaucus, NJ	25	10/18/01
29	A Teal	Keyport, NJ	05/18/01	R Gagne	Nantucket Is., MA		10/19/01
23	R Leja	Bridgeport, CT	07/25/99	R Berger	Bridgeport, CT		10/19/01
35	R Gardrel	Block Is., RI	08/12/98	P Zelenka	Great South Bay, NY	39	10/19/01
37	V Viola	Moriches Inlet, NY	10/03/01	S Spicer	Moriches Bay, NY	39	10/20/01
14 30	T Lake	Liberty Is., NYC	11/24/00	D Zurheide D Murphy	Secaucus, NJ Montauk Pt NV	16 32	10/20/01 10/20/01
28	S Jakubowski F Casey	Old Orchard Lt., NY Boston, MA	05/10/01 10/10/01	W Vars	Montauk Pt., NY Watch Hill, RI	32	10/20/01
24	C Kennedy	SE Cape May Inlet, NJ	11/18/99	G Dunzelman	Highlands Brdg., NJ	28	10/21/01
24	L Gonnello	Sandy Hook Chan., NJ	10/01/00	G Dunzelman	Highlands Brdg., NJ	26	10/21/01
29	F Heal	Ambrose Channel, NY	05/31/00	J Ahrens	Fire Is. Inlet, NY	<sup>*34</sup>	10/21/01
27	A Anderson	Block Is., RI	05/12/01	R Ferland	Barrington, RI		10/21/01
18	H Sweet	Providence, RI	09/19/98	B Meyer	Montauk Lt., NY	28	10/22/01
29	J Foti	Great Kills, NY	05/06/00	R Herrmann Sr.	Milford, CT	32	10/22/01
31	B Shillingford	Cape May Rips, NJ	11/13/00	J Ruane	Cape May Rips, NJ	33	10/22/01
24 16	S Fries A Messina Jr.	Little Gull Is., NY	07/31/01 08/12/00	P Perovich J Medina	Delaware Bay, NJ	27 19	10/22/01 10/23/01
21	A Messina Jr.	Little Neck Bay, NY Little Neck Bay, NY	09/11/99	A Falco	Pier 36, East R., NYC Throgs Neck Brdg., NY	24	10/23/01
21	R Conklin	Moriches Inlet, NY	10/27/00	R Frey	Moriches Bay, NY	25	10/23/01
21	B Shillingford	Whale Creek, NJ	05/16/00	S Liebman	Cross Ledge Lt., DE Bay	25	10/23/01
28	C Wilcox III	Moriches Inlet, NY	11/11/00	R Conklin	Moriches Inlet, NY	29	10/23/01
11	A Messina	Little Neck Bay, NY	10/14/01	E Martinez	Randall Is., NY	11	10/24/01
20	R Kyker	Norwalk, CT	08/26/00	W Edwards	Stratford, CT	22	10/24/01
25	R Leja	Bridgeport, CT	07/25/98	D Wells	Stratford, CT	35	10/25/01
28	S Brodsky	Atlantic Beach Brdg., NY	11/27/99	H Sternberg	Atlantic Beach Brdg., NY	31	10/27/01
27 27	T Marburger W Perlman	Shinnecock Inlet, NY Rockaway, NY	06/12/01 06/18/01	T Schneider T Whitehead	Captree St. Pk., NY Corson's Inlet, NJ	30 28	10/27/01 10/27/01
26	R Nystrom	Bridgeport, CT	07/22/01	M Ferrigno	Moriches Bay, NY	29	10/27/01
30	W Perlman	Rockaway, NY	06/19/01	M Margres	Raritan R., NJ		10/28/01
23	A Messina	Little Neck Bay, NY	09/19/01	R Holliday	East R., NYC	23	10/28/01
19	J Ragusa	Fire Is., NY	11/18/99	C Quartuccio	Astoria, NY	27	10/28/01
32	R Conklin	Moriches Inlet, NY	10/02/01	A Likewise	Moriches Inlet, NY	34	10/28/01
25	D Kelly	Orient Pt., NY	09/08/01	A Kukulski	Lower Raritan R., NJ	27	10/28/01
18	R Guttadauro	Princess Bay, NY	07/08/01	T Popowski	Raritan Bay, NJ		10/29/01
28	J Beaver	Sandy Hook, NJ	07/21/98 04/27/99	P Stiles R Ford	Sandy Hook, NJ Island Beach St. Pk., NJ	33	10/29/01
17 32	A Messina Jr. F Heal	Little Neck Bay, NY Great Kills Hbr., NY	10/22/01	F Guzman	Verrazano Brdg., NY	26	10/29/01 10/30/01
24	W Terrill	Provincetown, MA	09/30/01	J Beck	Balston Beach, MA	26	10/30/01
25	F Casey	Boston, MA	09/24/01	R Kroon	Flynn's Knoll, NJ	25	10/30/01
21	1 Mittelmark	Jones Inlet, NY	06/13/99	R Luik	Sandy Hook, NJ	25	10/30/01
17	A Schweithelm	Asharoken, NY	09/30/00	D Blank	Glen Cove, NY	19	10/31/01
26	P Collins	Woods Hole, MA	08/18/01	C Davies	2 mi NE Montauk Lt., NY		10/31/01
32	A Anderson	Block Is., RI	06/10/00	G Blank	East R., NYC	34	10/31/01
24	M Strober	Governors Is., NY	11/25/00	W Kolbenheyer	Manhasset Bay, NY	24	10/31/01
25 26	S Jakubowski J Ragusa	Flynn's Knoll, NJ Fue Island Lt., NY	06/23/00 11/07/99	R Mele B Pedersen	Jamaica Bay, NY Fire Is. Lt., NY	29	10/31/01 11/01/01
26 18	A Schweithelm	Eatons Neck, NY	05/25/01	G Cobb	Duck Pond Pt., NY		11/01/01
36	J Dotsey	Montauk, NY	09/03/01	E Hux	Ches. Bay Brdg. Tun., VA	36	11/01/01
24	G O'Driscoll	Strathmere, NJ	09/13/01	J Mumman	Corson's Sound, NJ	24	11/02/01
34	R Conklin	Moriches Inlet, NY	09/27/00	G Guydish Jr.	Moriches Inlet, NY		11/02/01
28	J Ragusa	Fire Is., NY	10/11/00	R Raniolo	Mullica R., NJ	31	11/02/01

