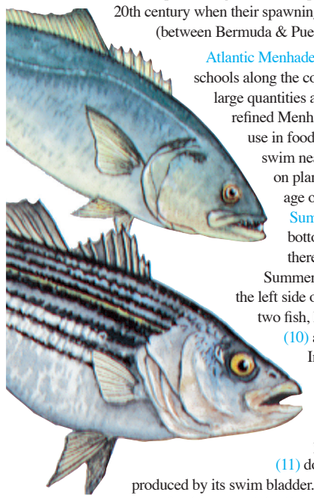
AQUATIC SPECIES

If you encounter anglers in the Harbor Estuary, chances are they are trying to catch Striped Bass (1). Striped Bass commonly reach 30 lbs., but can be 50, 60, or even 70 lbs or more. They are anadromous, spending most of their adult lives in the open ocean and returning to their native river to spawn. The Hudson River stock is one of the most important populations on the East Coast. Another important recreationally-caught fish, Bluefish (2a), spawn off the coast from June to August. The Harbor Estuary is an important nursery ground for Bluefish juveniles, known as Snappers (2b), which average less than 10 inches. Maturity is reached in 2 years at about 14 inches. These voracious fish prey heavily on other fish like Menhaden and Silversides. White Catfish (3) have feelers extending from both jaws, giving them whisker-like features. If you want to catch a catfish you'll find them at the bottom of the freshwater portions of the Harbor. White Perch(4), another sought after fish, spawns in the spring, when the female deposits a long string of eggs in shallow waters of the estuary.

Undoubtedly one of the most popular catches, not only in the Harbor Estuary, but in much of the Mid-Atlantic region, is Blue Claw Crab (5), which is olive on top, with a deep blue stripe down the middle of its claws. Although they can swim to catch prey, they are generally bottom feeders.They prefer sandy bottoms where they hide from predators and burrow to overwinter. Blue Crabs reach maturity in 12-18 months, but most do not live beyond 2 years. The crab can grow up to 9 inches wide, and is always half as long as it is wide. The most unusual species on the poster may be the American Eel (6), which swims against the tide, to turn a phrase; it lives in fresh or brackish water, but returns to the open ocean to spawn. Migration and reproduction of eels remained a mystery until the 20th century when their spawning grounds were discovered in the Sargasso Sea (between Bermuda & Puerto Rico).



Atlantic Menhaden (7), aka Bunker or Mossbunker, travel in large schools along the coast. The fish, which is rich in oil, is caught in large quantities and is used for bait and animal feed. In 1997, refined Menhaden fish oil was FDA approved for general use in foods for human consumption. Atlantic Herring (8) swim near the water's surface in huge schools, feeding on plankton. As with trees, scientists can determine the age of a Herring by counting the rings on their scales. Summer Flounder (9a) and Winter Flounder (9b) are bottom-dwelling flat fish. Both look similar, however, there is one sure way to tell them apart; it's in the eyes. Summer Flounder, also called Fluke, have both eyes on the left side of their body. Winter Flounder, the smaller of the two fish, have both eyes on the right side. Mummichog (10) also called Killie, is most commonly used for bait. In fact, one can find Killie traps within the Harbor Estuary just waiting to fill up with what will soon be dinner for larger fish.

