

Common Fish and Marine Invertebrates of the
Pribilof Islands

A Field Guide



By

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PREFACE

This field guide was made to help researchers identify marine organisms commonly found in Alaska Department of Fish & Game pot surveys around the Pribilof Islands. It is not intended to be the only tool used to identify marine organisms found during surveys, but an easy photo guide for the most common fish and marine invertebrates encountered. New species may be added to the guide as appropriate. All organisms found in this guide are listed by the common and scientific name found in the National Marine Fisheries Service, Resource Assessment and Conservation Engineering Division (RACE) Species Codebook. For easy reference, the NMFS 5 digit species code number is listed with each organism.

All organisms in this guide were identified by Leslie Watson and photographed by Susie Byersdorfer, Westward Region Shellfish Research biologists, unless otherwise noted.

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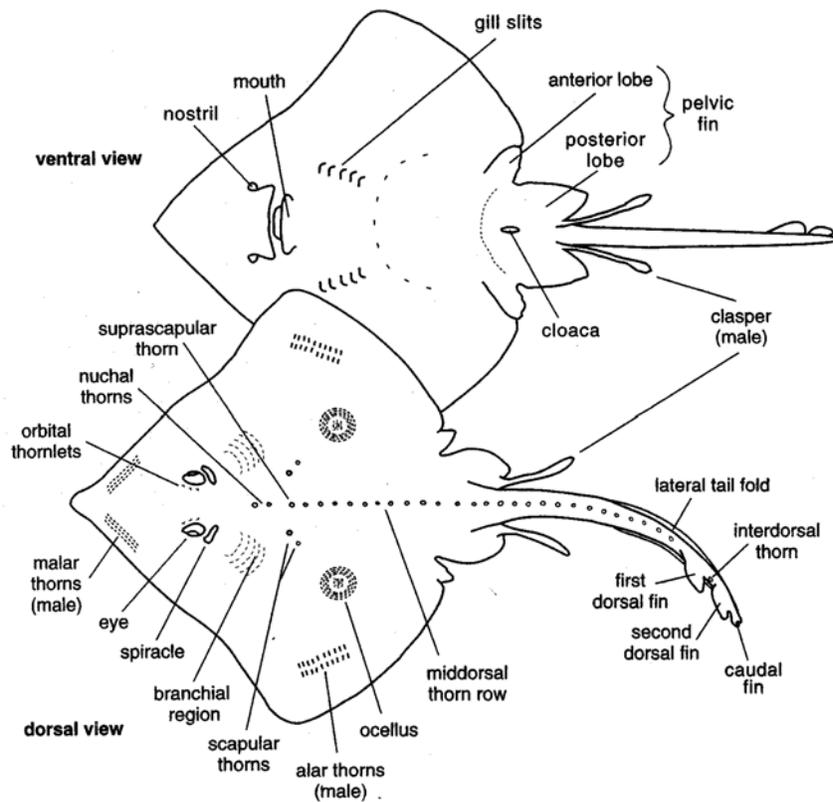
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Diagram of some external features of skates



SKATE



Skate

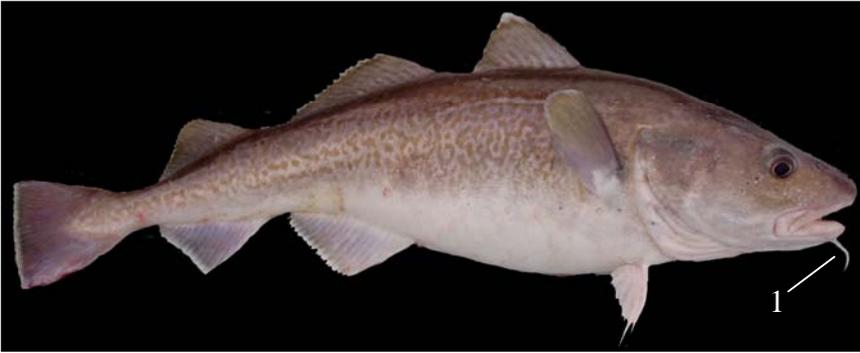
Bathyraja 00405

DESCRIPTION: Triangular or kite shaped disk, slender tail, and presence of two small dorsal fins (1) near the tip of the tail. Skates in Alaska are divided into two major genera *Raja* and *Bathyraja*. These genera are differentiated by the flexibility of their snouts. *Raja* species have stiff snouts, while *Bathyraja* species are soft-nosed, with flabby, pliable snouts.

SIZE: Length varies by species.

(Meklenburg et al 2002)

COD



Pacific Cod, Gray Cod, or True Cod
Gadus macrocephalus 21720

DESCRIPTION: Barbel (1) about as long as eye diameter.

SIZE: Length to 99 cm.
(Kessler 1985)

POLLOCK



Walleye Pollock or Pacific Pollock
Theragra chalcogramma 21740

DESCRIPTION: No barbel; slightly forked or straight tail; eye large; snout long, head profile flattened; teeth in upper jaw in a velvetlike band; 5-7 gill rakers on upper arch.

SIZE: Length to 91 cm
(Kessler 1985)

(NMFS photo)

RONQUIL



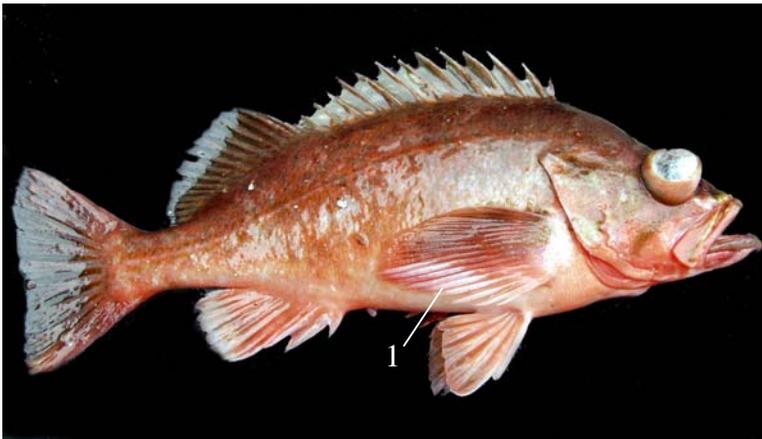
Searcher

Bathymaster signatus 20720

DESCRIPTION: Long-based dorsal fin without a notch; round tail; straight lateral line; no anal fin spines; slender body; black spot in front of dorsal fin (1); usually dark vertical bars on sides; bright orange pores on preopercle and behind maxilla.

