

SHRIMP, LOBSTERS, CRABS, PARASITES

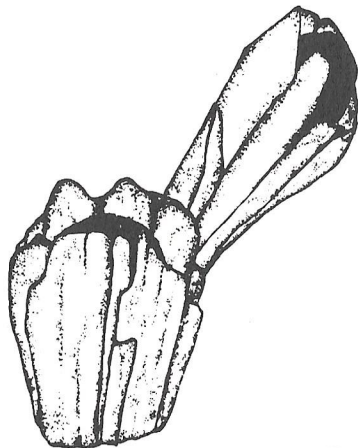
Phylum: Arthropoda

Arthropoda, the largest phylum, contains approximately three-quarters of a million species. Arthropods include such organisms as sea spiders, insects, crustaceans (shrimps, crabs, lobsters), horseshoe crabs, and arachnids (land spiders). Five classes of arthropods inhabit the marine environment. In this area, the shrimp and crab species are the most important.

Arthropods have jointed, armor-like exoskeletons and segmented appendages which enable them to exist in aquatic and terrestrial habitats.

All crabs shed their shells to grow, and form new ones. When they are shedding (molting) one shell, they can be eaten. However, they are most vulnerable to predators at this stage and hide in burrows until their new shell has hardened.

While many members of this phylum are eaten, killed, or otherwise preyed upon, they have survived most successfully since arthropods outnumber all other animal species combined three to one.



Northern Rock Barnacle

Northern Rock Barnacle

Family: Balanidae

Balanus balanoides

Description

Size: 3/4" in diameter, 1/2" high

Characteristics: Rough, folded calcium carbonate plates cover the body; occasionally coated with a film of algae; lives in dense colonies, which accounts for its twisted shape.

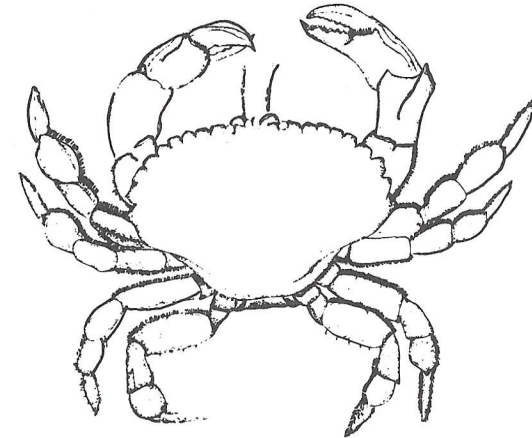
Color: Dull white.

Habitat

Lives on any hard surface; commonly found on Sandy Hook jetties.

Edibility

Inedible.



Rock Crab

Rock Crab

Family: Cancridae

Cancer irroratus

Description

Size: 5" wide.

Characteristics: Rounded body; small pseudorostrum (beak-like extension between the eyes); well-developed eye sockets; nine wide, smooth-edged marginal teeth between the eyes; distinguished from the lady crab by the dark band on its movable upper pincer claw.

Color: Yellow-orange with red or purple speckles.

Habitat

Found in the subtidal area to the outer continental shelf; found in the bay and along the ocean front at Sandy Hook.

Edibility

Good.

Sand Shrimp (Snapping Shrimp)

Family: Crangonidae

Crangon septemspinosus

Description

Size: 2"-3" long.

Characteristics: Elongated body; short rostrum; the first pair of walking legs are weak and imperfect and have pincer-like feet.