Do you think fish can't talk? Think again; if you catch the bottom dwelling Striped Searobin (11) don't be surprised to hear it grunt, a sound produced by its swim bladder. While it may not win a Grammy (or a beauty contest for that matter) the Oyster Toadfish (12) also produces a croaking noise. This large headed fish can live out of the water for several hours! It is also called Oyster Cracker because of its huge, strong mouth. Carp (13) is a freshwater fish that can be found swimming in the upper rivers of the Harbor Estuary. They prefer shallow, warmer, fresh waters and in winter they stop feeding and stay near the bottom. The Scup (14), aka Porgy, is a popular fish. This carnivorous fish may look small, but it is a strong fighter for its size. Bluegill (15) another freshwater fish, is also commonly known as a Sunfish. During spawning, the male Bluegill will build a shallow nest and guard the eggs until they hatch. The Atlantic Silverside (16) another important bait fish, is usually found in salt marshes and estuaries, in less than 10 feet of water. These schooling fish are an important link in the food chain of the Harbor Estuary ecosystem. They consume many smaller fish and are then eaten by larger fish of both commercial and recreational importance. You will find the mesmerizing Lion's Mane Jellyfish (17a) moving by means of a slow-motion jet propulsion. Also known as the Red Jellyfish, its graceful dance can rival the most prima ballerina. Along with the Lion's Mane are the Moon Jellyfish (17b) and the Comb Jelly (17c). Both are translucent, but in fact are not true jellyfish since they do not sting and are pushed primarily by currents.

Algae (18a & b), simple plant-like organisms, are the foundation of most aquatic food webs. One of the most important photosynthesizing organisms on earth, algae capture more of the sun's energy and produce more oxygen than all plants combined. Green Algae or Spirogyra (18a) are microscopic algae. In contrast, Sea Lettuce (18b) or Ulva, considered seaweed, is the largest algae. Sea Lettuce is a translucent bright green and can grow up to 3 feet long. It provides food and shelter for marine animals. Plankton (19), the smallest organisms shown on the poster, are microscopic open-water plants, animals or bacteria. Plankton can be divided into Phytoplankton (plants) and Zooplankton (animals), which are dinner for some of the smaller inhabitants of the Harbor Estuary.

MORE AQUATIC & TERRESTRIAL SPECIES

The Blue Mussel (20), violet-blue with a shiny blue-black outer covering, brings color to the often dark and dreary pilings found along the Harbor's waterfront. This common sea mussel, found attached to rocks on the shores of America and Europe, is widely used as food and bait. The Ribbed Mussel (21), identified by its ridges, can be found growing in clumps in the marshes of the Harbor Estuary. The Soft-Shell Clam (22), aka Steamer, is generally found in muddy sand. When disturbed it ejects a spurt of water and withdraws to safer depths by means of a hatchet-shaped muscular foot. The wavy, irregular shaped Slipper Shell (23) and Bryozoan (24) also called "moss animals" [aquatic organisms living in colonies of interconnected individuals] are often found attached to the Horseshoe Crab (25). The Horseshoe Crab, more closely related to spiders than crabs, has remained literally unchanged for more than 300 million years. In late spring, females lay eggs on the sandy beaches of the estuary. The population of this timid creature is threatened because of its value as bait for conch and eel traps. However, there is an important factor that may help save one of the oldest living creatures on our planet; the serum from the live horseshoe crab is the world's only known source of a compound used in hospitals around the world to test for purity in drugs, vaccines and intravenous drips.

At first glance, Barnacles (26) resemble mollusks, but they are actually crustaceans. Their planktonic larvae are free-swimming, but as adults they are always attached to objects such as rocks, piling, ship bottoms. During this stage, the barnacle lives in a tiny igloo-like structure, kicking food into its mouth with its feet. Hundreds of Fiddler Crabs (27) can be found on mud flats and in low salt marshes throughout the estuary during low tide. The male Fiddler Crab has one large front claw, so large it is up to half its body weight. The claw is used to court females and define territory. If the male loses this claw, the smaller claw enlarges and a new small claw regenerates in place of the one lost.