SIZE: Length to 30 cm
(Kessler 1985)

ROCKFISH



Northern Rockfish

Sebastes polyspinis 30420

DESCRIPTION: 3 anal fin spines; **14** dorsal fin spines. Dark greenish gray on red background with red-orange or brown specks and fine green spots; red orange to white ventrally; dark bands radiate from eye; top of head dark; fins reddish to dusky red; light colored band on lower side of the pectoral fins (1); gill cavity silver; peritoneum dark.

SIZE: Length to 41 cm TL.
(Mecklenburg et al 2002)

SCULPINS

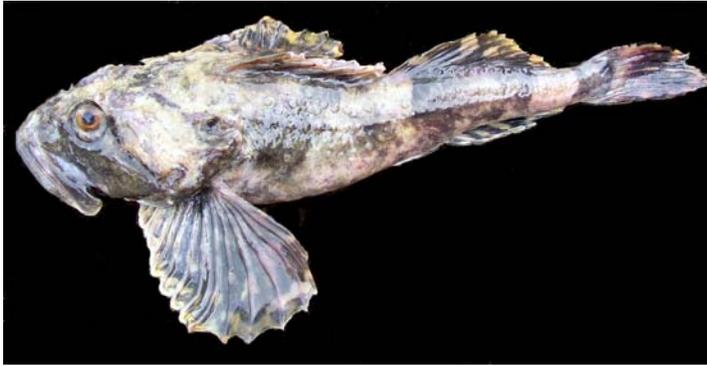


Yellow Irish Lord

Hemilepidotus jordani 21347

DESCRIPTION: Two bands of scales obvious; white chin; yellow patch in front of pectoral fin and on tail; 4 or 5 rows of scales in band below dorsal fin.

SIZE: Length to 30 cm.
(Kessler 1985)



Warty Sculpin

Myoxocephalus verrucosus 21368

DESCRIPTION: Greenish brown to blackish, with yellow and orange tinges and dark mottling; belly white; head depressed; top of head strongly verrucose or not; usually 2 postocular and 2 occipital protuberances or spines on each side; usually 3 preopercular spines; platelike scales above lateral line with depressed centers; fewer, scattered plates below lateral line.

SIZE: Length to 60 cm, usually less than 35 cm. (Mecklenburg et al. 2002)



Bigmouth Sculpin

Hemitripterus bolini 21420

DESCRIPTION: Head large and depressed; mouth extremely large, maxilla extending well beyond eye; numerous cirri, many complex, mainly on head; 13-15 free dorsal fin spines each with a flaglike skin pennant.

SIZE: Length to 69 cm. (Kessler 1985, Mecklenburg et al. 2002)



Crested Sculpin

Blepsias bilobus 21397

DESCRIPTION: White with olive to black molting; or orange-brown to olive green with darker blotches body compressed; 4 preopercular spines; prominent, simple cirri on snout and lower jaw; spinous fin dorsal without deep notch; pectoral fin rays 15 or more; prickles densely cover body.

SIZE: Length to 27 cm. (Mecklenburg et al. 2002)

SEA POACHER



Sturgeon Poacher

Podothecus acipenserinus 20040

DESCRIPTION: Yellowish brown to gray-brown with dark bands dorsally, white to orange ventrally; body covered with bony plates; 2 dorsal fins; mouth ventral; yellow barbels (1)

SIZE: Length to 30 cm.

(Mecklenburg et al. 2002)

WOLFFISH



Bering Wolffish

Anarhichas orientalis 20322

DESCRIPTION: Deep eel like body; large mouth; prominent canine teeth; dark brown color.

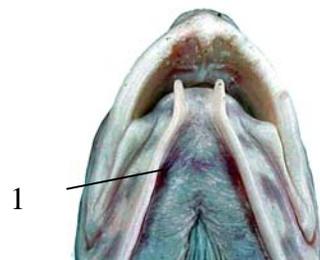
SIZE: Length to 112 cm.

(Kessler 1985)

EELPOUT



(L. Watson)



1

5

Wattled Eelpout

Lycodes palearis 24185

DESCRIPTION: Small pelvic fins; prominent cartilaginous ridges under head (1); rounded pectoral fin; teeth on vomer bone in roof of mouth; body gray. Usually with a black spot on the front of the dorsal fin.

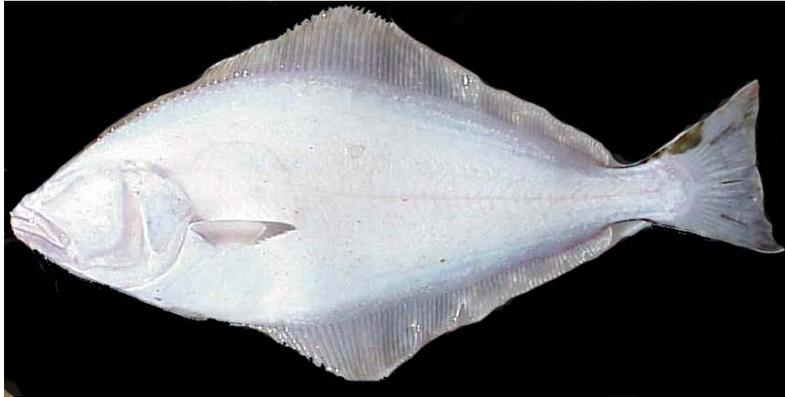
SIZE: Length to 51 cm.