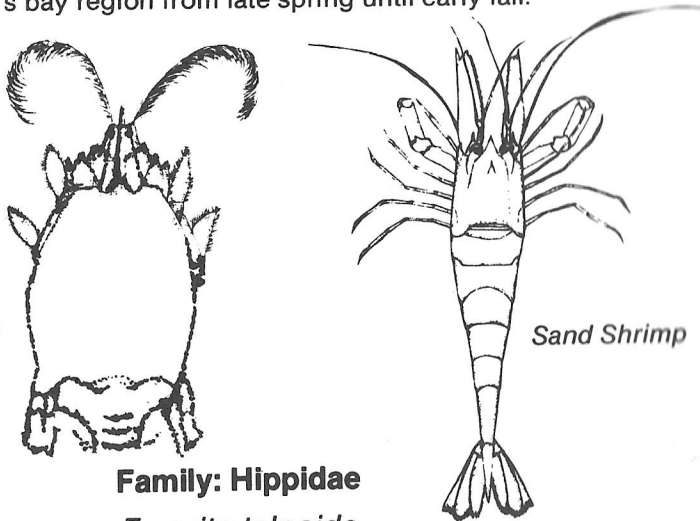
Color: Nearly transparent, to mottled brown or black.

Habitat

Found on sandy or muddy bottoms, usually near eelgrass beds; occasionally burrow into the bottom; inhabit the intertidal zone of Sandy Hook's bay region from late spring until early fall.

Edibility

Inedible.



Mole Crab

Sand Shrimp

Family: Hippidae

Emerita talpoida

Description

Size: Males, 1" long; females, 1/2" long.

Characteristics: Symmetrical, shield-shaped abdomen; two pincer-like claws closest to the mouth; small, hair-like projections on all legs; the two eyespots in the tail area allow this crab to see where its been — not where its going; fun to dig up, safe to hold, and will not bite; can be put to sleep by rubbing its belly.

Color: Light grayish-brown.

Habitat

Live in the sand; found by quickly digging into the foreshore of the beach when you see little bubbles, then holes, appear in the sand after a wave breaks.

Edibility

Inedible

Marine Parasite

Family: Idoteidae

Idotea triloba

Description

Size: Up to 1/4" long.

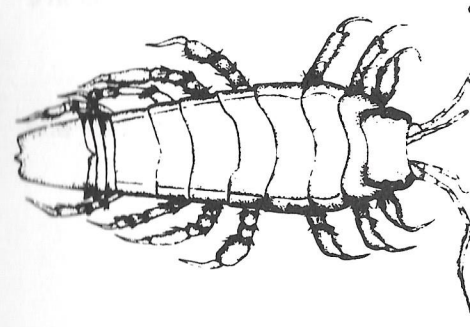
Characteristics: Eyes on each side of head; fused abdominal segments; tiny hooklets at the end of each leg help the parasite attach to a host.

Habitat

Found attached to the gills or bodies of pelagic fish; also near molluscs or vegetation.

Edibility

Inedible.



Marine Parasites

Marine Parasite

Family: Idoteidae

Idotea baltica

Description

Size: 1" long.

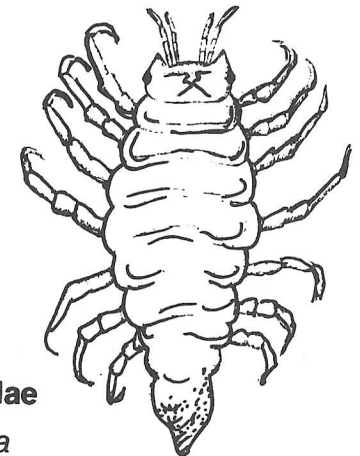
Characteristics: Fused abdominal segments; its pair of long antennae have segmented tips; hook-like feet (uropods) are folded against the underside of the body.

Habitat

Found near submerged salt marsh grass, swimming freely or clinging to sea lettuce or other types of vegetation.

Edibility

Inedible



Horseshoe Crab

Family: Limolidae

Limulus polyphemus

Description

Size: Up to 2' long; 10" wide.

Characteristics: Smooth, horseshoe-shaped, convex on top, concave underneath; large eye next to each dorsal ridge, a smaller eye on each side of the middle ridge; the mouth and breast bone are behind the labrum; six short spines border the rear edge of the abdomen; a long spike-like tail extends from the rear of the abdomen; three-jointed pincer (last two segments form the claw-like pincer) on each side of the mouth; behind the pincers on the underside of the chest cavity are five pairs of walking legs; males are generally smaller than females; during mating (late spring and summer) males ride on the females' backs and then will often line up one behind the other in a long chain along the beaches.