Grass Shrimp (28) can get only as large as 2 inches. This nearly transparent to brown colored shrimp may be inedible for humans, but is a feast for many inhabitants of the Harbor Estuary. Take a canoe ride through any salt marsh creek in the Harbor Estuary at low tide and you will almost certainly see the Northern Diamondback Terrapin (29), the only estuarine turtle, sunning itself on a mudflat. The Northern Diamondback is in peril because bulkheading and coastal development destroy nesting sites, and cars run them over when they emerge onto causeways to lay eggs. The sex of the hatchlings is determined by the temperature at which the eggs are incubated. Those nearer the surface, thus experiencing greater warmth, are more likely to become female. Eastern Garter Snake (30) can grow to about one meter long. This slender snake lives close to water, feeding on amphibians, insects, small mammals, and birds. The Garter Snake can vary in its appearance, but is usually olive, grey, or brown. The Northern Water Snake (31) is about the same size as the Garter and can be almost any color from light grey to dark brown. This heavy-bodied snake can be found in swamps and marshes, feeding on fish and amphibians.

Visit any marsh or pond in the estuary and you may find (and hear) the largest frog in the United States, the Bullfrog (32), which has a distinct deep-throated call of "Jug-a-rump." This carnivorous amphibian's hind legs,which are longer than its body, are considered a delicacy. The Muskrat (33) is very abundant throughout the Harbor Estuary. This semi-aquatic rodent has a long tail, which it uses as a rudder when swimming. The Muskrat eats water plants, invertebrates, and sometimes fish. The Sandy Mud Worm (34) can be found burrowing in tidal flats and is an important forage base for many fish and wading birds. The largest known Dragonfly (35), with a wingspan of 29 inches, lived more than 270 million years ago. While you are unlikely to see one quite that large in the estuary, these interesting insects, known for their territorial behavior, can be observed munching on mosquitoes and other small flying insects.

BIRDS

It is easy to see a heron or egret along the waterways of the Harbor Estuary, especially in areas of extensive mudflats, tidal marshes and shallow pools. Great Egrets (36) are the largest of the white, long-legged wading birds. Often they are seen walking slowly through shallow water, ready to stab at prey with their large yellow bills. The smaller Snowy Egret (37) eats fish and amphibians. When seen out of the water it can be recognized by its yellow feet or "golden slippers." Great Blue Herons (38) are the largest of the wading birds, appearing almost gray from a distance.The Great Blue Heron was once listed as a threatened species in New Jersey, meaning it had the potential to become endangered if conditions such as habitat, disease, or contamination were not improved. It was removed from the list in 1999, wonderful news for New Jersey and of course for the Great Blue Heron.

Not easily seen is the medium-sized Black-Crowned Night Heron (39). It rests during the day by hiding in the cattails and reeds, but at dusk it becomes active. Like other wading birds, it will walk slowly along the banks of the marshes, patiently waiting to strike out at fish, crabs and other aquatic creatures to eat. Unlike the Great Blue Heron, the Black-Crowned Night Heron is still included on the threatened species list in New Jersey.

It is difficult to visit the Harbor without crossing paths with a gull. Termed "seagulls," there are many types of gull that visit the estuary during migration and the winter months. The largest of these is the Great Black-Backed Gull (40), easily recognized by its black wings that contrast with a striking white head. Also common is the slightly smaller Herring Gull (41) with gray wings and a red dot on its yellow bill. Smaller yet is the Ring-Billed Gull (42), aptly named for the black ring around its bill. All of these birds are opportunistic feeders; they will scavenge along the water's edge, find food in refuse piles and even steal food from other birds.

Similar to a gull to the casual observer, but vastly different in habit, is the Common Tern (43). This buoyant flier can be seen hovering above the water's surface, eyeing the fish below. When it feels that it can grab a good meal, the tern will dive straight down, head first into the water. This differs dramatically from the feeding strategy of the Black Skimmer (44), which flies just above the water's surface, dipping its bill into the water as it flies. As soon as the Skimmer's bill encounters a fish, the bill snaps shut with its prey. The Black Skimmer is listed as endangered in New Jersey, which means their prospects of survival are in immediate danger, and assistance is needed to prevent extinction. In New York, the Black Skimmer is listed asa species of special concern, which means that the species is not yet recognized as endangered or threatened, but there is documented concern for its welfare.