26 Underwater Naturalist

Spec		Place Tagged	Date	Recapturer	Location	Leng	th Date
26	C. Jahrahamaki	014 0 1 110 110	05/00/01	I Deitabor	Indian R., DE	29	11/02/01
19	S Jakubowski M Strober	Old Orchard Lt., NY East R., NYC	05/09/01 11/21/98	L Britcher M Swift	Brick, NJ	26	11/03/01
27	A Anderson	Block Is., RI	09/28/00	J Siemer	Ocean City, MD	28	11/03/01
26	D Pinson	2 mi. SW Block Is., RI	06/29/01	S Pottichen	N. Wildwood, NJ	27	11/03/01
20	H Sweet	Warren, RI	06/15/98	R Blake	Montauk Lt., NY	27	11/03/01
29	A Fox	Avalon, NJ	08/19/01	M Pımpinelli	Prissy Wicks Shoal, NJ	29	11/04/01
36	J Posh	Stratford, CT	08/18/97	D Wells	Stratford, CT	37	11/04/01
28	A Anderson	Block Is., RI	10/16/01	J Hays	Raritan Bay, NJ	29	11/04/01 11/04/01
30 26	A Young T Leonardis	Riverhead, NY	06/26/01	R Gahm J Kleban	Ortley Beach, NY Cape May, NJ	28	11/05/01
19	A Messina Jr.	Sea Isle City, NJ Little Neck Bay, NY	10/03/00 09/13/99	P Stachowicz	Union Beach, NJ	23	11/05/01
36	D Kelly	Orient Pt., NY	08/02/01	D Jones	Assateague, VA		11/05/01
19	B Shillingford	I.C.W., Strathmere, NJ	08/02/01	G Robinson III	Great Egg Hbr., NJ	20	11/07/01
22	A Young	Mattituck, NY	07/07/01	D Wells	Stratford, CT	23	11/07/01
26	J Della Porta	Swampscott, MA	08/29/01	S Jakubowski	Hoffman Is., NY	. 26	11/07/01
27	R Templeton	Block Island, RI	06/17/00	Y Herve	Brick, NJ	30	11/07/01
27	G O'Driscoll	Avalon, NJ	09/21/01	C Huber	14 ft. Lt., DE Bay	26	11/08/01
26 18	C MacNamee  J Balicki	Delaware Bay, NJ Union Beach, NJ	11/12/99	T Cusick A Kukulski	Fortesque, NJ	36 24	11/08/01
18	G Horvath	Trenton, NJ	04/08/00 05/29/00	H Carter	Absecon Bay, NJ Patapsco R., MD	21	11/08/01
21	R Nystrom	Stratford, CT	09/20/98	J Mariano	Outerbridge Cross., NY	32	11/08/01
14	E Petronio Jr.	Pt. Judith, RI	08/22/00	C Ordzie	Matunuck, RI		11/09/01
23	S Jakubowski	Sandy Hook, NJ	06/25/00	D Barber	Watch Hill, RI	24	11/09/01
25	C Carroll Jr.	Sandy Hook, NJ	10/07/99	J Albin	Raritan Bay, NY	28	11/09/01
20	S Jakubowski	Romer Shoal, NJ	05/29/01	E Abbott	Sea Isle City, NJ		11/10/01
25	R Guttadauro	Princess Bay, NY	11/17/00	J Pais	Midland Beach, NY	30	11/10/01
21 27	W Marker F Stunkel	Atlantic Beach, NY	08/26/01 08/24/99	G Miller	Seaside Pk., NJ	22 33	11/10/01
2 <i>1</i> 26	D Kelly	Darien, CT Sag Harbor, NY	08/24/99	R Mele W Marker	Jamaica Bay, NY Atlantic Beach, NY	26	11/10/01
35	A LoCascio	Throgs Neck Brdg., NY	05/20/00	J Nolty	LaGuardia A., East R., NY	37	11/10/01
26	A Anderson	Block Is., RI	07/05/01	R Greene	Amagansett, NY		11/10/01
26	A Anderson	Block Is., RI	07/03/01	B Pittman	VA Beach, VA	32	11/10/01
25	J Leonard	Colt St. Pk., RI	06/30/00	E Camiolo Jr.	Ship Bottom, NJ	28	11/11/01
32	R Szellan	Raritan Bay, NJ	05/24/01	R Soltes	Indian R. Inlet, DE	33	11/11/01
26 20	R Kyker	Stamford, CT	07/08/00	R Talmo	Island Beach St. Pk., NJ	28	11/11/01
28 17	S Jakubowski A Schweithelm	Old Orchard Lt., NY	05/08/01	R Darr	Potomac R., VA	32 24	11/11/01
15	R Kyker	Eatons Neck, NY Norwalk, CT	09/14/00 05/08/01	N Riviezzo  J Maldonado	Pt. Jefferson, NY East R., NYC	18	11/12/01
16	J Balicki	Sea Bright, NJ	12/07/99	L Sears	East Hampton, NY	18	11/12/01
27	A Anderson	Block Is., RI	07/08/01	T Leonardis	Avalon, NJ	28	11/13/01
26	B Shillingford	Strathmere, NJ	10/10/01	F Ruczynski	Corson's Inlet, NJ	27	11/13/01
25	N Fiorillo Jr.	Long Branch, NJ	10/19/01	J Henglein	Ocean City Inlet, MD	27	11/13/01
27	S Hartmann	Eatons Neck, NY	09/23/01	R Martin	Corson's Inlet, NJ	27	11/13/01
22	R Leeds	Ocean City, NJ	04/08/98	B Connolly	Great Egg Inlet, NJ	30 32	11/13/01
27 29	V Galgano A Anderson	Sea Girt, NJ	12/05/98	J Barker J Barnes	Totenville, S.I., NY 5 mi. off Fortescue, NJ	30	11/14/01
25	W Marker	Block Is., RI E. Rockaway Inlet, NY	06/08/01 11/27/98	K Bridwell	Atlantic Beach Brdg., NY	29	11/14/01
34	J Matzinger	Swift Cr., NY	11/04/01	B Orloff	Breezy Pt., NY	35	11/15/01
28	A Anderson	Montauk Pt., NY	10/20/01	A Testa	Jones Inlet, NY	28	11/15/01
28	R Locke	Provincetown, MA	06/24/00	C Virgona	Moriches Inlet, NY	32	11/15/01
29	A Anderson	Block Is., RI	06/04/01	J Milano	Atlantic City, NJ	31	11/15/01
31	R Moelier	Charlestown, RI	09/14/01	J Furino	Great South Bay, NY	31	11/15/01
29	A LoCascio	City Is., NY	11/07/01	H Puff	Rye, NY	29 26	11/15/01
26 20	A Anderson	Montauk, NY	11/04/01	M Polito	Barnegat Lt., NJ Shinnecock Inlet, NY	32	11/15/01 11/15/01
28 15	S Jakubowski D Taft	Old Orchard Lt., NY Bucksport, ME	05/09/01 06/13/98	F Frosina C Galeano	Marine Pkwy. Brdg., NY	32	11/15/01
26	D Kelly	Orient Pt., NY	07/03/01	J Humphrey	Fire Is. Inlet, NY	27	11/15/01
28	S Jakubowski	Romer Shoals, NJ	05/31/01	J Albin	Tottenville, NY		11/16/01
24	L Gonnello	Flynn's Knoll, NJ	06/28/00	C Vohden	Beach Haven, NJ	28	11/16/01
19	R Pearson Jr	Breezy Pt., NY	09/17/01	D McConnell	Spring Lake, NJ	20	11/16/01
22	R Kyker	Westport, CT	07/14/99	A Velız	Norwalk, CT		11/17/01
18	R Baumann	Raritan Bay, NJ	11/05/99	S Taylor	Barnegat Lt., NJ	21	11/17/01
28	A Anderson	Block Island, RI	10/22/00	J Faraci Jr.	Highland Pk., NJ Sandy Hook, NJ	31 25	11/17/01
23 17	R Spotts R Conklin	Provincetown, MA	10/02/01 05/01/00	J Vayda M Morales	Lavallette, NJ	23	11/17/01 11/17/01
27	S Hartmann	Peconic R., NY Eatons Neck, L.I., NY	09/24/00	R Rak	Oyster Bay, NY	29	11/17/01
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Species							
Leng	th Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
27	S Hartmann	Eatons Neck, NY	00/17/01	T. Baselselsson	Constitution DE	27	11/10/01
28	S Jakubowski	Old Orchard Lt., NY	08/17/01 05/10/01	T Postlethwsit R Covell	Cape Henlopen, DE Cape May, NJ	27 32	11/18/01 11/18/01
25	W Marker	Atlantic Beach, NY	11/16/01	B Parnes	Atlantic Beach, NY	25	11/18/01
23	A Messina Jr.	Little Neck Bay, NY	08/26/99	R Roth	East R., NYC	27	11/18/01
22	T Rınaldi	Mattituck, NY	06/16/00	C DiStefano	NE Manasquan Inlet, NJ	29	11/18/01
20	E Taylor	Sea Bright, NJ	05/15/01	R Fedon	Flynn's Knoll, NJ	22	11/18/01
25	A Anderson	Block Is., RI	07/19/01	F Ruczynski	Hereford Inlet, NJ	27	11/20/01
29	D Kelly	Orient Pt., NY	09/27/01	S Rhodes	Raritan Bay, NY		11/20/01
26	S Kellner	Mattituck, NY	05/09/99	R Howard	Montauk, NY	31	11/21/01
24	G Ministeri	Cape Cod Bay, MA	06/09/01	C Bellinzoni	Jones Inlet, NY	25	11/21/01
24	J Della Porta	Swampscott, MA	08/19/01	J Faraci Jr.	Highland Pk., NJ	29	11/21/01
28	M Strober	Rikers Is., NY	11/04/01	R Biagiotti	Rikers Is., NY	28	11/21/01
21	R Nystrom	Fairfield, CT	06/30/01	C Chechoski Jr.	Devon, CT	21	11/22/01
31	A Anderson	Block Is., RI	05/26/01	M Saunders	Ches. Bay Brdg. Tun., VA	31	11/22/01
22	G Blank	East R., NY	10/10/98	E Krzanowski	Long Beach Is., NJ	27	11/23/01
28	A Anderson	Block Is., RI	06/05/01	B Schmitt	Jones Inlet, NY	29	11/23/01
21	R Nystrom	Bridgeport, CT	07/22/01	D Taft	Bayville, NY	22	11/23/01
26 26	F Stunkel	Stamford, CT	06/26/01	F Maiello	Cape May, NJ	26	11/23/01
29	M Berger	Atlantic Bch., NY	11/10/99	D Eichin	Atlantic Beach Brdg., NY	29	11/23/01
16	C Kennedy	Prissywick Shoal, NJ	11/22/01	B Demari	Cape May rips, NJ	30	11/23/01
24	B White	Wakefield, RI	05/14/99	F Liguori	Seaside Pk., NJ	23	11/23/01
23	A Anderson	Montauk Pt., NY	05/18/01	T Sereika	Mantoloking, NJ	24	11/23/01
32	A LoCascio	Harts Island, NY	09/01/00	J Maldonado	East R., NYC	25	11/23/01
29	D Kelly	Orient Pt., NY	10/23/01	C Capurso G Matvienko	Jones Inlet, NY	33	11/23/01
27	A Anderson J Foti	Block Is., RI	07/10/01	R Scarborough	Offshr., Barnegat Ridge, NJ	33	11/23/01
15	A Anderson	South Beach, NY Thames R., CT	06/18/00 12/29/00	P Faucher	Newport News, VA Norwich, CT	33 16	11/23/01
25	T Surgent Jr.	Belmar, NJ	11/12/01	G Zimmer	Long Beach Is., NJ	25	11/24/01 11/24/01
20	J Dickinson	Susquehanna Flats, MD	04/24/00	J Richardson	Pooles Is., MD	21	11/24/01
29	A Anderson	Block Is., RI	05/15/01	D Kokkoris	5 mi. W Montauk, NY	32	11/24/01
26	S Jakubowski	Old Orchard Lt., NY	05/17/01	E Dols	Breezy Pt., NY	32	11/24/01
15	N Ciampa	Freeport, NY	07/31/97	R Newallis Jr.	Flynn's Knoll, NJ	25	11/24/01
25	S Jakubowski	Raritan Reach, NJ	05/08/00	G Rohana	S Cape May Inlet, NJ	30	11/24/01
24	C Maxon	Boston, MA	09/02/01	D Horneff	Brant Beach, NJ		11/24/01
21	R Pirone	Harts Is., NY	06/17/01	P Floro	Island Beach St Pk., NJ	24	11/25/01
18	A Anderson	Thames R., CT	12/19/98	G Korteweg	Mystic, CT	22	11/25/01
26	A Anderson	Block Is., RI	09/23/00	C Nutile	Cape May, NJ	28	11/25/01
24	S Boulmetis	Flynn's Knoll, NJ	06/05/01	M More	Secaucus, NJ	28	11/25/01
21	B Shillingford	Strathmere, NJ	11/14/01	J Galezniak	Cape May, NJ		11/26/01
24	A Schweithelm	Northport, NY	06/10/01	B Ferrandino	Moriches Bay, NY	25	11/26/01
27	A Anderson	Block Is., RI	06/28/01	V Weil	Harvey Cedars Lump, NJ	30	11/26/01
20	S North	Atlantic Highlands, NJ	11/20/99	M Yarworth	Narrow R., RI		11/26/01
26 27	A Schweithelm	Montauk Pt., NY	06/28/00	J Butler	Ches. Bay Brdg. Tun., VA	31	11/27/01
19	D Kelly J Brown	Orient Pt., NY	09/26/01	K Buzby	Cape May, NJ		11/27/01
23	W Fischer	Noank, CT	06/11/92	W Lee	West Bank Lt., NY	30	11/27/01
35	D O'Rourke	Brigantine, NJ Old Orchard Lt., NJ	07/09/01	R Shetler	Corson's Inlet, NJ	27	11/27/01
31	W Marker	Chatham, MA	05/08/00 07/25/01	D Gerwitz	Ches. Bay Brdg. Tun., VA	36	11/27/01
25	J Della Porta	Swampscott, MA	09/04/01	M Witscher G Dowd	Barnegat Lt., NJ	32	11/27/01 11/27/01
26	D Pinson	Block Is., RI	06/15/01	R MacDonald	Jones Inlet, NY	28	11/27/01
21	A Schweithelm	Crab Meadow Beach, NY	07/31/99		Cape May, NJ	26	
28	T Marburger	Shinnecock Inlet, NY	06/24/01	G Gilbert E McCarthy	Cape May, NJ Pt. Pleasant, NJ	26	11/27/01
30	S Hartmann	Eatons Neck, NY	06/03/01	L Thayer	Delaware R., DE		11/28/01 11/28/01
20	R Kyker	Westport, CT	10/04/01	J Wade	Island Beach St. Pk., NJ	20	11/28/01
29	S Jakubowski	Romer Shoal, NJ	05/28/01	G Lopez	J.F.K. Airport, NY	33	11/29/01
32	D Nova	Oregon Inlet, NC	02/20/01	B Kleinrock	Hooper Is. Lt., MD	35	11/30/01
21	F Stunkel	Westport, CT	10/02/99	A Poukish Sr.	Wildwood Cr., NJ	27	11/30/01
29	R Conklin	Moriches Inlet, NY	10/23/01	R Colarusso	Great South Bay, NY	32	11/30/01
23	G Blank	East R., NY	10/12/99	J Cohen	Princess Bay, NY	23	11/30/01
18	D Sweet	Warren, RI	08/12/98	H Mockewich	Cape May, NJ	28	11/30/01
22	R Kyker,	Stamford, CT	08/11/01	G Louie	East R., NYC	24	12/01/01
20	N FionIlo Jr.	Monmouth Beach, NJ	11/25/98	T Bryan	Wildwood, NJ	29	12/01/01
35	W Perlman	Atlantic Beach, NY	10/15/01	W Schettler	Delaware Bay	35	12/01/01
29	D Kelly	Orient Pt., NY	10/11/01	T Corbey	Gardiners Bay, NY	30	12/01/01
33	D Kelly	Orient Pt., NY	09/02/01	R Catena	Montauk, NY	36	12/01/01
20	R Guttadauro	Princess Bay, NY	07/14/01	F Peralta	Harlem R., NYC		12/01/01
20	S Radossi	Upper NY Bay, NY	11/13/99	F Silhan	Fire Is. Inlet, NY		12/02/01