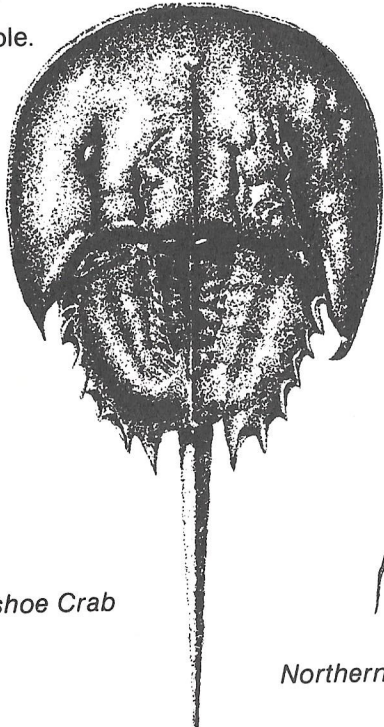
Color: Dark green or brown.

Habitat

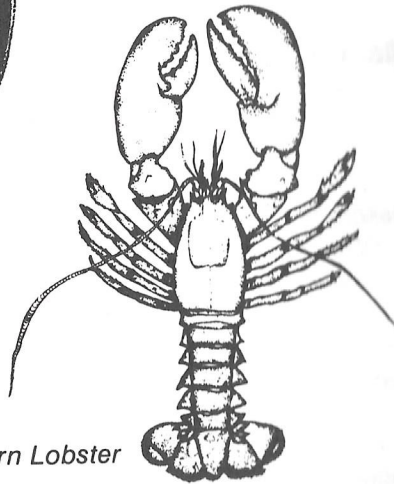
Found plowing through the sand in shallow waters of the sub- and intertidal zones from late spring until early fall.

Edibility

Inedible.



Horseshoe Crab



Northern Lobster

Common Spider Crab

Family: Majidae

Libinia emarginata

Description

Size: 4" wide.

Characteristics: Triangular shell narrows at head to form the pseudorostrum; incompletely formed eye sockets; shell spines (tubercles) are covered with short hairs; leg span of up to one foot.

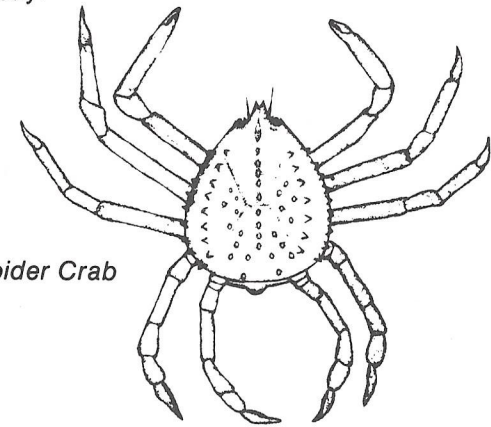
Color: Brown or dull yellow.

Habitat

Found in shallow water in the intertidal and subtidal zones of Sandy Hook's ocean and bay.

Edibility

Poor.



Spider Crab

Northern Lobster

Family: Nephropidae

Homarus americanus

Description

Size: 1' long, up to 3'.

Characteristics: Cylindrical shell; well-developed rostrum; first three pairs of legs have pincers, the first pair used for holding and shredding food; younger lobsters, 1-2 lbs.; older animals can weigh up to 40 lbs.

Color: Dark brown with orange edges; small orange or black spots on tail section.

Habitat

Juveniles inhabit shallow ocean depths around rocky areas or sunken ships; older animals found in inshore waters out to the edge of the continental shelf; can be found just off the groins of Sandy Hook.

Edibility

Excellent

Ghost Crab

Family: Ocypodidae

Ocypode quadrata

Description

Size: 2" wide.

Characteristics: Square-shaped; small pseudorostrum; well-developed eye sockets; the genus name, Ocypode, means "swift-footed," and once found, these crabs can quickly scurry across the beach.