Floating on the surface of the water could be a Mallard (45). Traveling in pairs, these common dabbling ducks feed on aquatic vegetation and often can be seen with their tails in the air as they try to reach plants growing just under the water's surface. Diving nearby one might see the Double-Crested Cormorant (46), a duck-like bird with a long neck. They eat primarily fish and will dive under the surface and swim underwater to find food. If you find yourself along the water's edge watching this bird in action, you will soon discover why the Cormorant may be considered the most successful angler in the Harbor Estuary.

The Osprey (47) has made an incredible comeback from being on the brink of extinction, although it is still listed as threatened in New Jersey and a species of special concern in New York. This large bird of prey, with its striking black, brown, and white markings, can be seen gliding over the estuary's large waterways. Ospreys feed primarily on live fish, which they grab from the water with their long hooked talons. Also increasing in population are Peregrine Falcons (48), with several pairs nesting on bridges and buildings in the Harbor Estuary region. These fast flying, powerful birds feed primarily on other birds such as pigeons, waterfowl and shorebirds. Improved prospects for the survival of the Peregrine Falcon lead to its removal from the Federal list of endangered species in 1999. However, it is still listed as endangered in both New York and New Jersey.

The estuary's marshes are filled with many songbirds, the most common being the Red-Winged Blackbird (49). Singing from atop a reed stalk, this bird proclaims its territory to others of its species with the loud "kon-ka-ree!"

PLANTS

Horsetail (50), a medium-height perennial herb, can be found in both brackish and freshwater marshes throughout the Harbor Estuary. Common Horsetail, growing to about 1 foot, has hollow green stems and minute dark brown, pointed scale-like leaves. Common Cattail (51a) and Narrow-Leaved Cattail (51b) are home during the day for the Black-Crowned Night Heron. These tall perennial herbs have long flat leaves with flowers in dense, cylindrical terminal spikes. The Common or Broad-Leaved Cattail grows 5-9 feet high, with simple elongate leaves up to 1 inch wide. Its terminal spike is composed of two parts, the male flower spike above and contiguous with the female spike. Narrow-Leaved Cattail, most commonly found in tidal marshes, can be distinguished from its counterpart by the separation between the male and female parts of the flower. Also, as its name implies, the leaves are narrow, getting up to only 1/2 inch wide. The graceful, delicate leaves of the Cinnamon Fern (52) are found in forested wetlands and along stream banks. This fern grows up to 5 feet tall and is often seen with cinnamon-colored woolly stalks. The Cinnamon Fern also grows in Canada, Europe, and the tropics.

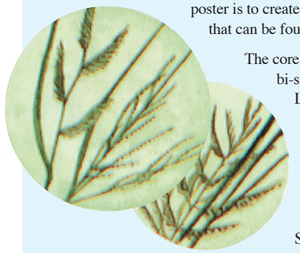
A predominant plant found throughout the wetland areas of the Harbor Estuary is commonly refered to as Spartina. Often mistaken for the same plant, many varieties of this hollow-stemmed grass exist. The poster contains three species: Salt Meadow Grass, Salt Marsh Grass, and Salt Reed Grass. Salt Meadow Grass (53a), also called Salt Hay, is low to medium height (1-3 feet tall) and is found in irregularly flooded salt and brackish marshes; Salt Marsh Grass (53b) is usually the only species of Spartina found in the regularly flooded low marsh zone of salt and brackish marshes. Salt Marsh Grass, also called Smooth Cordgrass or Saltwater Cordgrass, grows 1 to 8 feet tall. Salt Reed Grass (53c) can be found in irregularly flooded salt, brackish, and tidal fresh marshes. Also known a Big Cordgrass, this plant stands 3 to 10 feet tall and has an open terminal inflorescence composed of 20-50 crowded spikes.

