



The Monmouth County Park System has two environmental centers dedicated to nature education. Each center has a trained staff of naturalists who answer visitor questions about area wildlife and natural history.

The **Huber Woods Environmental Center**, on Brown's Dock Road in the Locust Section of Middletown, features newly renovated exhibits and activities about plants, wildlife and the Lenape Indians. There's a bird observation area and a reptile house. Miles of surrounding trails offer many opportunities to enjoy and view nature.



Specializing in Monmouth County's wetland species, the **Manasquan Reservoir Environmental Center**, on Georgia Tavern Road in Howell, has water-related wildlife displays, hands-on activities and a bird and Bald Eagle observation area. Features include an interactive watershed map, aquarium, live animals, and a fossil wall.



# Seashells

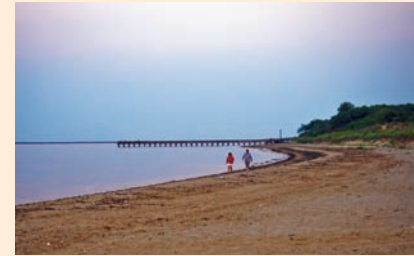
## of Monmouth County



### Searching for Seashells

One of the best times to find seashells along the Jersey Shore is in late winter and early spring. The rough winter surf and storms such as Nor'easters will bring more seashells to the beach. Look for these natural treasures along the high tide line mixed in among the seaweed and flotsam.

The Monmouth County Park System has three locations to enjoy beach combing and seashell collecting. Each offers a different variety of shells to discover due to their different locations.



Bayshore Waterfront Park

**Bayshore Waterfront Park, Port Monmouth** is located along the shore of Sandy Hook Bay. Here you will find large numbers of slipper shells, clams and mussels. This is also the best spot for locating the State Seashell of New Jersey, the knobbed whelk.



A collection of mussel shells, commonly found at Fisherman's Cove



Seven Presidents Oceanfront Park

**Fisherman's Cove, Manasquan** is located on the Manasquan River just inside the Manasquan Inlet. Here you can find mussels, clams and oysters.

**Seven Presidents Oceanfront Park, Long Branch** offers the bounty of the Atlantic Ocean. Look closely along the high tide line for tiny shells like the oyster drill. Surf clams and mussels are common, but other treasures like sand dollars can occasionally be found.

### Meet the Mollusk

Most seashells that are found on our New Jersey beaches are made by animals called mollusks, who live inside the shells. However, it is common that when people find a shell abandoned on the beach, the mollusk has already "moved out."

Many Mollusks have two unique features that are not found in any other animal group, the mantle and/or radula.

The mantle is a special fold of the body wall that secretes the material that creates that shell (calcium carbonate). The radula is a toothed, tongue-like organ that is used for feeding. You won't be able to see the radula, but you can see evidence of its use in the perfectly drilled holes that appear on the shells of other creatures who were fed on by mollusks.



## Bivalves-The Most Common Beach Finds

Bivalve mollusks are probably the most common seashore finds. While alive, all bivalves have two shells—or valves—that are secreted by the mantle. The shells are not symmetrical and often differ in size and shape from side to side. These two valves are held together at the hinge with a ligament and one or two adductor muscles.

### Hard Shell Clam

(*Mercenaria mercenaria*)



### Soft Shell Clam

(*Mya arenaria*)



### Surf Clam

(*Spisula solidissima*)



### Common Razor Clam

(*Ensis directus*)



### Oyster

(*Crassostrea virginica*)



### Blue Mussel

(*Mytilus edulis*)



### Bay Scallop

(*Argopecten irradians*)



### Jingle shell

(*Anomia simplex*)



## Gastropods with One Shell-The Snails

Shells of gastropod mollusks can also be found on New Jersey beaches. These animals have one shell and can be referred to as univalves, or more commonly as snails. Gastropod mollusks can close the opening of their shell with a thin shell-like covering called an operculum. The knobbed whelk was once so common it was chosen as New Jersey's state shell, but today it is a rare beach find.

### Channeled Whelk

(*Busycon caniculatum*) Left



### Knobbed Whelk

(*Busycon carica*) Right

### Moon Snail

(*Lunatia heros*)



### Oyster Drill

(*Urosalpinx cinerea*)



### Slipper Shell

(*Crepidula fornicata*)



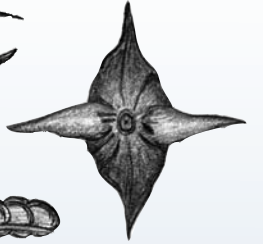
## Other Interesting Beach Finds

Some of the items that are found on the beach are not shells at all, such as the egg cases of skates (a type of ray with wing-like fins) and whelk. Occasionally we may even find the seedpod of the freshwater Chinese Chestnut, sometimes referred to as a "Devil's Head."

### Skate Egg Case



### "Devil's Head"

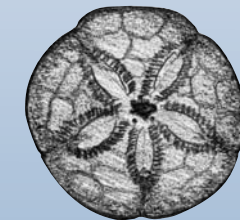


### Whelk Egg Case



Although it is unlikely to confuse the items above with seashells, there is another group of animals that can be easily confused. They have hard skeletal elements that are often fused together, called a test. On New Jersey beaches it is common to encounter two animals of this group, the sand dollar and the sea star. These live animals are covered with scales and spines, and have the name Echinoderm, which literally means "spiny skin."

### Sand Dollar



### Sea Star