(Kessler 1985)

FLATFISHES



(NMFS photos)



Pacific Halibut
Hippoglossus stenolepis 10120

DESCRIPTION: Mouth large; teeth prominent; body slightly elongated; lateral line arched; eyed side usually uniform dark gray or brown, sometimes with light blotches; blind side clean white.

SIZE: Length to 267 cm.
(Kessler 1985)

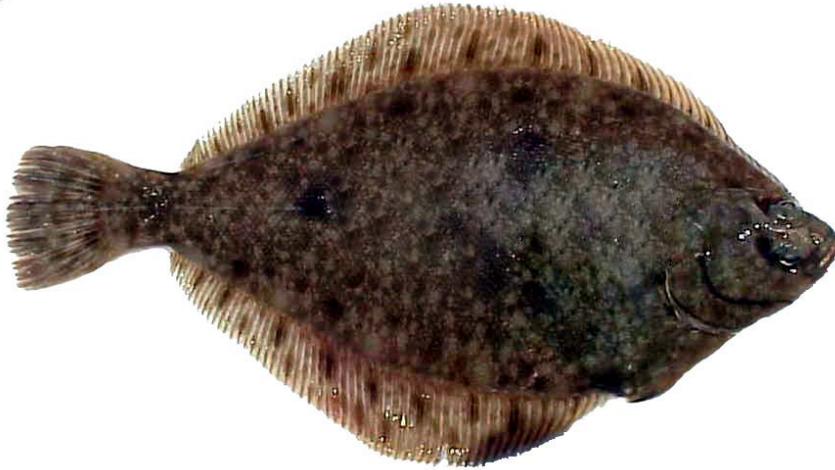


Yellowfin Sole
Limanda aspera 10210

DESCRIPTION: Lateral line with a high flat-topped arch and no dorsal branch; distinct dark line between body and dorsal and anal fins; eyed side dark brown or olive, fins often yellow; blind side white.

SIZE: Length to 46 cm.
(Kessler 1985)

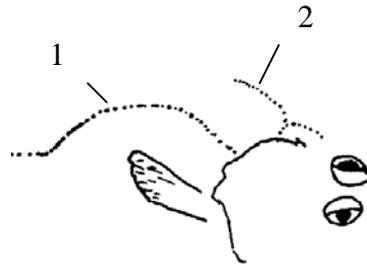
Northern Rock Sole
Lepidopsetta polyxystra 10261



DESCRIPTION: Lateral line strongly arched above pectoral fin (1) with an accessory dorsal branch (2); no distinct line between body and dorsal and anal fins; eyed side yellowish brown to greenish brown with scattered brown blotches and light spots; scales on eyed side rough; blind side uniformly creamy white without glossy white highlights; anal spine pronounced.

SIZE: Length to 61 cm.
(Mecklenburg et al. 2002)

(NMFS photos)



CRABS



Red King Crab

Paralithodes camtschaticus 69322

DESCRIPTION: Long rostrum, thornlike; 3 pairs of prominent spines in mid-dorsal plate; 5 separate plates on second abdominal segment; red or purple shell dorsally, and white to creamy ventrally.

SIZE: Length to 23 cm; width to 28 cm (Kessler 1985)

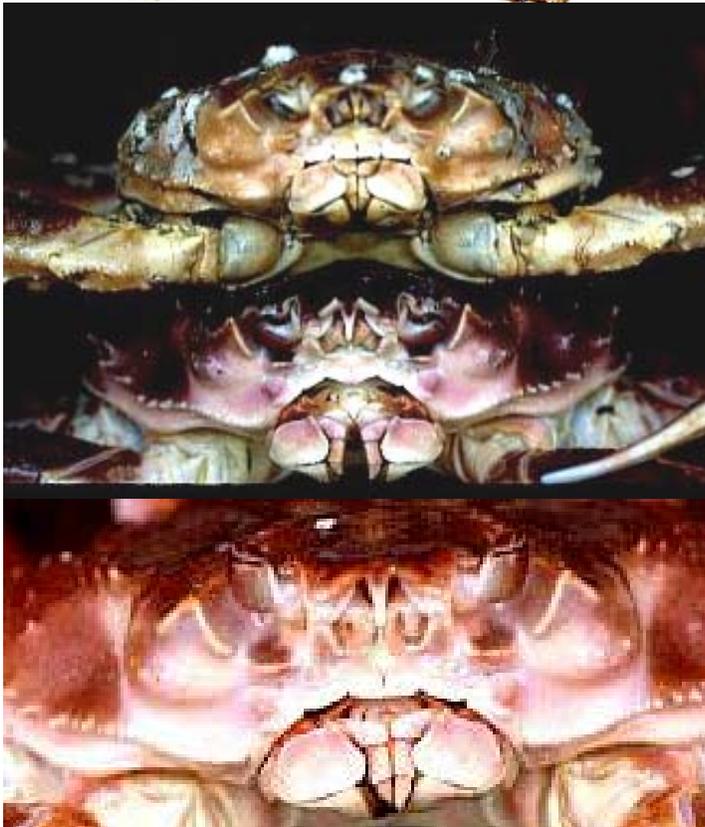


Blue King Crab

Paralithodes platypus 69323

DESCRIPTION: Short, ventrally slanted rostrum with a pair of dorsal spines; 2 pairs of prominent spines on the mid-dorsal plate; 5 separate plates on second abdominal segment; blue or purple shell dorsally, and white to creamy ventrally.

SIZE: Length to 20 cm; width to 25 cm. (Kessler 1985)



Snow Crab

Chionoecetes opilio 68580

DESCRIPTION: Straight teeth; rostral spines triangular, bluntly rounded, not tilted upward; eyes usually green or gray-green.

Tanner Crab

Chionoecetes bairdi 68560

DESCRIPTION: M-shaped teeth; rostral spines triangular, sharply pointed, tilted upward; eyes usually red.

Hybrid Tanner Crab

Chionoecetes bairdi x *Chionoecetes opilio* 68590

DESCRIPTION: Hybrids possess characteristics that are intermediate between the two species. (Kessler 1985)



Hair (Korean) Crab
Erimacrus isenbeckii 69400

DESCRIPTION: Body about as long as wide; margin of carapace, posterior to the eye, has 7 lateral spines. Especially long, shaggy hair covers the underside of the legs and abdomen.