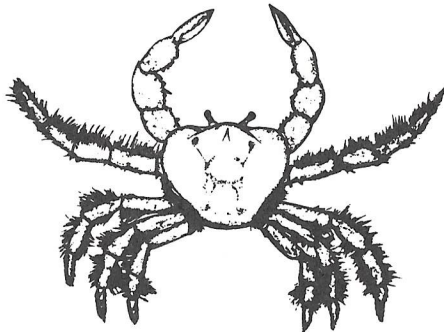
Color: Pale sand color; difficult to spot them on the beach.

Habitat

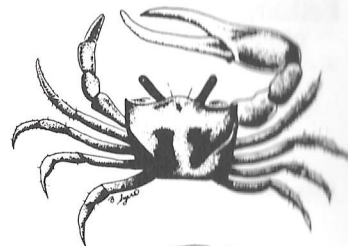
Found in small burrows in the beach zone or along the surf zone wetting its gills; commonly found in deserted areas along Sandy Hook's extreme northern tip.

Edibility

Inedible



Ghost Crab



Mud Fiddler Crab



Mud Fiddler Crab

Family: Ocypodidae

Uca pugnax

Description

Size: 3" wide.

Characteristics: Square-like body, tapered at the rear end; small pseudorostrum; well-developed eye sockets; males have one enlarged claw (up to 1-1/2" long,) female claws are the same size, with tubercles on the palm.

Habitat

Inhabits the intertidal zone and found on mud banks along salt marsh areas where it burrows into the sand.

Edibility

Inedible.

Long-Clawed Hermit Crab

Family: Paguridae

Pagurus longicarpus

Description

Size: 3" or more wide.

Characteristics: Lives in a snail shell and moves to a larger one when it outgrows it; small rostrum; first pair of legs are pincer-shaped; the narrow, almost cylindrical major claw has a smooth palm and a row of weak spines along the middle and outer edges; walking legs (third maxillipeds) are widely separated; particularly vulnerable to predators when looking for a larger shell.

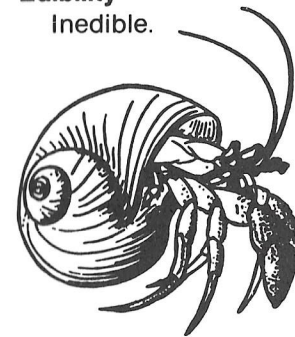
Color: Medium brown to tan; major claw is dark brown or striped gray.

Habitat

Lives in the intertidal zone near rocky structures and salt marsh mud banks on Sandy Hook.

Edibility

Inedible.



Flat-Clawed Hermit Crab

Family: Paguridae

Pagurus pollicaris

Description

Size: 1", the smallest of the hermit crabs.

Characteristics: Lives in a snail shell; asymmetrical abdomen; no rostrum; first legs have pincers; bases of the walking legs are widely separated.

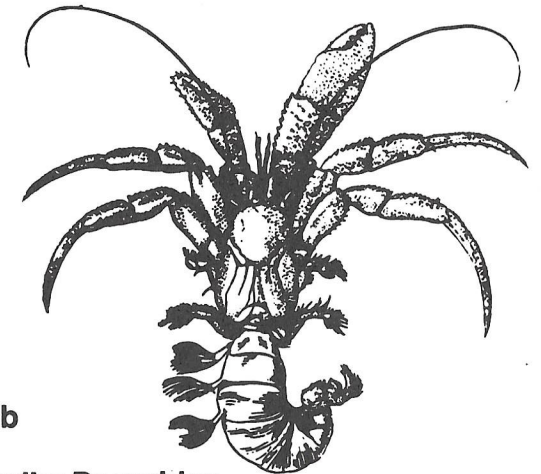
Color: Pink to medium brown.

Habitat

Found living in moon snail or whelk shells in the intertidal and subtidal zones of Sandy Hook's bay and ocean regions.

Edibility

Inedible.



Common Shore Shrimp

Family: Palaemonidae

Palaemonetes pugio

Description

Size: 2" long, some up to 4".

Characteristics: Sharply pointed and digger-like rostrum; one tooth on the crest behind the eye; abdominal segments on the underbelly enable this shrimp to move with rapid jackknife-like movements.