Underwater Naturalist

Leng	ies th Tagger	Place Tagged	Date	Recapturer	Location l	.eng	th Date
							4.0.00.00
25	G Blank	East R., NY	10/13/99	G Borkun	Breezy Pt., NY	32	12/02/01
31	F Ryan	Darien, CT	07/25/97	G Wetmore	11B, Eatons Neck, NY	41	12/02/01
17	A Messina Jr.	Little Neck Bay, NY	10/14/01	E Messina	Scarborough, NY	20	12/03/0
27	J Matzinger	Swift Cr., NY	11/03/01	J Laucius	Island Beach St. Pk., NJ	28	12/03/0 12/04/0
26	A Anderson	Montauk, NY	05/19/01	S Renz	Cape May, NJ	22	12/04/0
17	A Schweithelm	Northport, NY	11/13/99	G Gillum	Manasquan, NJ	23 35	12/04/0
23	C Silva	Newport, RI	06/21/96	D Kelly	4 mi. N Fortesque, NJ	32	12/04/0
20	H Sweet	Barrington, RI	06/12/97	A Pagan	Moriches Inlet, NY	26	12/04/0
19	M Simmons	Barnegat Lt., NJ	12/08/95	J Salvo	Cold Spring Inlet, NJ	31	12/05/0
29	R Leja	Bridgeport, CT	10/04/00	E Keller	E. Rockaway Inlet, NY	31	12/05/0
26	F Stunkel R Guttadauro	Stamford, CT	06/30/99	J Rade	Montauk Pt., NY	31	12/05/0
31 10		Annadale, S.I., NY	11/11/01	J Albin	Raritan R., NJ	14	12/05/0
29	A Anderson S Jakubowski	Connecticut R., CT	05/10/01	B Gregorski S Shaffer	Old Saybrook, CT		12/05/0
29 25	E Glanz	Old Orchard Lt., NY	05/08/01		Upper E Chesapeake Bay, VA	31	12/05/0
25 26	W Perlman	Atlantic Bch. Brdg, NY	05/11/00	R Miesowile  J Fleischmann	Raritan Bay, NJ	28	12/07/0
21	B Shillingford	Rockaway, NY	11/12/01	R McCabe	E. Rockaway, NY	25	12/07/0
25	F Casey	Strathmere, NJ	07/09/01	P Regula	Ocean City, MD	25	12/07/0
16	•	Boston, MA	06/01/01	_	Sandy Hook, NJ	30	12/07/0
20	D Hoxsie	Charlestown, RI	06/19/97	J Costa	South Amboy, NJ	22	12/08/0
23	P Grippo	Wantagh, NY	06/10/01	A Graciano	Manasquan Inlet, NJ	28	12/08/0
23 21	F Stunkel	Stamford, CT	09/19/98	S Horan	Montauk, NY	25	12/08/0
16	R Nystrom	Fairfield, CT	06/25/00	H Rauer	Sandy Hook Bay, NJ	23	12/08/0
	J Zaffuto	Democrat Pt., NY	05/05/96	S Horan	Montauk, NY	25	12/09/0
24	D Kelly	Orient Pt., NY	10/01/00	E Ernst	Montauk, NY	30	12/10/0
30	S Hartmann	Eatons Neck, L.I., NY	08/13/00	A Yanovsky	Bay Ridge, NY		12/10/0
24	R Leja	Bridgeport, CT	10/22/98	R Catena	Montauk, NY	33 33	12/10/0
24	R Chmiel	Watch Hill, RI	06/22/99	J Young	Cape May, NJ	34	12/11/0
31	S Jakubowski	West Bank Lt., NY	05/24/01	C Austin	Urbanna, VA	14	12/11/01
14 25	W Smagalski	Upper Hackensack R., NJ	07/25/00	W Smagalski	Upper Hackensack R., NJ	27	12/11/01
23 33	J Behl	Salem, MA	05/24/98	S Jakubowski R Bock	Romer Shoal, NJ	21	12/11/01
33 24	F Montz	New Haven, CT	07/20/01		Chincoteague Inlet, VA	33	12/13/01
35	F Laskowski W Perlman	Fairfield, CT	05/22/99	E Figueroa	St. George, S.I., NY	33	12/13/01
29	J Della Porta	Atlantic Beach, NY	10/15/01	B Berwind T Kaider	Atlantic Beach Brdg., NY	33	12/13/01
29 27	B Shillingford	Lynn, MA	08/18/01 04/28/96	P Maksimow	Jones Inlet, NY	38	12/15/0
29	S Hartmann	Cape May Rips, NJ Eatons Neck, NY	07/01/01	R Hartley	Cape May Rips, NJ	50	12/16/01
32	S Jakubowski	Old Orchard Lt., NY	05/17/01	R Uhler	Cape May, NJ	35	12/16/01
21	B Semasek	Indian R., DE	06/01/98	C Willingham	Oregon Inlet, NC Ocean City, MD	28	12/16/01
24	A Piszczatowski	Glen Cove, NY	10/02/01	B Brownstein	Cape May, NJ	25	12/16/01
22	B White	Wakefield, RI	05/06/00	G Matteson	S. Kingstown, RI	26	12/17/01
34	R Gardrel	Block Is., RI	09/09/01	M Bulkley	Ocean City, MD	34	12/17/01
21	R Nystrom	Stratford, CT	11/08/01	L Feniger	Long Branch, NJ	21	12/19/01
23	F Stunkel	Stamford, CT	07/10/01	J Orlando	Seaside, NJ		12/19/01
28	R Templeton	Block Island, RI	06/04/00	P Jackson	Lower DE Bay	34	12/19/01
24	P Grippo	Jones Inlet, NY	12/02/01	B Joyce	Mantoloking, NJ	24	12/19/01
22	R Leja	Bridgeport, CT	10/04/00	A Ristori	Belmar, NJ	23	12/20/01
28	S Hartmann	Eatons Neck, NY	10/04/01	G Short	Ocean City, MD	28	12/20/01
29	A D'Amato	Cape May, NJ	11/16/01	C Malta	Sea Girt, NJ		12/21/01
19	F Stunkel	Darien, CT	10/04/99	T Melito	Offshr., Manasquan, NJ	27	12/21/01
24	A Anderson	Block Is., RI	05/29/01	D Schiffhauer	Barnegat Inlet, NJ	27	12/21/01
24 26					Ocean City Inlet, MD	26	12/21/01
	G Ottavio	Cape May, NJ	11/24/01	C Faircloth	Sea Bright, NJ	24	12/22/01
24	W Terrill	Provincetown, MA	10/02/01	J Nirschl	Norwich, CT	17	12/22/01
16	G Kerkhan	Sandy Hook, NJ	11/24/00	A Anderson	Smith Point Lt., VA	30	12/23/01
30 30	A Anderson	Block Is., RI	05/15/01	H Jackson	Chesapeake Bay Brdg., MD	31	12/24/01
29	B White	Block Island, RI	06/24/00	E Warner	Perth Amboy, NJ	19	12/25/01
14	A Schweithelm	Asharoken, NY	08/16/00	J Costa	Indian R. Inlet, DE	30	12/25/01
28 31	A Anderson	Block Is., RI	07/05/01	M Bienicewicz W Kowalski	Kearny, NJ	31	12/26/01
31	A Anderson	Block Is., RI	06/08/01	W Kowalski	Perth Amboy, NJ	27	12/27/01
20 26	H Sweet	Barrington, RI	10/13/97	J Costa D Hirsch	Avalon, NJ	26	12/28/01
26 27	A Anderson	Block Is., RI	07/06/01		Montauk, NY		12/29/01
27	R Nystrom	Bridgeport, CT	07/09/00	E Oberg R Lentz	James R. Brdg., VA	37	12/30/01
34	S Jakubowski	Romer Shoal, NJ	05/29/01	1. Lenne			
Tauto	g				and a court tion		04000
7	A DeFrancisco	S. Housatonic R., CT	10/15/99	R Desrosiers	3 mi. S. Stratford, CT		04/30/01
13	L Gonnello	Flynn's Knoll, NJ	04/26/01	L Gonnello	Flynn's Knoll, NJ	13	05/24/01
12	L Gonnello	Flynn's Knoll, NJ	04/30/01	L Gonnello	Flynn's Knoll, NJ	12	06/02/01