The moderate to fast growing Pin Oak (54) can be found bordering swamps. This broad-leaved deciduous tree has a growth pattern unlike most oaks, a continuous central trunk with scaly, ridged bark and slender, short lateral branches. The dark gray to brown Pin Oak, with light brown acorns, can be found up to 110 feet tall. Scotch Pine (55), often used as Christmas trees, is the most widely distributed pine in the world. The Scotch Pine, with its oblong cones and dark bluish green leaves, is not native to New York and New Jersey, but has been naturalized in parts of New England, Sandy Hook, the Pinelands, and can be found along the rivers of the Harbor Estuary.

Birds are not the only ones that contribute to the amazing colors of the Harbor Estuary; from spring through fall all sorts of flowering plants dot the landscape. Asiatic Dayflower (56), sometimes called Spiderwort, can be found in many varieties of colors. These colorful flowers unfortunately last a short time, as their name suggests. By contrast, between August and October, the graceful clusters of the deep yellow flowers and green foliage of Seaside Goldenrod (57) seem to go on forever. This perennial, 3 to 4 feet in height, is found in irregularly flooded salt, brackish, and tidal marshes of the Harbor Estuary, in addition to sand dunes and beaches. One of the most striking flowers is the short-lived Sunflower (58). This burst of yellow energy is an important source of vegetable oils for humans. Blooming from July through frost is the Black-Eyed Susan (59). The dark brown disk surrounded by deep golden yellow rays seems to light up the landscape. Ox-Eye Daisy (60), with the appearance of what would be considered the common daisy, can be found cheering up the Harbor Estuary. Growing along non-tidal and brackish marshes is the Swamp Rose Mallow (61), with its huge saucer-shaped blooms. This beautiful perennial can grow as tall as 7 feet. The flower, which is 4-6 inches, has white or rose colored petals with deep purple or red centers.

WILDLIFE OF THE NEW YORK - NEW JERSEY HARBOR ESTUARY

The NY-NJ Harbor Estuary is a highly urbanized area that is also home to numerous species of animals and plants. A number of these appear on the state's threatened or endangered species lists. This brochure, which is a companion piece to the Wildlife of the Harbor Estuary poster, is designed to identify and provide some basic information about the species illustrated. The objective of the poster is to create an awareness of the rich natural resources that can be found within the Harbor Estuary.



The core area of the Harbor Estuary includes the bi-state waters of the Hudson River, Upper and Lower New York Bays, Arthur Kill, Kill van Kull, and Raritan Bay. In New York, the area includes the East, Harlem, and Bronx Rivers and Jamaica Bay. In New Jersey, it includes the Hackensack,Passaic, Raritan, Shrewsbury, Navesink, and Rahway Rivers as well as Newark and Sandy Hook Bays.

FISH CONSUMPTION ADVISORIES

The States of New York and New Jersey issue advisories to the public on safe consumption practices for recreationally-caught fish. The advisories are issued due to the elevated levels of chemicals that may be found in certain species. Some individuals, such as pregnant women and children under the age of 15, may be at higher risk from the effects of eating contaminated fish.

Although consumption advisories vary according to who you are, where you fish, and what you catch, both states advise that:

- Children and women who may become pregnant should generally not eat any fish or crabs caught from water bodies where there are advisories. Toxic contaminants can have a greater effect in developing children and fetuses, and some chemicals may be passed on in breast milk.
- Fish fat and skin should always be removed, and any cooking juices or drippings should be discarded because many toxic compounds concentrate in the fat.
- If eating crabs, the tomalley or "mustard" (hepatopancreas) should be removed before cooking because this is where many toxic substances accumulate. Note that it is prohibited to eat, catch, or sell crabs from Newark Bay and tidal Passaic and Hackensack Rivers.

State agencies can provide more information on fish advisories and the health effects of chemical contaminants in the fish. To stay current with advisory updates and to request additional information:

- In NEW JERSEY, call the NJ Department of Environmental Protection at 609-984-6070, visit www.FishSmartEatSmartNJ.org, or call the NJ Department of Health at 609-826-4935.
- In NEW YORK, contact the NY State Department of Health. Visit www.health.ny.gov/fish, call 518-402-7800 or 800-458-1158, or email btsa@health.state.ny.us.