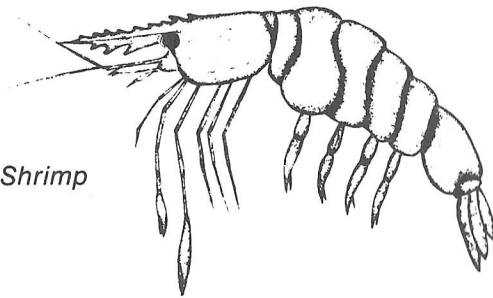
Color: Light tan to mottled brown.

Habitat

Inhabits the intertidal zone of Sandy Hook near pilings, rocky structures, and submarine plants.

Edibility

Inedible.



Common Shore Shrimp

Grass Shrimp

Family: Palaemonidae

Palaemonetes vulgaris

Description

Size: Up to 2" long.

Characteristics: Rostrum extends beyond the antenna; a tooth on the dorsal and ventral surfaces; distinct claws on the first and second pair of legs.

Color: Nearly transparent to brown.

Habitat

Found in the intertidal and subtidal zones of Sandy Hook near plants, on rocks, or resting on the bottom.

Edibility

Inedible.

Blue Crab (Blue-Claw Crab, Soft-Shell Crab)

Family: Portunidae

Callinectes sapidus

Description

Size: Up to 9" wide; half as long as it is wide.

Characteristics: Oval body, small pseudorostrum; well-developed eye sockets; nine marginal teeth; male abdomen is tapered, female's abdomen is broader; last pair of legs are paddle-shaped to aid in swimming; very aggressive and capable of quick movements.

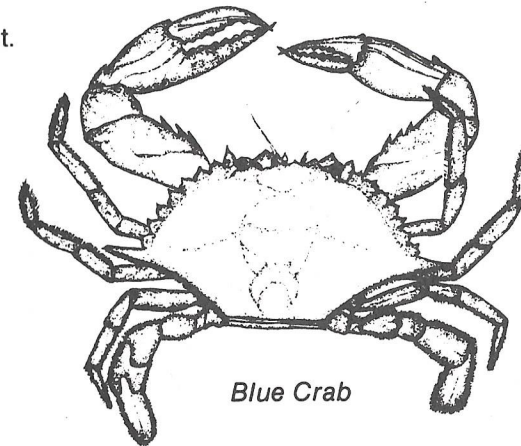
Color: Olive on top, white underneath; a deep bluish stripe runs down the middle of the claws (hence the name "blue-claw").

Habitat

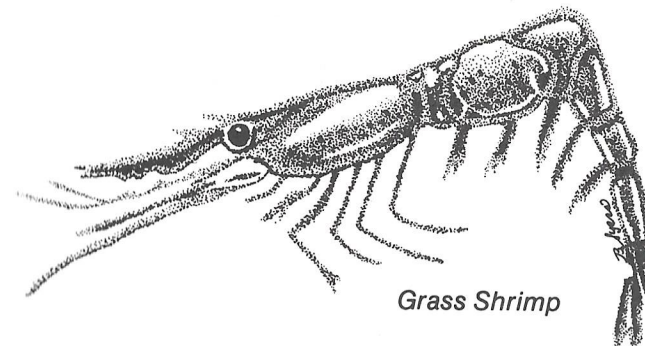
Inhabit the subtidal zone; usually found in quiet bay waters just outside the main channels; prefer muddy or clay bottoms where they dig burrows and hide during molting; found in Sandy Hook Bay from mid-summer to mid-fall.

Edibility

Excellent.



Blue Crab



Grass Shrimp

Green Crab

Family: Portunidae

Carcinus maenas

Description

Size: 3" wide.

Characteristics: Oval body, small pseudorostrum; well-developed eye sockets; five marginal and three frontal teeth; the walking legs (the last pair) are flattened to aid in swimming.