	Species						
Len	gth Tagger	Place Tagged	Date	Recapturer	Location	Leng	th Date
9	A Piszczatowski	Glen Cove, NY	05/10/01	A Piszczatowski	Glen Cove, NY	10	07/14/01
10	L Velsor	Atlantic Beach Reef, NY	09/06/01	G Fariello	Atlantic Beach Reef, NY		09/01/01
11	J Dotsey	Rockaway Reef, NY	08/01/01	J Gelb	Sheepshead Bay, NY		09/10/01
10	J Dotsey	Rockaway Reef, NY	08/01/01	A Bocchi	Rockaway Reef, NY	12	10/11/01
14	G Brouillette	Narragansett Bay, RI	10/14/01	P Karcz	Narragansett Bay, RI	14	10/21/01
12	G Brouillette	Narragansett Bay, RI	10/14/01	P Karcz	Narragansett Bay, RI	14	10/21/01
11	M Hawkins	9 mi. NE Ocean City, MD	04/28/01	H Hickman Jr.	Fenwick Is. Wreck, DE	11	10/21/01
12	A Piszczatowski	Glen Cove, NY	10/15/00	A Piszczatowski	Glen Cove, NY	13	10/29/01
11	G Brouillette	Narragansett Bay, RI	10/14/01	A Bolduc	Narragansett Bay, RI	12	10/29/01
11	G Mehmood	Raritan Bay, NJ	10/25/01	R Madel	Old Orchard Lt., NY	11	10/31/01
12	N Ignacio	Raritan Bay, NJ	10/25/01	R Madel	Old Orchard Lt., NY	13	10/31/01
16	A Piszczatowski	Glen Cove, NY	10/14/01	M Beberman	Mamaroneck, NY		11/08/01
17	A Piszczatowski	Glen Cove, NY	11/04/01	V Vaccaro	L.I. Sound, NY		11/09/01
18	A Piszczatowski	Glen Cove, NY	11/08/01	J Morandı Jr.	Poling Bros. wreck, CT	20	11/10/01
17	A Piszczatowski	Glen Cove, NY	11/04/01	J Breen	W. L.I. Sound	17	11/11/01
17	A Piszczatowski	Glen Cove, NY	11/01/01	J Breen	W. L.I. Sound	17	11/11/01
12	A Piszczatowski	Glen Cove, NY	11/04/01	D Isaac	W.L.I. Sound		12/04/01
15	A Piszczatowski	Glen Cove, NY	10/12/01	R Rivera	L.I. Sound, NY		12/04/01
20	A Piszczatowski	Glen Cove, NY	11/01/01	D Nanton	L.I. Sound, NY		12/04/01
17	A Piszczatowski	Glen Cove, NY	10/22/01	S Ayala	Off City Is., NY		12/07/01
10	A Piszczatowski	Glen Cove, NY	05/10/01	S Ayala	Off City Is, NY		12/07/01
19	A Piszczatowski	Glen Cove, NY	11/01/01	C Hufnagle	W.L.I. Sound	19	12/09/01
16	A Piszczatowski	Glen Cove, NY	10/12/01	J Palmer	60' water, W. L.I. Sound	16	12/10/01
17	A Piszczatowski	Glen Cove, NY	10/12/01	J Palmer	60' water, W. L.I. Sound		12/10/01
14	A Piszczatowski	Glen Cove, NY	11/04/01	J Palmer	60' water, W. L.I. Sound		12/10/01
17	A Piszczatowski	Glen Cove, NY	11/04/01	J Palmer	60' water, W. L.I. Sound		12/10/01
15	A Piszczatowski	Glen Cove, NY	11/01/01	J Palmer	60' water, W. L.I. Sound	16	12/10/01
12	D Goodwin	SE Jones Inlet, NY	06/09/01	C Nakashian	SE Jones Inlet, NY		12/17/01
Trigg	gerfish						
15	C Fiorillo	Deal, NJ	08/02/01	W Egerter	Seaside Pk., NJ		09/15/01
Wea	kfish						
20	A D'Amato	Cape May Inlet, NJ	06/01/01	B Drew	USCG, Cape May, NJ	20	06/06/01
19	A D'Amato	Cape May Inlet, NJ	06/07/01	K Laudeman	Cape May Inlet, NJ	19	06/18/01
23	B Shillingford	Strathmere, NJ	07/13/01	R Saitlova	Strathmere, NJ	.,	07/30/01
25	P Cappuccia	Little Egg Hbr., NJ	05/23/01	O Kline	Harvey Cedars, NJ	25	08/03/01
13	M Bode	Ocean City, MD	07/21/01	F Phillips	Ocean City, MD	16	09/28/01
Wint	er Flounder						
12	C Kurtzke	Jamaica Bay, NY	03/28/01	G Philippo	Jamaica Bay, NY	12	04/28/01

## The American Littoral Society's web address is now www.littoralsociety.org

Check out our tagging section at www.littoralsociety.org/tag.htm

Or visit some of these other fishing or tagging related sites

www.soundfishing.com

www.njstriper.com

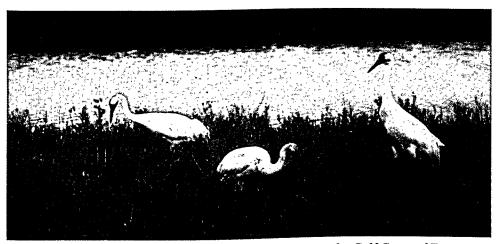
www.reel-time.org

www.neangling.com

### **Protecting Coastal Wetlands**

by DAVE GRANT

"It took a lot to get a little, but we farmed every inch of that land. We even put the swampy part to use, as a pasture for cows..."
From: "Pataki," by Governor George Pataki (NY)



A tidal wetland at the Aransas National Wildlife Refuge on the Gulf Coast of Texas. The three birds are whooping cranes, an endangered species that nests inland (Nebraska, for example) and winters in coastal marshes.

Coastal wetlands, especially tidal marshes, are some of our most productive and threatened ecosystems. To better understand these threats and people's attitudes about them, we surveyed wetland scientists, managers, educators and environmentalists for an overview of their concerns and perceptions. The results are varied and interesting, and when compared to the data on wetlands losses reported from various state and federal agencies, indicate a high level of understanding of the threats by respondents. The results also revealed some interesting trends and attitudes in different regions.

Grant is the director of Brookdale College's Ocean Institute at Sandy Hook, and wrote the New Jersey version of Saving Wetlands: A citizens' guide for action, for the National Audubon Society. All photos by the author unless otherwise noted.

#### Coastal wetlands defined

Coastal wetlands, according to Ralph Tiner (US Fish and Wildlife Service) and others, are "low-lying areas periodically flooded by tidal waters for varying lengths of time. They are associated with barrier beaches, salt water embayments and tidal rivers along the coastline. They generally include tidal flats, salt and brackish marshes and tidal freshwater marshes. shrub and scrub areas and swamps, mangrove swamps, salt barrens or flats, intertidal rocky shores, beaches and aquatic beds.") Although there are a great variety of coastal wetlands types, and many are regional in nature, flooding by tidal water is the common denominator of all of them.

The Natural Oceanic and Atmospheric Administation (NOAA), looking at the "big picture," expands this definition somewhat, including wetlands within the Estuarine Drainage Areas (EDA) as part

of a Coastal Wetlands Area (CWA) stretching from upstream, freshwater areas downriver to the sea-grass beds. This is important for proper management since even those uninformed about the complicated issues involved in managing an ecosystem, understand that water (and the problems associated with it) flows downhill.

Perhaps the best example is Chesapeake Bay, North America's largest estuary, with a watershed that drains parts of six states,

and accounts for about 45% of the EDA of the Middle Atlantic coast. However just a fraction of it is coastal wetland. These limited wetland resources are greatly affected by the urban, agricultural and forestry activities that occur on about half of the land area. They are also at the receiving end of over a thousand pounds of pesticides and fertilizers that are applied to each square mile every year, hundreds of industrial and wastewater "point"

sources of water pollution, and innumerable sources of "non-point" source pollution from 15 million residents

#### Wetland distribution

Although coastal wetlands comprise 30% of the wetlands types in the contiguous United States (about 27 million acres) they are not distributed evenly. Eighty-one percent are found in the Southeast, with more than half (51%) concentrated on the Gulf coast, and the remainder (30%) in the Southern Atlantic region. Nationally, the states with the most coastal wetland

acreage are (in order of acreage): Florida, Louisiana, South Carolina, Texas, North Carolina, Georgia, Alabama and New Jersey. More than three-quarters of coastal wetlands in the contiguous states are associated with the wider, shallow estuaries of the East, and the largest concentrations are found in the Everglades-Ten Thousand Islands system in Florida, the Mississippi Delta region, and Albemarle-Pamlico Sound in North Carolina.

Despite their great size, Washington,

Oregon California, account for less than two percent of coastal wetlands. This apparent incongruity is related to the ruggedness of their coastlines, but human activities weigh heavily too and California leads the nation in wetlands loss, with a 99% reduction.

Alaska, because of its size, geography, remoteness and limited development, is an exceptional case with more than half of the nation's remaining wetlands; over

170,000,000 acres -- much of it in the Yukon and Kuskokwim river deltas. Despite having a coastline longer than the rest of the coastal states combined, estuarine and marine intertidal wetlands are a small percentage of the entire wetlands acreage in Alaska. About 2.18 million acres are classified as estuarine, including 48,000 acres of marine intertidal wetlands.

Coastal wetlands are elastic ecosystems thriving in a dynamic geologic province. They move, disappear and reform at a natural pace that is for humans, barely per-



The age of a salt marsh can be dated by reading the layers of a core sample; the core here is being collected in the tidal wetlands of Brewster, Massachusetts. The person in the center appears to be puzzled.

ceptible, but biologically and ecologically, is quite acceptable. Natural processes like shifting shorelines and changing sea level constantly alter them.

In spite of the great biological and economic importance of wetlands, most states have sacrificed significant acreage to development during the last two centuries. Nationally, about 58,500 acres have been lost annually in past decades. Little data document the early rates of destruction during Colonial times, but as with most other wetlands, what remains is less than half of what existed in the 1700s.

In New Jersey, for example, more than 85,000 acres of tidal marsh has disappeared since 1925. Much of it was filled at a tremendous rate, over 3,000 acres a year, typically for vacation homes at the shore, until the state passed the Wetlands Act of 1975. Today, losses are reduced to about 50 acres a year, mostly for public works projects like utility right-of-ways, highway construction and causeways out to barrier beaches in the southern part of the state, (where nothing should be done to encourage more development.)

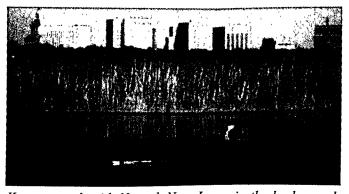
#### Methods

Interest in conducting this survey was motivated by several factors. Certainly, the primary reason is that these are interesting ecosystems. Another was the opportunity to tap into a national audience -- members of the National Marine Educators Association gathering at their annual meeting. Third, is the lingering menace from efforts started by the Bush administration ("Bush the Elder") to redefine "wetlands" in a way that might result in further losses, despite his "No net loss" pledge, a goal that the nation has

yet to achieve.

The information about wetlands presented here is a snapshot of the attitudes and concerns of a wide assortment of individuals from around the country. To develop relevant questions and a list of knowledgeable people to pose them to, local wetland scientists and advocates were consulted for their opinions and ideas. Some especially helpful individuals who assisted and guided us include: Ken Thoman and Sue Draxler (Monmouth County Parks System) Linda Stefaniak (Allentown High School), Owen Hatteras (American Littoral Society) and the late Dr. William Niering (University of Connecticut and Humbolt Field Research Institute, Maine).