WILDLIFE OF THE NEW YORK - NEW JERSEY HARBOR ESTUARY

AQUATIC SPECIES

1. Striped Bass (*Morone saxatilis*) Moronidae
2a. Bluefish (*Pomatomus saltatrix*) Pomatomidae
2b. Snappers 'Snapper Blues, Young Bluefish'
3. White Catfish (*Ameiurus catus*) Ictaluridae
4. White Perch (*Morone americana*) Moronidae
5. Blue Claw Crab (*Callinectes sapidus*) Portunidae
6. American Eel (*Anguilla rostrata*) Anguillidae
7. Atlantic Menhaden 'Mossbunker, Bunker' (*Brevoortia tyrannus*) Clupeidae
8. Atlantic Herring (*Clupea harengus*) Clupeidae
9a. Summer Flounder 'Fluke' (*Paralichthys dentatus*) Paralichthyidae
9b. Winter Flounder (*Pleuronectes americanus*) Pleuronectidae
10. Mummichog 'Common Killie' (*Fundulus heteroclitus*) Cyprinodontidae
11. Striped Searobin (*Prionotus evolans*) Triglidae
12. Oyster Toadfish 'Oyster Cracker' (*Opsanus tau*) Batrachoididae
13. Carp (*Cyprinus carpio*) Cyprinidae
14. Scup 'Porgy' (*Stenotomus chrysops*) Sparidae
15. Bluegill 'Sunfish'(*Lepomis macrochirus*) Centrarchidae
16. Atlantic Silverside (*Menidia menidia*) Atherinidae
17a. Lion's Mane 'Red Jellyfish' (*Cyanea capillata*) Cyanidae
17b. Moon Jellyfish Ulmaridae
17c. Comb Jelly Ctenophora
18a. Green Algae, Spirogyra Chlorophyta
18b. Sea Lettuce (*Ulva lactuca*) Ulvaceae
19. Plankton Phytoplankton & Zooplankton

MORE AQUATIC/TERRESTRIALSPECIES

20. Blue Mussel (*Mytilus edulis*) Mytilidae
21. Ribbed Mussel (*Geukensia demissa*) Mytilidae
22. Soft-Shell Clam (*Mya arenaria*) Myacidae
23. Slipper Shell (*Crepidula fornicata*) Calyptraea
24. Bryozoa
25. Horseshoe Crab (*Limulus polyphemus*) Limulidae
26. Barnacles (*Balanus sp.*) Balanidae
27. Fiddler Crab (*Uca pugnax*) Crustacea
28. Grass Shrimp (*Palaemonetes pugio*) Palaemonidae
29. Northern Diamondback Terrapin (*Malaclemys t. terrapin*) Emydidae
30. Eastern Garter Snake (*Thamnophis sirtalis*) Colubridae
31. Northern Water Snake (*Natrix sipedon*) Colubridae
32. Bull Frog (*Rana catesbeiana*) Ranidae
33. Muskrat (*Ondatra zibethica*) Cricetidae
34. Sandy-Mud Worm (*Streblospio benedicti*) Polychaeta
35. Dragonfly (*Libellula sp.*) Insecta

BIRDS

36. Great Egret (*Casmerodius albus*) Ardeidae
37. Snowy Egret (*Egretta thula*) Ardeidae
38. Great Blue Heron (*Ardea herodias*) Ardeidae
39. *Black-Crowned Night Heron (*Nycticorax nycticorax*) Ardeidae
40. Great Black-Backed Gull (*Larus marinus*) Laridae
41. Herring Gull (*Larus argentatus*) Laridae
42. Ring-Billed Gull (*Larus delawarensis*) Laridae
43. + Common Tern (*Sterna hirundo*) Laridae
44. **Black Skimmer (*Rynchops niger*) Rynchopidae
45. Mallard (*Anus platyrynchos*) Anatidae
46. Double Crested Cormorant (*Phalacrocorax auritus*) Phalacrocoracidae
47. *Osprey (*Pandion haliaetus*) Pandionidae
48. **++ Peregrine Falcon (*Falco peregrinus*) Falconidae
49. Red-Winged Blackbird (*Agelaius phoeniceus*) Icteridae