SIZE: Length to 13 cm; width 13 cm.
(Kessler 1985)



Soft Crab
Hapalogaster grebnitzkii 69316

DESCRIPTION: Upper surface of carapace not spiny; rostrum triangular (1); finger of right claw large, ventrally curved, blue or black (2); tail soft, without plates, not held tightly against body.

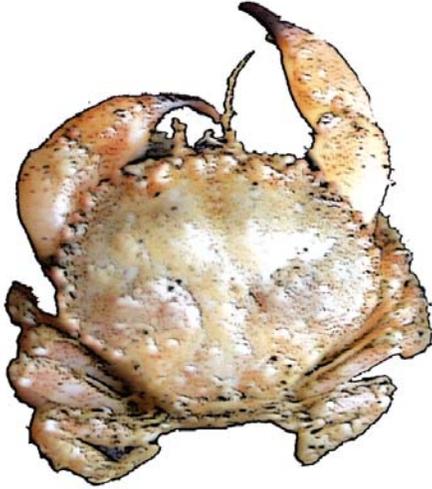
SIZE: Length to 5 cm.
(Kessler 1985)



Pacific Lyre Crab
Hyas lyratus 68578

DESCRIPTION: Carapace is lyre-shaped with tubercles and a winglike, lateral expansion behind each eye; prominent posterior spine; edges of expansions are toothed. Rostrum divided into 2 flattened, blunt-tipped horns. Legs are long slender and cylindrical, white, orange and brown; chelipeds of mature male stout and longer than walking legs.

SIZE: Length to 10 cm
(Barr and Barr 1983, Hart 1982)

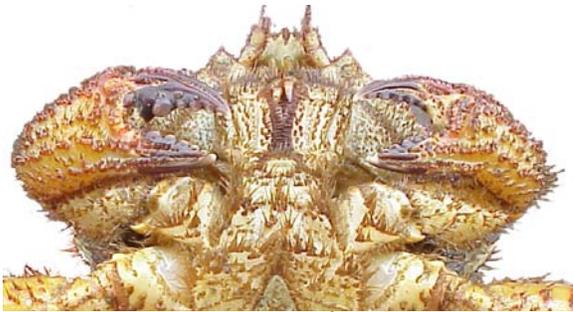


Oregon Rock (Pygmy Cancer) Crab
Cancer oregonensis 68040

DESCRIPTION: Adults small, less than 4 cm wide; carapace oval with 12-13 teeth in all on each side; light brown or tan shell; claw tips black.

SIZE: Length to 4 cm.

(Kessler 1985)



Helmet Crab
Telmessus cheiragonus 68781

DESCRIPTION: Body slightly wider than long; margin of carapace, posterior to eye, has 6 lateral spines.

SIZE: Length to 10 cm.

(Kessler 1985)

(NMFS photos)



Graceful Decorator Crab
Oregonia gracilis 68510

DESCRIPTION: Usually completely camouflaged by pieces of kelp, seaweed, hydroids, sponges or other bottom debris; rostral spines long, thin, joined for part of their length, separated by a narrow slit.

SIZE: Length to 5 cm.

(Kessler 1985)



HERMIT CRABS



Widehand Hermit Crab

Elassochirus tenuimanus 69110

DESCRIPTION: Merus of legs often bright blue or purple (1); right claw wide, with a prominent lateral projection (2); carpus narrower than claw (3).

SIZE: Length to 4 cm.

(Kessler 1985)



Purple Hermit Crab

Elassochirus cavimanus 69121

DESCRIPTION: Basic color purple; first right carpus with 1 or more tiny irregular spines on dorsal surface; right claw narrow (1); carpus wider than claw, with winglike projections (2).

SIZE: Length to 4 cm.

(Kessler 1985)



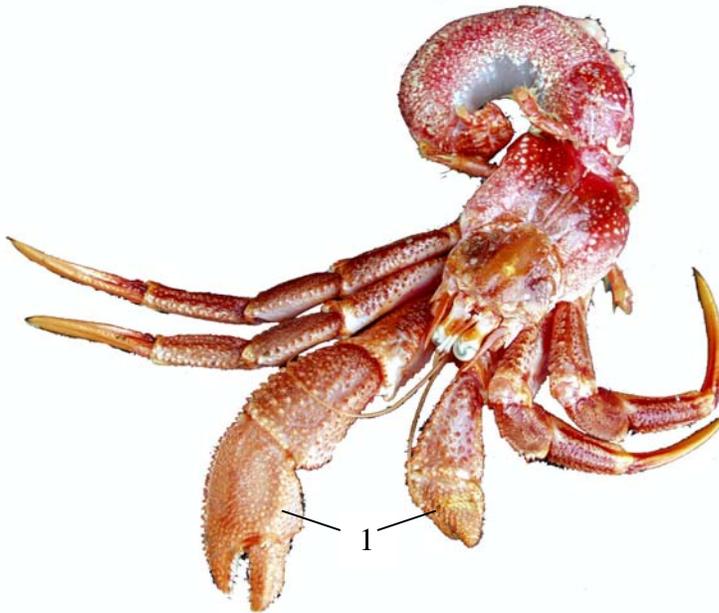
Pacific Red Hermit Crab

Elassochirus gilli 69122

DESCRIPTION: Basic color red or orange; first right carpus without tiny spines on the dorsal surface.

SIZE: Length to 4 cm.

(Kessler 1985)



Aleutian Hermit Crab
Pagurus aleuticus 69060

DESCRIPTION: Carapace shield red or brown with paler network; abdomen pink and yellow; right cheliped stout, shorter than walking legs and with carpus and chela covered with spines and granules, outer margins serrate; both claws flattened with raised margins (1); dactyls long, stout and twisted.