Predictably, because of their biological and economic importance, many people have strong feelings about wetlands protection, and it was easy to generate survey questions. Our target audience was wetlands scientists, regulators and marine educators at the local, state and national level from all of the coastal states. They were contacted by direct mailings. In addition, we were able to fill in many blanks by surveying participants at the annual conference of the National Marine



Kearny marsh with Newark New Jersey in the background, and New York City less than 10 miles the other way. The marsh is one of the state's most productive; It was formed by accident (probably an illegal dredge and fill), and is fed by stormwater runoff. The bird in the center foreground is a black-crowned night heron. Photo by Anne Galli.

Educators Association.

Over 325 questionnaires were returned and evaluated. Any that were incomplete or had confusing responses were rejected. I'm compelled to share a few anecdotes to illustrate how interesting it can be to undertake such an endeavor.

Surprisingly, many of the respondents one might classify as environmental activists and advocates (self-described bunny-huggers and the like) proved to be the most difficult to get timely responses from, and as a result, several mailings were done. Perhaps not too astounding, efficient administrators at the middle levels of government needed little encouragement to return the survey or pass it to a subordinate for action, and it wasn't even an election year.

We received a particularly memorable

deep throat phone call government from а employee of one state (let's just say it has oil, deltas, and shrimp dishes and politics that are hot and spicy.) in which he cautioned us that "could not get the approval of his superiors to participate" so he was passing along the questionnaire to local environmental group.

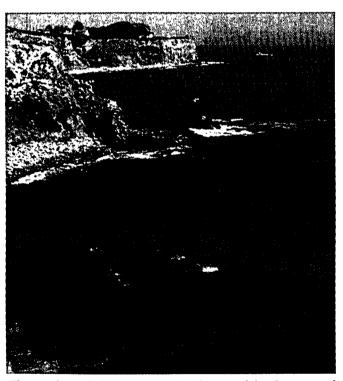
Perhaps the most insightful response came from a Middle Atlantic bureaucrat who felt compelled to write a review of the questions and reorganize them and the choices into the "proper (alphabetical) order." (That was one destined for the circular file.) Regardless of their responses. all were thanked for their participation.

The occupational breakdown of respondents is as follows: Government and regulatory agencies (73.4%), Educational institutions (15.3%), Environmental and Advocacy groups (11.3%). Most respondents are paid staff (58.5%) and directors or supervisors (31.7%), and the remainder (9.8%) described themselves as educators and naturalists.

Data were evaluated nationally then compared regionally, and ranked according to the number of first, second and third responses. The regions are: New England (ME, NH, MA, RI, CT), Middle Atlantic (NY, NJ, PA, DE, MD, VA), South Atlantic (NC, SC, GA), Gulf (FL, AL, MI, LA, TX), Pacific (AK, WA, OR, CA) and Islands (Hawaii, Guam and Puerto Rico).

#### Results: Threats to Wetlands

The responses pertaining to the *greatest* 



The southern California coast (and most of the Oregon and Washington coasts) has few wetlands, and California leads the country in percentage of wetland loss - above 90 percent, most of that in San Francisco, the state's only estuary of size.

34 Underwater Naturalist

threats to wetlands are divided into Human and Natural threats.

#### **Human threats to wetlands**

Wetland types are variable, shaped by the environment according to location, hydrology, climate, soil and fire frequency. The ways that humans disturb wetlands are as diverse as the many types of wetlands that exist. Urbanization of coastal areas destroys wetlands and affects adjacent areas through: filling, dredging, the creation of impervious surfaces, increased runoff, sedimentation, nutrient loading and the introduction of toxic chemicals from point and non-point sources.

Home construction also affects wetlands through habitat loss, sewage disposal and the introduction of exotic or invasive species. Shoreline stabilization projects alter wetlands, especially in coastal areas, and isolates upland areas that wetlands can naturally retreat to as sea level rises. Roads and bridges can alter hydrology and affect the salinity of coastal wetlands.

Agricultural practices on existing and former wetlands can have significant impacts on adjacent wetlands. Although the "Swampbuster" provision of the 1985 Food Security Act discourages the conversion of wetlands to agricultural production, many permitted practices by farmers, like maintaining roads, ditches and drainage systems, timber harvest (silviculture), livestock grazing, and the application of fertilizer and pesticides, can interfere with wetlands function and impact wildlife.

In our survey, urbanization received the most first-choice responses nationally (23%); followed by non-point pollution (16%), vacation homes (10%), and agricultural development and dredge-and-fill activities (9% each). Other activities that are of concern include: commercial development (7%), shoreline stabilization (6%), agricultural and forestry practices (4%), industrial runoff (4%), sewage

(3%), transportation corridors (3%), and two percent each for oil spills and primary residences.

Responses making up less than one percent of the tally were: industrial development, tidal flow restrictions, bulkheading, fertilizer, land-filling and leaching of contaminants, pesticides and sedimentation.

Not surprising, some of these threats are more significant in different regions. For example: In the Gulf region, *dredge-and-fill* ranked highest among respondents. In New England and the South Atlantic, *non-point pollution* ranked highest. And in the Middle Atlantic States, *vacation homes* ranked second to *urbanization*. The threats presented by region are:

- New England: Non-point pollution, urbanization, development
- Middle Atlantic: Urbanization, vacation homes, non-point pollution
- South Atlantic: Non-point pollution, urbanization, agricultural/forestry practices
- Gulf: Dredge-and-fill, non-point pollution, development
- Pacific: Urbanization, non-point pollution, agricultural/forestry practices
- Islands: Urbanization, non-point pollution, agricultural development

These opinions about threats to wetlands reflect some departure from the most recent USF&WS survey of docu-1986-1997. from losses mented Urbanization also topped that list with 30% of the acreage lost, but it was followed closely by agriculture (26%), silviculture and forestry (23%) and rural development (21%). This most recent data illustrates a continuing trend regarding wetlands loss. The previous surveys (1975-1985) found agriculture leading the list for wetlands disturbance and accounted for 54% of the acreage lost that decade. This is a decline from the previous two decades when agriculture accounted for 87% of the losses nationally.

The population distribution near the coast is often cited as a major threat to wetlands; and indeed, more than half of

Americans live in coastal counties and these areas have five times the population density of inland areas. However, this distribution is not that different from observations made over 200 years ago by Thomas Jefferson. What is significantly different is the size of the population today. This, and society's needs, determines the impact on wetlands. Urbanization is simply the most recent chapter in our exploitation of these valuable ecosystems.

### Natural threats to wetlands

Coastal wetlands are altered by many natural processes like erosion and accretion, sea-level changes, grazing by wildlife, ecological succession, climate change and geological upheavals. In an undisturbed setting they are able to endure by migrating, responding to change and continually being re-established. Their ability to develop and thrive can be severely impeded by human activities like development along the coast.

In our survey, erosion (35%) received the most first choice responses nationally, followed by rising sea level (22%), exotic species (11%), storms (10%), invasive species (7%), subsidence (6%), accretion (2%), and overgrazing by wildlife (2%). Fires, flooding, groundwater depletion and soil loss received 1-2% each.

Louisiana loses between 16-25,000 acres of wetlands (an area larger than Manhattan) each year because of a combination of human activities like dredging, levee construction and dams reducing the amount of sediments that reach the Mississippi Delta. It is also subject to natural processes like subsidence and rising sea level, which also may be influenced by human activities. Not unexpectedly, among Gulf state respondents, erosion. subsidence, storms, and rising sea level are listed more frequently than in other regions. Surprisingly, respondents from most areas listed exotics and invasive species as major concerns.

The threats presented by region are:

- New England: Rising sea level, erosion, exotics/invasive species
- Middle Atlantic: Erosion, rising sea level, exotics/invasive species
- South Atlantic: Storms, rising sea level, erosion
- Gulf: Erosion, Subsidence, storms and rising sea level
- Pacific: Erosion, exotics/invasive species, rising sea level, accretion
- Islands: Rising sea level, exotics/invasive species, erosion

## Invasive and Exotic plants and animals

Participants were asked to list invasive and exotic species that threaten wetlands in their state and the responses reflect the current regional distribution of just a minute fraction of the 4,300 alien or exotic species that are now thriving in the U.S. Some species listed have not yet reached any state (Brown tree snake in Guam). Another, *Spartina alterniflora*, is considered an exotic because it is an eastern species and has been crowding out western species where it is introduced in Washington and Oregon.

The impact of exotic species on native biodiversity can be especially pronounced in wetlands. Exotic and invasive species are often very aggressive and not only threaten the integrity of native communities and functions, they can completely replace them, as Phragmites (reed grass) has done in parts of the Middle Atlantic. This can reduce habitat and endanger local species, alter hydrology, and even have direct socioeconomic impacts, like increasing fire hazards.

Preventing the introduction of these pest species is critical because management programs for many of them are labor intensive and expensive, and have had only limited success. Estimates of the cost of controlling exotic species in the U. S. range as high as \$138 billion (about \$500. per person) each year. Louisiana is trying a novel approach to deal with the nutria or Argentine swamp beaver (Myocaster) by

developing new recipes that encourage residents and tourists to sink their teeth into the problem and serve that South American rodent in new dishes. Unfortunately, few other target species are likely to be exploited this way.

The *invasive*, reed grass (*Phragmites*) topped the list in nine Northeastern states (CT, DE, ME, MD, NY, NJ, PA, RI, VA). Considered a probable native by some authorities, Phragmites (or an aggressive cultivar of the native) colonizes disturbed sites and crowds out more valuable wetland plants in others. Cattail (*Typhus*), a valuable wetland plant in many parts of the world is blamed for crowding out other marsh plants in Alabama and California.

Exotics reported as problem species in other states include: Annual grasses in California; Brazilian Pepper (Schinus), Melaleuca and Australian (Casuarina) in Florida: Autumn olive (Elaeaguus) in New Jersey; Chinese tallow or Popcorn tree (Sapium) in Alabama and Texas; Pampas grass (Cartaderia) in California; Purple loosestrife (Lythrum) in Maine, Connecticut, Oregon, Washington, Pennsylvania and New Jersey: Reed canary grass (Phalaris) in Oregon and Washington; and Tamarisk tree or Saltbush (Tamarix) in California.

Two bothersome plants are particularly interesting to me. One, because it is a good example of the complexity of the issue of exotics, and the other because it hits close to home. Water hyacinth (*Erichhornia*), labeled by some as the "world's worst aquatic plague," clogs waterways and is a nuisance to boaters. It has no enemies in Florida and Louisiana, except the manatee, which will graze on it. The manatee is threatened by habitat loss and because it is a frequently injured by boat traffic.