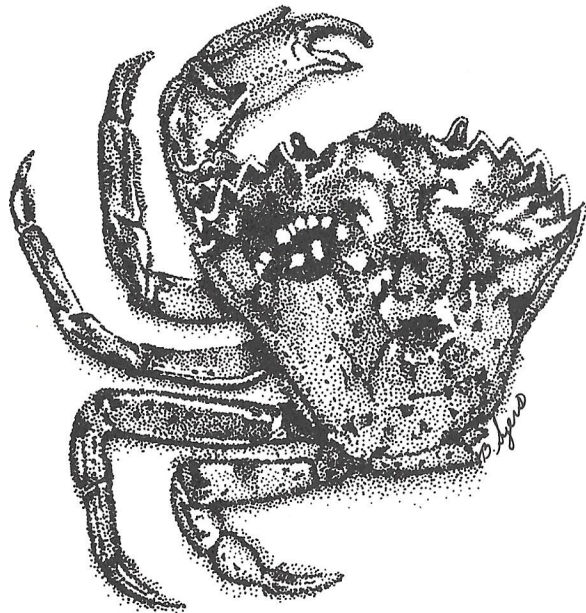
Color: Males are green on top, yellow underneath; females are green on top, reddish-orange underneath.

Habitat

Live in the intertidal zone near any hard bottom or debris-strewn area; found in both the bay and ocean regions of Sandy Hook.

Edibility

Poor.



Green Crab

Lady Crab (Calico Crab)

Family: Portunidae

Ovalipes ocellatus

Description

Size: 3-4" wide.

Characteristics: Oval shell; small pseudorostrum; well-developed eye sockets; nine marginal teeth on the anterior shell; last pair of legs are paddle-shaped to aid in swimming; no dark band on the upper part of its claw; very aggressive, commonly nip bathers' toes.

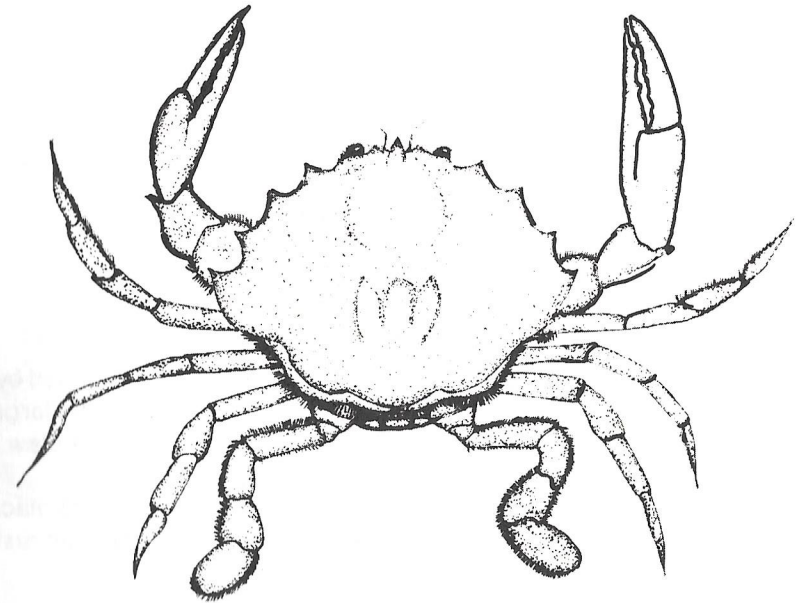
Color: Pale tan-gray with clusters of purple specks.

Habitat

Found in the intertidal and subtidal zones; burrows into sandy bottoms where it lies with just its eye stalks protruding; found in the bay and ocean areas of Sandy Hook

Edibility

Poor.



Lady Crab

Black-Fingered Mud Crab

Family: Xanthidae

Eurypanopeus depressus

Description

Size: 1/2" wide.

Characteristics: Rounded body; small pseudorostrum; well-developed eye sockets; the right adult claw is larger than the left one; spoon-like fingers on the claws help bring food into the mouth; preys on young oysters and clams by crushing their shells with its claws.

Color: Muddy brown or black; the larger claw is dark brown to the palm; the walking legs (third pair) are marked by a rusty-red spot.