SIZE: Length to 5 cm.
(Hart 1982)



Alaskan Hermit Crab
Pagurus ochotensis 69090

DESCRIPTION: Prominent red stripe under thumb (1); merus with iridescent blue or purple areas (2); eyes yellow green; spines on claws short and blunt.

SIZE: Length to 5 cm.
(Kessler 1985)



Hairy Hermit Crab
Pagurus capillatus 69120

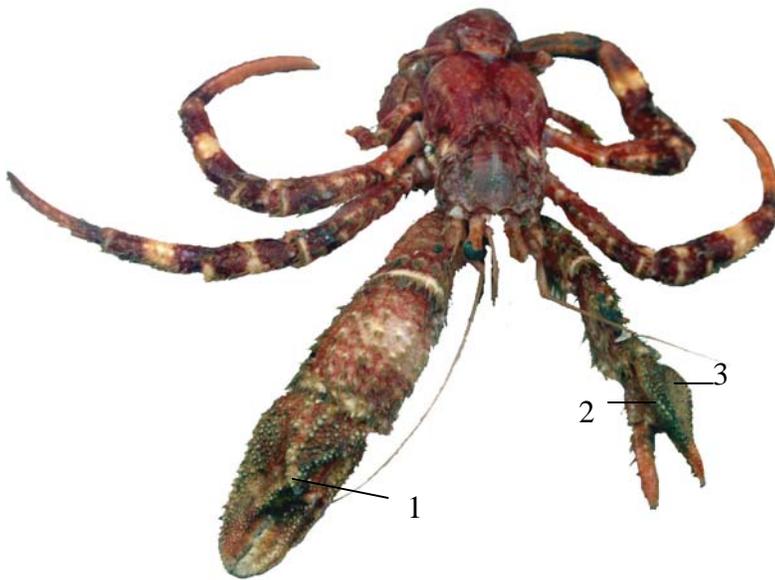
DESCRIPTION: Claws not black-tipped, completely covered with dense hairlike setae that obscure spination and are usually saturated with mud; antennae without bands; merus without white band; a row of fine spines on ventral margin of second and third dactyls.

SIZE: Length to 4 cm.
(Kessler 1985)



Fuzzy Hermit Crab
Pagurus trigenocheirus 69086

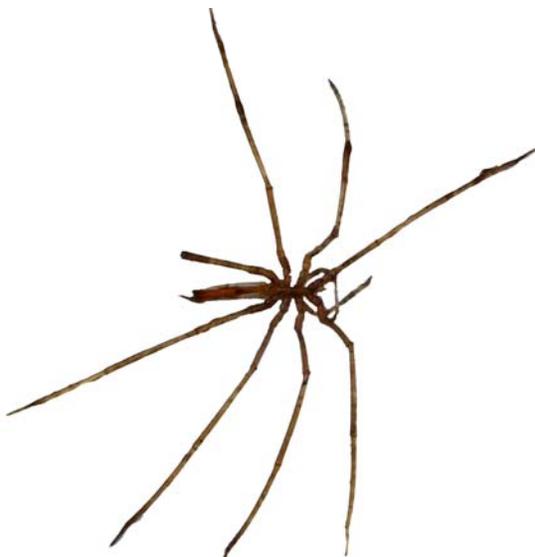
DESCRIPTION: Claws often covered with fine hair-like setae looking like a golden-brown fuzz; first right carpus about one and one-half times long as wide.
 SIZE: Length to 5 cm.
 (Kessler 1985)



Knobbyhand Hermit Crab
Pagurus confragosus 69070

DESCRIPTION: Both claws with prominent ridges or crests; right claw less than twice as long as wide, with a prominent knob (1); ridge on right claw extends onto finger as a flattened plateau; mottled red or brown color. Left cheliped slender with rows of spines on carpus (2); hand with palm greatly inflated on outer side of a convex ridge (3).
 SIZE: Length to 4 cm.
 (Kessler 1985, Hart 1982)

SEA SPIDER



Sea Spider Unidentified
 Class Pycnogonida 69900

DESCRIPTION: Spider-like in appearance; body short and thin; 4 pairs of slender legs; anterior end of body forms a proboscis; color often matches environment; species hard to identify in the field.
 (Kozloff 1987)

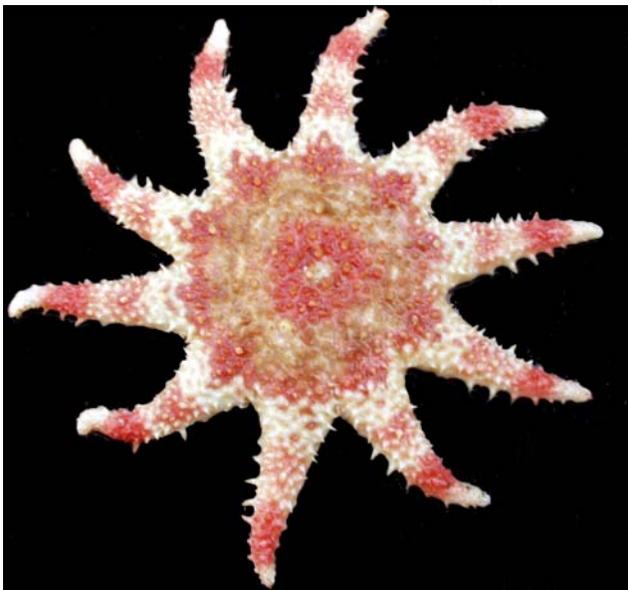
SEA STARS



Obscure Sea Star
Pteraster obscurus 81355

DESCRIPTION: Six to nine rays, smooth, short and thick.

SIZE: Diameter to 18 cm.
(Kessler 1985)



Rose Sea Star
Crossaster papposus 81095

DESCRIPTION: Ten or 11 rays; dorsal surface usually in shades of rose, red, or pink; rays white with broad red or pink bands; spinelets in the form of long bush like tufts scattered irregularly over dorsal surface.