The other plant of interest, Scotch broom (Cytisus), crowds out many native species in Oregon and the Pacific Northwest, and has little value to native wildlife. It was introduced to the West Coast by an expatriate Scotsman, a Captain Walter Grant (!) who also opened

the first lumber mill in Vancouver.

### **Wetlands Protection**

The protection of wetlands is carried out at the national, state and local levels, and individuals have a significant impact by taking a proactive role in wetlands protection. Participants were questions about which protection and management methods they felt were the most effective in their state.

Nationally, 55% of respondents feel there is sufficiently strong public support for continued wetlands protection in their state. Regionally the responses ranged between 45% (Islands) and 75% (New England).

When asked if changes are proposed in their state's wetlands protection laws, 44% responded "Yes" nationally. Regionally the responses ranged between 25% (Islands) and 60% (Pacific). Of those who answered, "yes," 67% felt that changes proposed in their state laws would make wetlands protection more difficult.

Some wetlands advocates still express concern about short-sighted "No net loss" policy and wetlands classification changes proposed by the first Bush Administration, and 76% of respondents indicated such proposed changes in federal laws would make wetlands protection more difficult in their state. The highest level of concern expressed is from respondents of the Gulf, Pacific and New England states (85%, 84% and 65%, respectively).

When asked what programs are most effective in protecting coastal wetlands in your state, 37% of respondents nationwide rank state regulatory programs (state wetland protection laws) the highest; followed closely (35%) by federal regulatory programs like the Clean Water Act, River and Harbor Act of 1899, etc. Eastern regionstend to favor state programs whereas in the Gulf, Pacific and Island regions (which also tend to have greater proportions of government-owned land) federal programs received higher praise.

Private programs like Ducks Unlimited and The Nature Conservancy also received high marks from respondents and ranked third nationally (9%), followed by federal acquisition programs (U.S. Fish &Wildlife Service, National Wildlife Refuges, etc.) with eight percent. Local and municipal regulatory programs (Ordinances, transfer of development rights, etc.) ranked fifth Surprisingly, state acquisition programs (open space bond issues, etc.) were last with four percent.

### **Managing Wetlands**

When wetlands are disturbed by human activities, *mitigation* is often required by government agencies. Mitigation is a last resort, not a substitute for wetlands preservation, and is a process to attempt to alleviate impacts on wetlands through:

- Restoration of an affected wetland after it has been disturbed.
- Creation of replacement wetland acreage where one does not presently exist.
- Enhancement to improve the functioning of a degraded wetland.
- Mitigation Banking to provide contributions of money or land for the unavoidable loss of wetlands.

Not all mitigation attempts are success-

ful. For example, in New Jersey, almost half of these projects have failed, and the result has been a net loss of wetlands. Tidal restoration projects have the best track record, especially when initiated adjacent to existing, functioning wetlands. Forested and other freshwater wetland mitigation projects have not demonstrated great success, and some enhancement efforts have been controversial. The least favored options are Contribution or Mitigation Bank programs, which allow the destruction of a wetland, as long as there is no net loss in an area. A major concern is the scope of that affected "area" since it may allow the substitution of wetlands some distance away, reducing the value of the replacement.

Nationally, only 39% feel wetlands mitigation is a successful program in their state. In New England and the South Atlantic, half of respondents (50%) feel their state programs are successful, but significantly fewer in the Islands (25%) and the Middle Atlantic (26%) approve of their state's mitigation efforts.

When surveyed as to the type of mitigation required, 56% responded restoration, 20% reported creation and 5% reported enhancement. The respondents were split almost evenly regarding the replacement requirements for impacted acreage (1:1 or

2:1) for their state. The National Audubon Society recommends that in cases when damage is severe or a mitigation site is separate from an existing wetland, the ratio should be greater, as high as 3:1 or even 6:1.

Red mangroves near Ponce, Puerto Rico. The roots provide protection from wave action on the shoreline and are ideal habitat for juvenile fishes.

### **Wetland Values**

It is said that "wetlands work 24 hours a day, seven days a week" and the value of wetlands cannot be overstated or detailed adequately here. Participants were asked

what features of coastal wetlands make them most valuable to your state? Their responses are fairly consistent and are: Habitat (25%), Water Quality (19.9%), Flood Control (16%), Recreation (11.5%), Erosion Control (8%), Storm Protection (8%), Aesthetics (6.4%) and Natural Products (3.9%). All regions listed Habitat as the top value that wetlands provide to their state, although Flood Control moved into the number-two spot in the Gulf, Northeast and Pacific regions.

## Wetlands worth saving and exploring

Finally, participants were asked: Are there any coastal wetlands types that are unusual or unique to your state, or particularly threatened? Again, the responses reflect interesting regional variations.

Many respondents from different regions included "tidal marshes" as threatened. A large number also listed vernal, ephemeral, or isolated wetlands, which are more difficult to identify and protect. Significantly, destruction of some isolated wetlands is permitted under wetlands protection laws, so these are areas of particular concern. (Most importantly, these responses also gave me a complementary guide to interesting wetlands worth exploring on my next vacation.)

Starting in New England, one encounters unusual raised peatlands (coastal bogs) along the coastal strip of Downeast Maine. Dominated by dwarfed shrubs, sub-arctic plants and orchids, some of these actually drain directly into saltwater at the seashore. They are threatened by development, rising sea level and peat harvesting. In Massachusetts, Coastal Plain Ponds (Ponds without inlets or outlets, and which are tied to the water table) and cranberry bogs (Natural peatlands dominated by cranberries and bog plants) are threatened by development, pollution, and draw-down of water tables from too many private and municipal wells. These areas harbor a disproportionate number of endangered species, including some that

are globally rare.

Coastal fens were listed too. These were a new one on me and a bit of a puzzle, since the only fens I was famliiar with are those small peculiar limestone springs found in mountainous areas. A reticent Cape Codder piqued my curiousity with a cryptic response to my inquiry: "Why don't you ask the Red Sox?" Persistence on my part paid off and I was rewarded with another enigmatic response, but it helped describe them and the threats to them: "Ever hear of Fenway Park?"

In Rhode Island, Connecticut and New York, tidal ponds were listed most frequently, and these are threatened by development, pollution, bulk-heading and shoreline protection structures. Also in Connecticut in New Jersey, and Pennsylvania and Virginia, freshwater tidal creeks are threatened by pollution, utility rights-of-way, development and changes in tidal flow and hydrology. These limited sites, dominated by nonpersistent plants like wild rice and arrowhead, and cattails, are some of the most valuable habitat for fish and migrating waterfowl.

Also in the Middle Atlantic region, ephemeral and isolated wetlands were repeatedly listed. These tend to be peculiar little shrub bogs, wet meadows and vernal pools with local names like spongs, pingos and pocosins (in New Jersey) and whale wallows, sea level fens and Delaware and Delmarva bavs in Maryland. Although their method of formation is poorly understood, these wetlands are another variation of a coastal depression, dominated by deciduous trees, shrubs, grasses and sedges, some of them rare.

In the South Atlantic region, Carolina bays and Maritime forests were listed. Carolina bays are unusual, elliptical ponds and shallow wetlands, dominated by evergreen "bay" trees, like sweetbay magnolia and redbay. Thousands exist on the coastal plains from Florida to Delaware, and some are large, but their origins are a mys-

tery. Many have been filled for farming or altered by timber harvesting. More than 97 percent of the Carolina bays once

found in South Carolina have been destroyed or severely altered.

Dry and wet maritime forests are found on barrier islands and sea islands of the Carolinas, Georgia and Florida. Many oak and cedar maritime forests along the entire eastern seaboard were logged-out for ship building in colonial times. and are today threatened by development, saltwater intrusion and erosion.

The Everglades or River of Grass (emergent freshwater wetlands prevalent in South Florida) is threatened by agricultural development and runoff, freshwater diversion. saltwater intrusion, exotic plants, soil desiccation and fires. Florida

mangroves (forests of saltwater-tolerant trees with floating seeds) also are threatened by development. Although cutting mangroves is prohibited, some homeowners practice, what is called locally, Midnight Blight to open their view to the water. Black mangroves along the south Texas coast (which grow farther north than other species) are threatened by

coastal development on barrier beaches and die-off during severe winters.

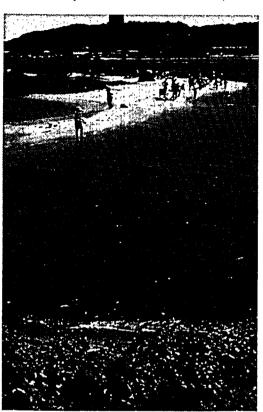
In Alabama, there is concern for carniv-

orous plant bogs. peatlands with poor drainage, high acidity and insectivorous plants. Since they are isolated wetlands. they are threatened by farming development. In Mississippi and Louisiana, concern was expressed for delta and riverine swamps and marshes. Besides problems like subsidence and rising sea level, lumbering is still important industry along this part of the Gulf coast and threatens the remaining cypress lowland and forests.

On the West Coast, inter-dunal bogs were listed as threatened because they are restricted to a narrow band of coastline. These coastal peatlands are dominated by spruce and other bog plants.

Wetlands in Alaska are the least threatened and most abundant in the country, but concern was expressed regarding oil development and transportation, and the inevitable spills that occur.

Island wetlands have not escaped threats from tourism and commercial development. Ephemeral wetlands were identified as threatened in Hawaii, and



This sand spit on the back side of Sandy Hook, New Jersey, provides the calm waters conducive to marsh building, upper left. Summer seining turns up as many as 20 species of juvenile fishes feeding near the saltmarsh grasses weakfish, northern kingfish, blackfish and cunner, sea robins, snapper blues, pollock, and tropicals in the late summer.

40

tourists should note that Waikiki beach (which means "spouting waters" and referred to the many freshwater springs and seeps where taro was once cultivated) has only hotel fountains remaining. Hawaii harbors many endangered plants and animals including freshwater species that have evolved there and rely on these threatened wetlands.

Respondents from Guam and Puerto Rico expressed concern over *commercial development* on the coast. In Puerto Rico, vacation home construction and agriculture, particularly sugar cultivation, threatens wetlands; and a proliferation of illegal houseboats threatens its mangroves, bioluminescent bays, and coral reefs.

### Saving coastal wetlands

Our attitude about wetlands has changed over the time. Once they were regarded as waste areas or valued only for the resources that could be extracted. George Washington devised a plan to try to drain the Dismal Swamp in Virginia to convert it to "productive" agricultural land. Wetlands were also feared as the lair of pirates, boogiemen like the Jersey Devil, or worse. The great ornithologist Frank Chapman wrote in 1895, "How many evenings have I tempted the malaria germs of the Jersey lowlands to watch the Woodcock perform his strange sky dance!"