PLANTS

50. Horsetail, common (*Equisetum arvense*) Equisetaceae
51a. Common Cattail (*Typha latifolia*) Typhaceae
51b. Narrow-Leaved Cattail (*Typha angustifolia*) Typhaceae
52. Cinnamon Fern (*Osmunda cinnamomea*) Osmundaceae
53a. Salt Meadow Grass 'Salt Hay' (*Spartina patens*)
53b. Salt Marsh Grass 'Saltwater CordGrass' (*Spartina alterniflora*)
53c. Salt Reed Grass 'Big Cordgrass' (*Spartina cynosuroides*) Gramineae
54. Pin Oak (*Quercus palustris*) Fagaceae
55. Scotch Pine (*Pinus sylvestris*) Pinaceae
56. Asiatic Dayflower 'Spiderwort' (*Commelina communis*) Commelinaceae
57. Seaside Goldenrod (*Solidago sempervirens*) Asteraceae
58. Sunflower (*Helianthus annuus*) Asteraceae
59. Black-Eyed Susan (*Rudbeckia hirta*) Asteraceae
60. Ox-Eye Daisy (*Chrysanthemum leucanthemum*) Asteraceae
61. Swamp Rose Mallow (*Hibiscus palustris*) Malvaceae

* NJ Threatened Species
** NJ Endangered Species
\+ NY Threatened Species
++ NY Endangered Species

ABOUT THE ARTIST

Raised in Southern New Jersey, Kathy Johnston was never at a loss for nature's beauty or scenery to paint. Salt marshes, old buildings, fishing boats and historical sites were among her favorite subjects. Recreational scuba diving, kayaking, mountain biking and hiking have offered opportunities for inspiration from which Kathy often paints. Now relocated in Malvern, Pennsylvania, Kathy searches for new students, new scenery and new inspiration to share her enthusiasm for the arts. Artistic affiliations include Young Audiences, Rutgers University, the Atlantic City Ocean Life Center, the Artificial Reef Association, and New Jersey Outdoors Magazine. This self-taught artist has developed skills that have received many awards and much recognition. Kathy's paintings and prints can be found in New York, Texas, the Virgin Islands, Australia and the East Coast from Maine to the Florida Keys. Her respect for the marine environment and its inhabitants is always apparent in her paintings and lifestyle. Kathy Johnston can be reached at: Custom Artwork, 472 E. King Street, Unit B, Malvern, Pennsylvania 19355

WILDLIFE OF THE NEW YORK - NEW JERSEY HARBOR ESTUARY

This brochure was adapted from *Wildlife of the Harbor Estuary's Newark Bay Complex* originally produced by *NJDEP* as part of an outreach effort to Newark Bay anglers and residents of the Complex. Although the information in this document has been funded wholly or in part by the United States Environmental Protection agency under agreement CE98272003 to NEIWPCC, it has not undergone the Agency's publications review process and therefore, may not necessarily reflect the views of the Agency, and no official endorsement should be inferred. The viewpoints expressed here do not necessarily represent those of the New York-New Jersey Harbor & Estuary Program, NEIWPCC, or U.S. EPA, nor does mention of trade names, commercial products, or causes constitute endorsement or recommendation for use. Special thanks to Lynette Lurig, *NJDEP*, for developing the content for the original brochure, and to Cathy Yuhas, *New Jersey Sea Grant*, for expanding it to include New York State information.

New York - New Jersey Harbor & Estuary Program
www.harborestuary.org

NEIWPCC
New England Interstate Water Pollution Control Commission