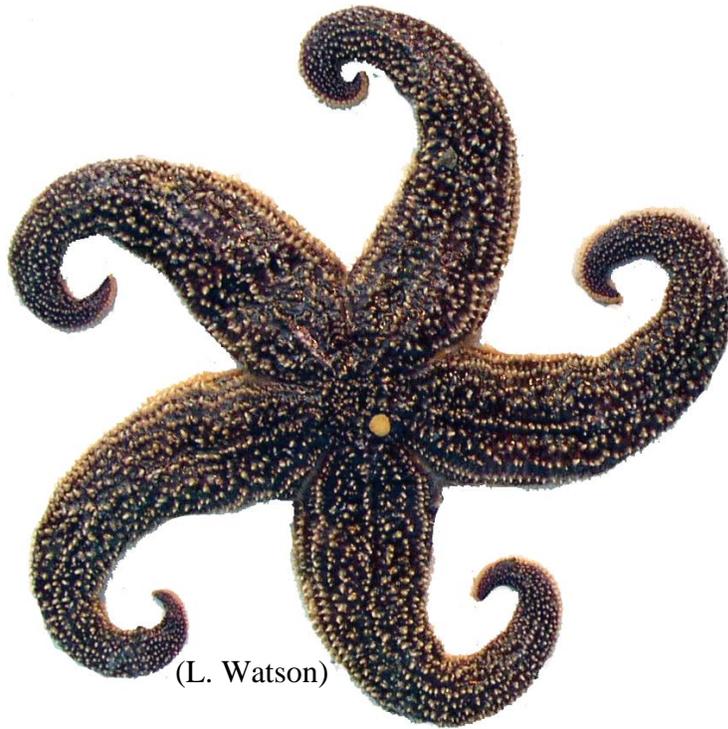
SIZE: Diameter to 15 cm.
(Kessler 1985)



Purple-Orange (Flatbottom) Sea Star
Asterias amurensis 81742

DESCRIPTION: Flat ventral surface with a conspicuous boundary between dorsal and ventral sides; 5 broad rays, roughly textured, not outlined by prominent marginal plates; both crossed and straight pedicellariae common.

SIZE: Diameter to 41 cm.
(Kessler 1985)



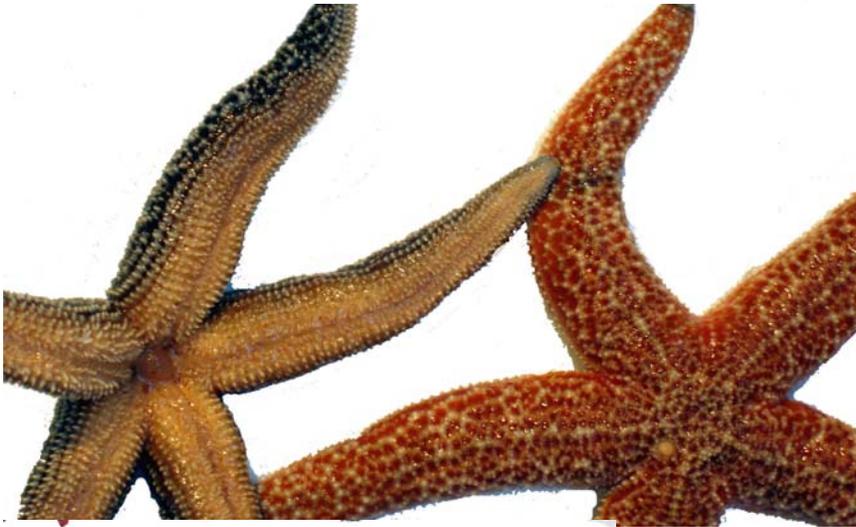
(L. Watson)

Giant Sea Star

Evasterias echinosoma 80020

DESCRIPTION: Roughly textured with uniform spines or knobs, arranged in a definite longitudinal series; upper rows of marginal spines are on side of ray; both crossed and straight pedicellariae common.

SIZE: Diameter to 76 cm.
(Kessler 1985)



Mottled Sea Star

Evasterias troschelii 80015

DESCRIPTION: Spines not uniform in size and shape, not arranged in a definite longitudinal series; color, shape, and spination variable.

SIZE: Diameter to 71-76 cm.
(Kessler 1985)



(L. Watson)₁₅

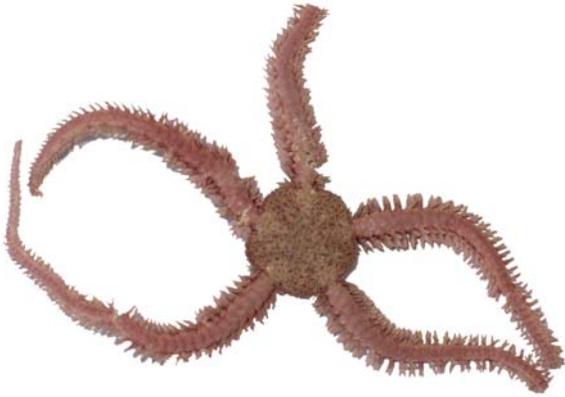
Blackspined Sea Star

Lethasterias nanimensis 80200

DESCRIPTION: Spines prominent, black tipped; top of spines shaped like the end of a stone drill; soft easily broken skeleton; 5 or more rays; body dirty white or gray.

SIZE: Diameter to 61 cm.
(Kessler 1985)

BRITTLE STARS



Ubiquitous Brittle Star
Ophiopholis aculeata 83400

DESCRIPTION: Disc fairly large, pentagonal; dorsal plates of rays separated by tiny encircling platelets; variable in shape, spination and color; arms relatively long, flexible and bearing long hollow spines; color often brown, tan or gray banded.