Habitat

Can be found in and around shells in the intertidal and subtidal zones of Sandy Hook; prefer muddy bottoms of the bay and ocean.

Edibility

Inedible.

Black-Fingered Mud Crab

Family: Xanthidae

Panopeus herbstii

Description

Size: Up to 1" wide.

Characteristics: Oval body; small pseudorostrum; well-developed eye sockets; five marginal teeth, the first pair fused together; the larger claw has a tooth near its moveable finger, visible when its claw is closed; the wrist of the pincer is smooth.

Color: Brown to greenish-black; tips of the claws are brown to black, extending to the palm; the male's third leg has a characteristic rusty red spot on it.

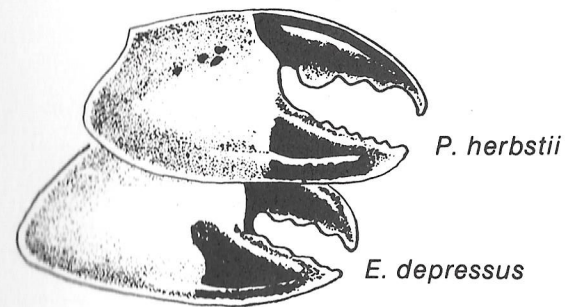
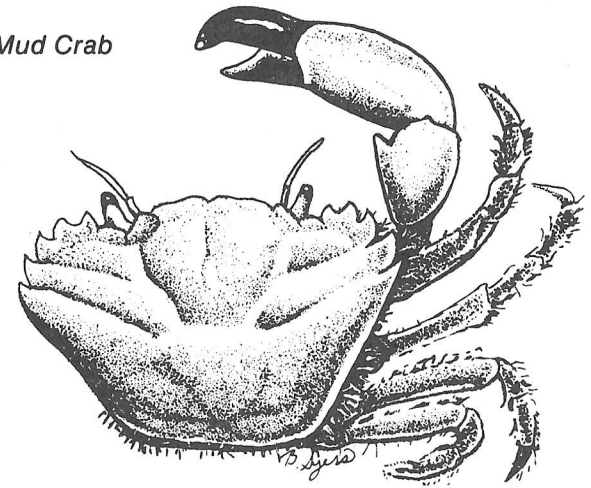
Habitat

Usually found in muddy bottoms in the subtidal zone; also found under stones or around eel grass beds in the bay; can also be found in the ocean.

Edibility

Inedible.

Black-fingered Mud Crab



White-Fingered Mud Crab

Family: Xanthidae

Rhithropanopeus harrisii

Description

Size: Up to 1" wide.

Characteristics: Rounded body; small pseudorostrum; well-developed eye-sockets; greatly resembles black-fingered mud crabs and must be observed closely to be identified correctly.

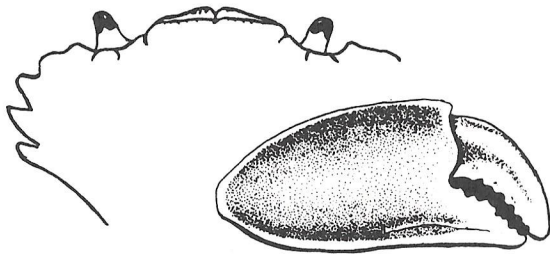
Color: Light tan to medium brown; the claw tips are a lighter color (hence the name "white-fingered").

Habitat

Lives in the intertidal zone under stones or in oyster or clam beds; can be found on any hard surface along the bay and ocean.

Edibility

Inedible



White-fingered Mud Crab

SAND DOLLARS AND STARFISH

Phylum: Echinodermata

The echinoderms are strictly marine animals and most live in shallow water. Their body forms vary but echinoderms usually have a five-part, radial-patterned shape. Their calcareous skeletons and surface spines may also vary. Most echinoderms have contractile tubular feet used in locomotion and feeding and operated by an internal water-vascular system. There is no external difference between male and female organisms. A few species brood eggs that develop without distinct larval forms; other species lay their sperm and eggs in the water and the young undergo a complex metamorphosis. Most echinoderms have the ability to regenerate lost or damaged body parts.