Perhaps the first person to sound the alarm about wetlands loss was the Swedish botanist Peter Kalm, who in 1749, returning from a visit to North America, complained that colonists recklessly cutting 1,000-year old Atlantic white cedar would soon destroy the forests of New Jersey.

Because they are situated below the fall line and at the lower reaches of our rivers and estuaries, coastal wetlands will always be impermanent features on the landscape. Also because of their location, they were the first and some of the hardest hit wetlands modified and destroyed by human activities. They are usually the first casualties in the endless battle to tame our surroundings and because they are situated in our most densely populated areas will always be impacted by our activities and natural processes.

After several centuries, we are still debating how to manage wetlands, although it should be apparent by now that they are our most valuable coastal resource and every effort should be made to preserve them. Addressing the issues and concerns presented here will influence the future of coastal wetlands, but in the long run it is necessary to increase the public's awareness of the value and threats to these special places. The best protection for wetlands continues to be public ownership and vigilance by individuals to insure that wetlands and the laws that regulate them are protected. For those who would like to pursue this issue further, try the following:

Wetlands: Status and Trends in the Counterminous United States (Mid-1970's to Mid 1980's) Dahl, T.E. and C.E. Johnson. 1991. U.S. Department of Interior, Fish and Wildlife Service, Washington, D.C.

Wetlands. William A. Niering. National Audubon Society Nature Guides. Alfred Knopf Publishers, NYC, NY

Wetlands of the United States: Current Status and Recent Trends. Ralph W. Tiner. 3/84 U.S. Government Printing Office, Washington, D.C.

Field Guide to Coastal Wetlands of the Northeast United States. Ralph W. Tiner. 11/90. University of Massachusetts Press.

Field Guide to Coastal Wetlands of the Southeast United States. Ralph W. Tiner. 6/93. University of Massachusetts Press.

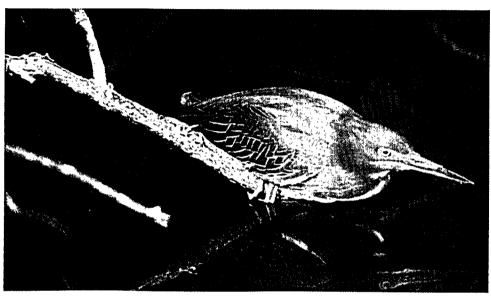
Greenhouse Effect, Sea Level Rise and Coastal Wetlands. Titus, James G. 1988 Office of Policy Analysis, USEPA. 333.91'816'093

Saving New Jersey Wetlands: A Citizens' Guide for Action in the Mid-Atlantic Region. National Audubon Society, 1104 Fernwood Ave., #300, Camp Hill, PA



# Green Heron Fishes With Bait

by CHARLES ABEL



A little green heron in its active fishing posture. Serious ornithologists change its name every decade or so. Recently, it has been little green heron, green heron, or green-backed heron. Take your pick. Photo by Dave Grant.

It was the last week or two of February. My family and I were fortunate enough to find ourselves vacationing in Florida during our kid's school break. We were visiting my in-laws on the west coast on the outskirts of Fort Myers. My in-laws (snowbird's) winter habitat for several years has been Bokeelia on the northern end of Pine Island. Pine Island itself is not one of Florida's mainstream winter tourist spots. The Island has a low-key image without high rises or sandy beaches. It mainly attracts fisherman and boaters.

Charles Abel is a merchant seaman whose previous contribution to this journal was A Bad Wind For Sanderling (Vol. 25, No. 4).

The island itself is referred to as the garden island because of it's large tracts of farmland, predominately nurseries.

Development is sprawling here too. With man-made water frontage the major player. I sort of hate to admit that I've been here. Definitely goes against the grain of what the Littoral Society stands for. I envision my dues being sent back with a terse expulsion note. For free accommodations though one must make sacrifices. But back to the island. Being Florida and being still rural, wild life still has a precarious foothold on the place. In short birding is easy. To be sitting poolside and to have white ibis's constantly winging overhead with the pervasive

42 Underwater Naturalist

screeching of osprey and red shoulder hawks it's surely paradise. To see active bald eagle nests, and all the herons, wood storks, pelicans, the gulls and shore birds, woodpeckers, vultures, owls, and hawks reinforces the fact that we're a long way from Jersey.

However on this one afternoon of our short vacation we had to leave paradise and entertain the kids with a round of miniature golf and other amusements at "Mike Greenwell's Arcade," inland from Pine Island in Cape Coral. Mike was a Boston Red Sox player many years ago. Mike's place is "Fore Sale." Cape Coral is also "For Sale." It has been for many decades. To see the barren landscape of planned roads and empty lots is eerie, the likes of a nuclear waste land.

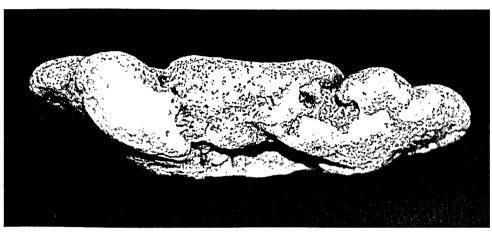
But Mike's is alive, somewhat, bordered by super dense stands of non- native trees. What a job it must be to keep that growth at bay. We entertained ourselves with our round of miniature golf, the kids hitting the arcade afterward while the adults had a refreshing break in the shade. With the arcade played out it was "Hey Dad let's ride those go-carts over there." I asked my youngest (Dylan) to check out the price. With him back with the details I followed Dylan to the track, but noticed a fish pond on the way. I had to check it out. Bounding up the steps of a shaded deck at the pond, I was immediately dejected by the sight of nothing more than a ditch of brown water below. What the hell is this thing? An alligator pond? There was no sign of life anywhere. No beady eyes. Nothing. Must be another tourist trap I guess, but then I noticed ten feet away a green heron at the water's edge. I swear the bird wasn't there when I first surveyed the pond. It was a scrawny looking bird. Maybe winter Florida green herons just tend to be small. I imagine it's sometimes easier surviving in the wild when you're puny. I'm used to seeing plurnp summer and fall Jersey birds on someone's dock or flushed out of a sedge. I consider the green heron the tamest of all herons, but,

I've never seen one hold so closely. I froze, thinking maybe it doesn't see me. You idiot! That bird has eyes in the back of its head. It knows your there and is probable anticipating your every move. So you can stand at ease and blow it off as a weird Florida thing. "Come on Dad let's go!" Oh yes, off to the races. So much for birding 101.

We did the go-carts and then headed for the exit. "But wait, you've got to check out this green heron in this fishless fish pond." I told our crew. So we all bounded up the deck. Of course no bird, just muddy water. "Does anyone have a quarter?" inquired one of the kids. What for, I replied. "To feed the fish!" they all said. Sure enough at kid height was a bubble gum dispenser of fish food. With the first click of the machine, and a tablespoon of mini-pellets the green heron arrived. Where from, no one did see. With the first toss of food the pond came alive. Smallmouth bass, blue gills, catfish, turtles, minnows. With the water so murky you couldn't really see the fish, so the boys were instructed to toss the food closer to the edge so we could get a good look at the fish. When the first kernel hit the shore, our green heron picked it up and took it to a spot at the water's edge. But he didn't eat it. He dropped it into the water just in front of him. If a bluegill made for his kernel in the water, the heron would quickly catch the fish. With every shower of food it looked like the fast bluegills gobbled them up. The bass and catfish seemed always too late to get in on the action. Our heron though was constantly dropping it's kernels into the water. and when a minnow darted for the heron's kernel, it was caught by the heron and quickly eaten. I think everyone realized it at the same time. That heron is fishing. and he's using bait. How could this bird be so smart? Maybe it's man's preconceived ideas of nature that are dumb. As you may have guessed, even I enjoyed an afternoon of amusements in sunny Florida.

### Fossil Ghosts on the Beach

by SILVIO CRESPO, JR.



With claws in a display posture and face to the camera, well preserved ghost crab fossils like this one are hard to find. This specimen was found by the author near Canova Beach, Florida.

How many generations of children have chased ghost crabs along eastern beaches of North America? How many people have enjoyed watching these small industrious beach dwellers clean their burrows, and search for food? Although ghost crabs live on every beach from Massachusetts to Texas, their fossils are very hard to find.

Very few specimens have been described, and the locations, and preservation of these animals have been ill defined. This is most likely due to the environment where they live. The sands and sediments of the east coast beaches are constantly changing, due to wave action, tides, and wind. Ghost crabs have chosen to live and have successfully adapted to life in this dynamic environment.

The author and long time Society member was a teacher of Earth Science at Jefferson Township High School in New Jersey. He's now retired and lives on the East Coast of Florida. All photos are by the author.

Walking the beaches, one finds very few if any dead ghost crabs. Shore birds, raccoons, and other predators make quick work of those who are not vigilant, too slow, or too weak to make it back to the protection of their burrows. For the few whose remains are left on the beach, tides and wave action quickly disarticulate and grinds their remains into beach sediment.

On Florida's Space Coast, there is a thick deposit of fossilized beach sediment (the Anastasia formation -- Pleistocene) that is yielding fossilized ghost crabs (Ocypode quadrata, fabricius). The most productive area starts at Satellite Beach, and continues south to Canova Beach. This beach area is just south of Cape Canaveral in Brevard County, Florida.

Beach erosion has exposed the Anastasia Formation, a 100,000-year-old Pleistocene beach. It is a consolidation of beach sediments very similar to those we see today composing eastern beaches. Many of the same species of animals that live today lived then, and can be found fossilized in the sedimentary rock. The

44 Underwater Naturalist

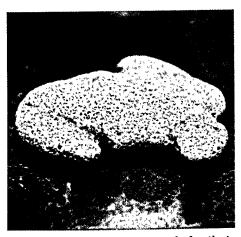
formation is the rigid spine that makes up the East Coast of Florida. It goes from Jacksonville to Jupiter, but most of the time it is covered with beach sands of recent age. The formation is exposed at maximum low tide. It is in the rock layers and rock fragments that the waves have broken up that the best fossils can be found, exposed and washed into pools and on the beach.

With patience and a good, eye one can find fossil crabs. Most are surf worn, and only hint at what they are. With luck a very good specimen can be found. These specimens preserve the actual exoskeleton of the crab.

Ghost crabs have a distinctive symmetry while they are resting. Therefore they cannot be confused with other species of crabs. They are borrows dwellers with tubular shapes so it is easier for them to enter and exit their borrows. Thus fossilized specimens are easy to identify. They must have died and are fossilized in their resting posture, indicating that they must have died in their borrows.