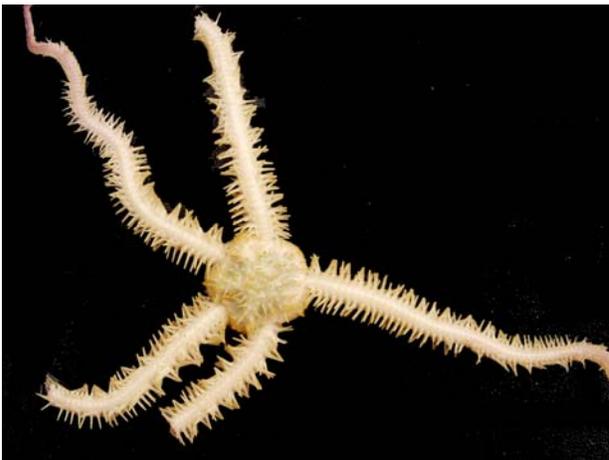
SIZE: Disc diameter to 2 cm.
(Kessler 1985)



Notched Brittle Star
Ophiura sarsi 83320

DESCRIPTION: Uniform maroon or gray; rays inserted into definite notches on disk margin; largest plates on dorsal side of disk separated from each other along entire length by a row of scales; papillae of ray combs pointed and well separated.

SIZE: Disc diameter to 2 cm.
(Kessler 1985)

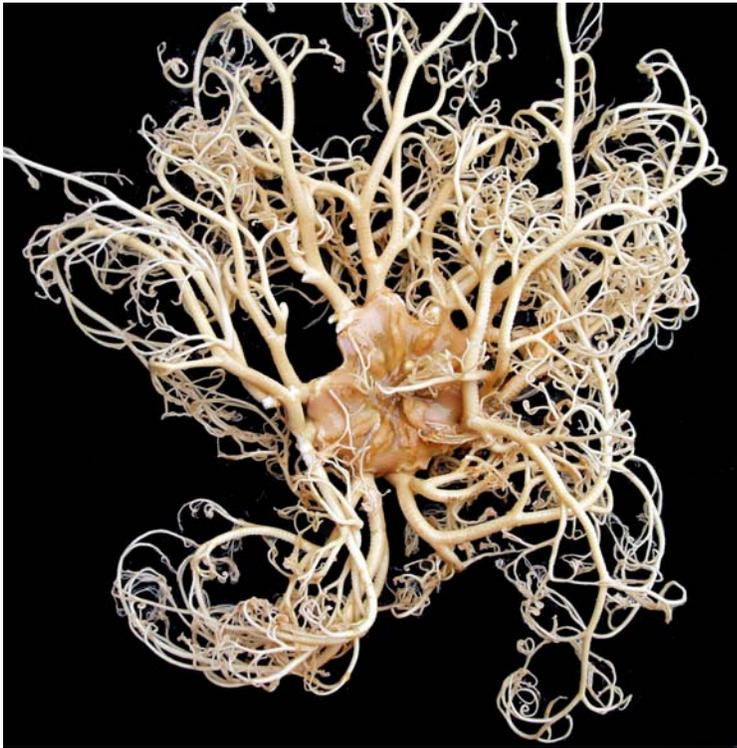


Longspined Brittle Star
Ophiopholis longispina 83390

DESCRIPTION: Similar to *O. aculeata*, but smaller, disc pentagonal to round; surface of disc with numerous, fairly long, up-right spines; arm spines longer than arm width.

SIZE: Disc diameter to 1 cm; arm length to 6 cm.
(Kozloff 1987)

BASKETSTAR



Basketstar

Gorgonocephalus eucnemis 83020

DESCRIPTION: Rays branched; color variable; red, orange, or white.

SIZE: Disk diameter to 10 cm.
(Kessler 1985)

SEA URCHINS



Green Sea Urchin

Strongylocentrotus droebachiensis 82510

DESCRIPTION: Body spherical, covered with short stiff spines (1-1.5 cm), usually greenish or whitish, sometimes dark purple; secondary spines slightly shorter and finer than primary spines; tube feet dark greenish or purple.

SIZE: Disk diameter to 10 cm.
(Kessler 1985)

SEA CUCUMBER



Sea Football
Cucumaria fallax 85201

DESCRIPTION: Body football-shaped when contracted, without spines or scales; tube feet retractable, in longitudinal rows; brown, orange or white.

SIZE: Contracted length to 30 cm.
(Kessler 1985)

OCTOPUS

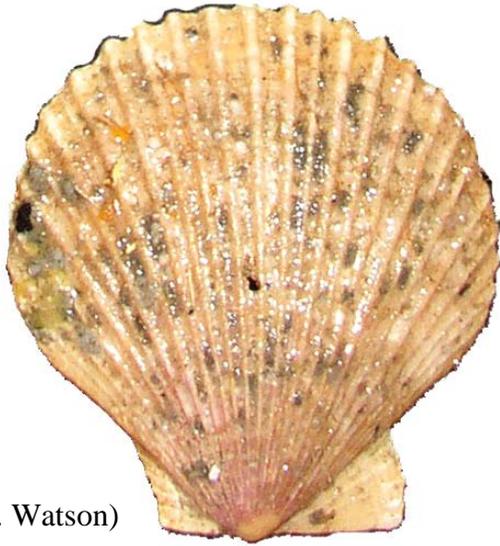


Giant (Common) Pacific Octopus
Octopus dofleini 78403

DESCRIPTION: Body round, without fins; 8 arms, that are 3 to 5 times body length; extensive skin folds; large conical warts, above eyes.

SIZE: Length to 102 cm.
(Kessler 1985)

SCALLOP



(L. Watson)

Reddish (Hinds) Scallop *Chlamys rubida* 74106

DESCRIPTION: Left shell with up to 20 primary ribs without prominent spines; right shell with 20-30 ribs; shell margin not deeply undulating; color uniform or mottled with light areas; often covered with scallop sponge.

SIZE: Length to 8 cm.
(Kessler 1985)

MUSSELS



Northern Horse Mussel *Modiolus modiolus* 74060

DESCRIPTION: Beak not terminal; no radial sculpturing; wide band of hair on dorsal surface; brown color.