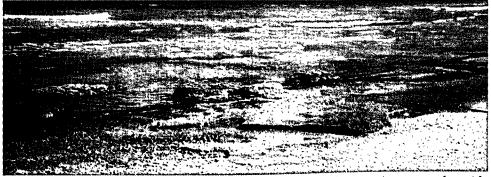
All the fossilized specimens are enrobed in fine sand, and shell fragments that have been cemented together by calcium carbonate around the exoskeleton, or have replaced the hard parts of the ghost crab leaving an internal mold.

The professional literature does not have very much information about these



One reason finding ghost crab fossils is rare. It takes an experienced eye to recognise a surf worn sample like this one.

fossils or how they are formed. In fact, there is more information about far less numerous dinosaurs than about these crabs. We can blame this on the environment in which the crabs live, a littoral zone that recycles remains rapidly, and does not allow fossilization to take place readily. Now with these new specimens we can follow a succession that spans 100,000 years to the present. We can also study how the beaches where they lived have changed, and at the same time understand the beaches of eastern North America from a time before man walked on them.



Canova Beach - along Florida's Space Coast in Brevard County. At extreme low tide beach erosion exposes the 100,000 year old Anastasia Formation and, along with it, fossils of the same age.

### From The Director's Desk

### "The Ocean's Easy Disregard"

The Atlantic Monthly recently published an article entitled "Anarchy At Sea" by William Landewiesche. The article opens with the dramatic lines, "...since we live on land, and usually beyond sight of the sea, it is easy to forget that our world is an ocean world, and to ignore in practice what that means. Some shores can be tamed, but beyond the horizon lies the wave-maker, an anarchic expanse, the open ocean of the high seas." Landewieseche goes on to spin a tale of pirates, unregulated and shadowy merchant ship owners, and the unpredictability of the sea - as he puts it, "the ocean's easy disregard for human constructs."

The story was a great way to pass time on a long flight but also spoke, at its essence, to a broader issue closer to the concerns and agenda of the American Littoral Society --the familiarity that "human constructs" presume about the ocean, and our ability to take from it what we will, to use it for our own purposes. We often act without the knowledge necessary to do so wisely. Neither arrogance nor ignorance, however, insulates us from the "ocean's easy disregard" for our intentions. The ocean's processes and ecology play out along well-established lines – oblivious to humanity's desired outcomes, or presumptuous expectations that our actions will be benign. All too often action in the absence of information comes with negative consequences.

To illustrate, this year, the Society continued its ongoing work to preserve an irreplaceable ecological relationship along the shores of Delaware Bay -- the linkage between migratory shorebirds and horseshoe crabs (Limulus polyphemus). Each spring, thousands of shorebirds, on their return flight from over-wintering areas in South America to breeding grounds in the Arctic, stop over along the Delaware Bay to feed on the eggs of horseshoe crabs. Decimated by the energy demands of their flight, the protein rich eggs enable the birds to rapidly gain the weight necessary to complete the migration. The horseshoe crabs, following their own biological imperatives to spawn, are on the beaches at the exact time the birds arrive.

Both populations in this ecological partnership are sustained because of the "superabundance" of eggs laid by the horseshoe crabs. Into this long-standing calculus comes a growing seafood market demand for conch and eel — for which the preferred bait is horseshoe crabs. Also, the biomedical applications of lysate from horseshoe crab blood — which serves as one of the most effective indicators of bacterial contamination of medical equipment — are expanding rapidly. These twin pressures created a blitz on horseshoe crab harvesting along the Atlantic coast in the late 1980's and early 1990's, which was for all practical purposes unregulated. The pressure has by all accounts reduced the observable horseshoe crab population by 50% since 1990. It was not long before scientists and local conservation organizations, including the Littoral Society, began to take notice of dropping numbers of shorebirds in annual surveys, and lower "take off weights" reflecting decreased weight gains at the end of the birds' stay on Delaware Bay. The population declines have raised the question of the necessity of conferring endangered status for at least one species of Delaware Bay shorebird. Clearly, none of this was expected or anticipated.

Despite centuries of study by a variety of scientific disciplines, the way the ocean "works," and particularly the ecology of its living inhabitants and their habitats, remains in many areas largely unknown. Hence, the Society's pursuit of the study of the marine environment, and our efforts to work this knowledge into the various processes, agencies and forums where decisions affecting the coast and ocean are being made. Each year of tagging records, each field observation, each new study or discovery informs us. Perhaps it merely reminds us of what remains unknown. In either instance, the work of Littoral Society members discussed in this issue of the Underwater Naturalist better prepares us to address "the ocean's easy disregard."

- Tim Dillingham Executive Director

46 Underwater Naturalist



## CELEBRATION OF THE WORLD'S BARRIER ISLANDS

By Orrin Pilkey, batiks by Mary Edna Fraser

Columbia University Press, New York 400 p. \$39.95 (cloth).

This is a big, beautiful book that will serve well if it is read and looked at by engineers, beach lovers, geologists, surf fishermen, coastal mayors, shore developers and shorefront home buyers, the Corps of Engineers, the chairman of the House Appropriations Committee, and the head of the Federal Emergency Management Agency. And it should be must reading for barrier island residents and government officials all over the world. includes the exquisite batiks of Mary Edna Fraser, renderings in silk and dye of barrier islands that she has studied from photographs, hikes, and, most notably, from the perspective of "flying in my grandfather's 1946 415C Ercoupe at about 85 miles an hour, the cockpit open, wind in my face." The book is filled with her work and with photos, current and historic, from the ground and the air, and is, indeed, a celebration of barrier islands.

It is also a lesson in geology (in easy-to-understand language), in waves, tides, and currents, in river flows, and in coastal climate.

Throughout the book, Pilkey describes man's understandable but most often foolhardy attempts to force barrier islands to stay in one place, a tactic that flies in the face of nature which needs barrier islands to move to survive. The book is also evidence that Pilkey has traveled the world studying barrier islands. There are examples from the Arctic, Asia, the Indian Ocean, and South America; some 2200 all told, everywhere except the Antarctic, and

the reader gets the feeling that Pilkey has walked most of them, scuffling sand, pitching rocks, and shaking his head at overdeveloped shorefronts. Pilkey has written a number of good books about the coast from his littered office at Duke University, including "The Beaches Are Moving" and "The Corps and the Shore." His writing continues to be clear and forceful, and Fraser's aerial photographs and batiks and the photographs of others wonderfully illustrate the book's message: barrier islands deserve to be celebrated; they also need to be understood.

### MARINE LIFE OF THE NORTH ATLANTIC

By Andrew J. Martinez

Aqua Quest, Locust Valley, NY 255 p. \$30.00 (paper).

This is the third edition of Martinez's excellent guide to the underwater from Canada to New England with about 80% of the species covered occurring down through New York and New Jersey. First published in 1994, he has brought it up to date with more wonderful photographs and descriptions.

It's the photos that make the book, for here are great pictures of the creatures of North Atlantic waters as they actually appear to the diver. He goes from algae to winter flounder with one or several underwater photos and good descriptions -plants, invertebrates, and fish. One can only imagine how many hours of diving it took to produce such a panoply of the real things in their natural surroundings.

This is a valuable book for the fishermen, diver, or littoral naturalist.

### SEASHORE FOR SALE

Fletcher Selkirk,the Society's deputy comptroller, has been approached by a stockbroker with a hot tip to buy shares of Seashore Overdevelopment Corporation, stock symbol SOC on the American Stock Exchange. Selkirk performed his due diligence by asking for a prospectus, which he received a few days later along with the company's four-color brochure. Here are some hot selections from the sales pitch:

Welcome to The Seashore Overdevelopment Corporation, SOC for short (remember our slogan: We SOCK it to the shore). Might we interest you in one of the following:

**SEAGULLE VIEWE** -- A community designed by Ralph Lauren on the edge of Farewell Bay. Here are 27 of the most exquisite summer homes you can imagine. Perched on a cliff overlooking the water, these 4500-6700-square-foot semi-castles on 1/8-acre mini-estates come equipped with wet bars, damp bars, and dry bars. The great room overlooks an Olympic-sized swimming pool so you don't need to mix with the public on the beach below. Fully pebbled lawn is carefree and varmint free.

ATLANTICE BEACHE-- Right on the sand with scrumptious ocean views. The dunes have been landscaped (bulldozed flat) to provide an unlimited horizon. This is the only beach development we know of where the palatial homes have garage doors wide enough to HH&HH (Handle His and Her Hummers).

**SANDYE POINTE** -- Gracious living with a vengeance. If you select one of these beauties, you will be the envy of everyone in the office. A winding road cut through a former holly forest opens onto a vista of showy faux seaside farmettes, each with its own miniature barn (complete with copper weathervane!), four master suites on each of three floors, along with full tropical hardwood decks. With a cocktail in one hand and your significant other's in the other, this is as close as you can legally get to heaven and the high tide line.

STORME RIDGE -- The ultimate in seashore comfort. The decor is French provincial with a touch of Norwegian moderne -- Italian marble foyer leads from entrance areas to great room with 18-foot ceilings. Donald Trump's chief designer, Marc, did the interiors - mostly maroon and gold, with spectacular floor to ceiling mirrors. Fully covered by federal flood insurance.

SURFE TOWNE -- A totally gated exclusive community with a walled-in private ocean beach, barbed wire fencing at the surf's edge; offshore guarded by the Village's private security force on jetskis. Hungry, combat trained Rhodesian ridgebacks patrol the perimeter. You don't know what relax means till you stretch out on a deckchair at Surfe Towne!!

HARBORE DOCKE -- Lagoon community on 300 acres of filled former satt marsh. Fully bulkheaded. Step directly from your elegant sprawling 16-room English Tudor manse into your boat. Be underway in a flash. The nearby waters are devoid of speed limits, no-wake zones, and pesky marine life -- 20-minute boat ride to the famous Stripede Basse Inne!

GULFE GOLFE RESORTE -- Two 18-hole championship golf courses nestled among 250 five-acre country estates. This seaside location lends itself to luxurious comfort and par smashing golf. Drop your three-wood and come for a visit and you'll never leave. The entire development is pest free. If you see a mosquito or greenhead fly, toad or frog, we'll take 10% off the price of the house!

Want more info? Check our website: coastalsprawl@abode.SOC\ptbarnum

D. W. Bennett

### **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.

Yes, I want to	be a member of the	American Littoral Society.
I am currently a member and here are my renewal dues.		
receive the Coastal Rep	orter newsletter, the	Vith these annual membership dues I will Underwater Naturalist journal, field trip and any local chapter newsletters and
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