SIZE: Length to 15 cm.
(Kessler 1985)

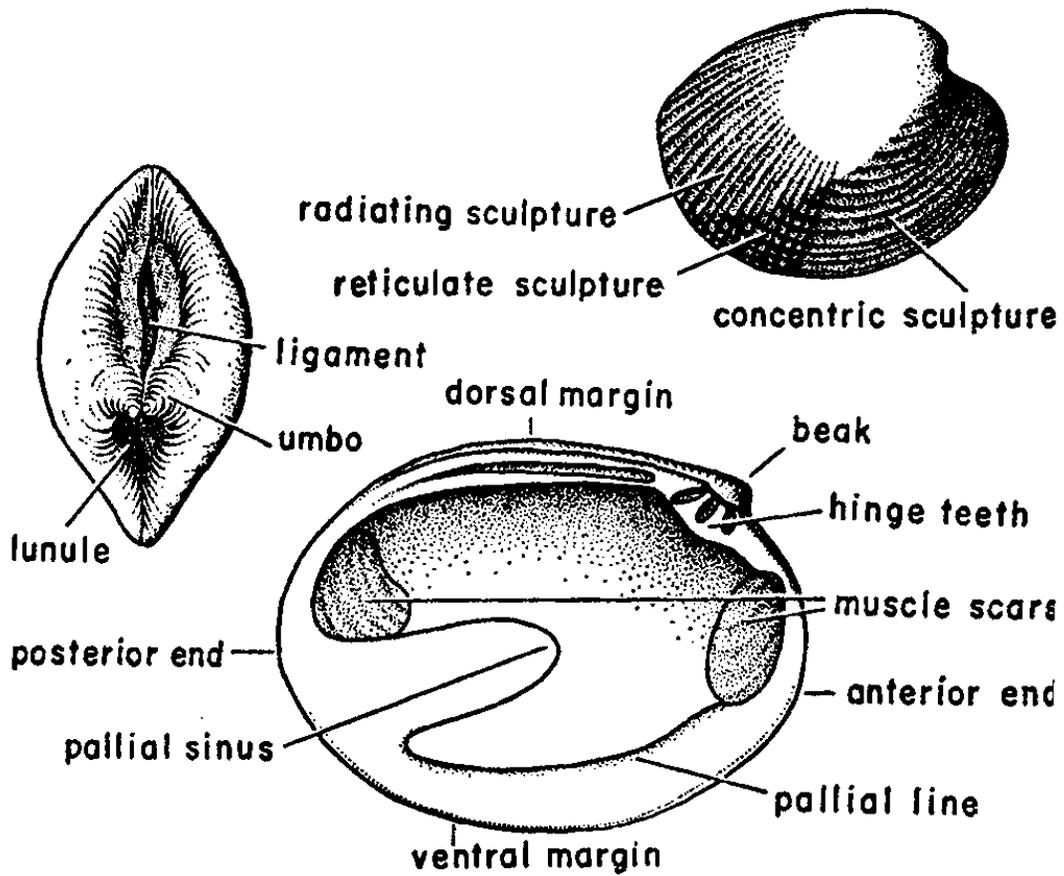


Discordant Mussel *Musculus discors* 74562

DISCRIPTION: Anterior radial sculpturing only; no hair on dorsal surface; often found in a cocoon of soft hair like fibers (1).

SIZE: Length to 5 cm.
(Kessler 1985)

TERMINOLOGY OF BIVALVE SHELLS



(from Morris 1980)

COCKLE



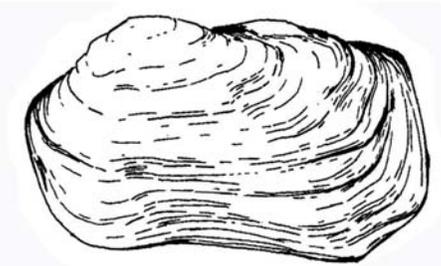
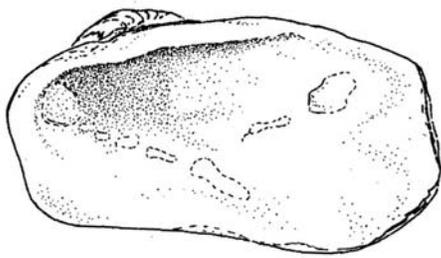
Greenland Cockle
Serripes groenlandicus 75285

DESCRIPTION: Distinguishing characteristic is spherical shape of shells smaller than 2 inches, and umbo of larger shells (1); other characteristics variable; adults are thin shelled.

SIZE: Length to 5 inches.
 (Kessler 1985)

(NMFS photo)

CLAMS

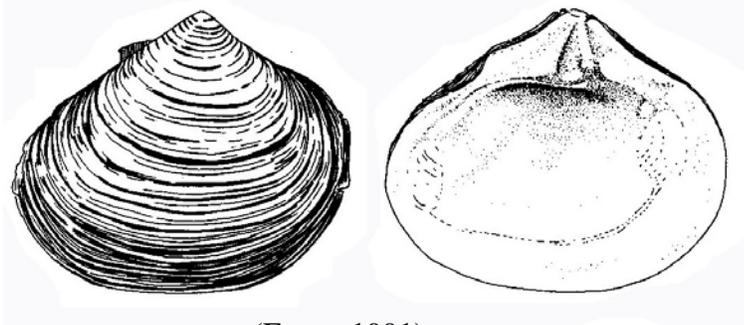


(Foster 1991)

Arctic Hiatella (Nestler) Clam *Hiatella arctica* 74311

DESCRIPTION: The shell is rough, irregular, oblong, and white with a dark, dehiscent periostracum. Pallial line is patchy; outer shell covering thin and flaky.

SIZE: Length to 4 cm.
(Kessler 1985)



(Foster 1991)

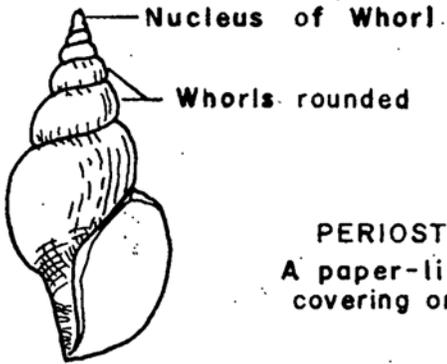
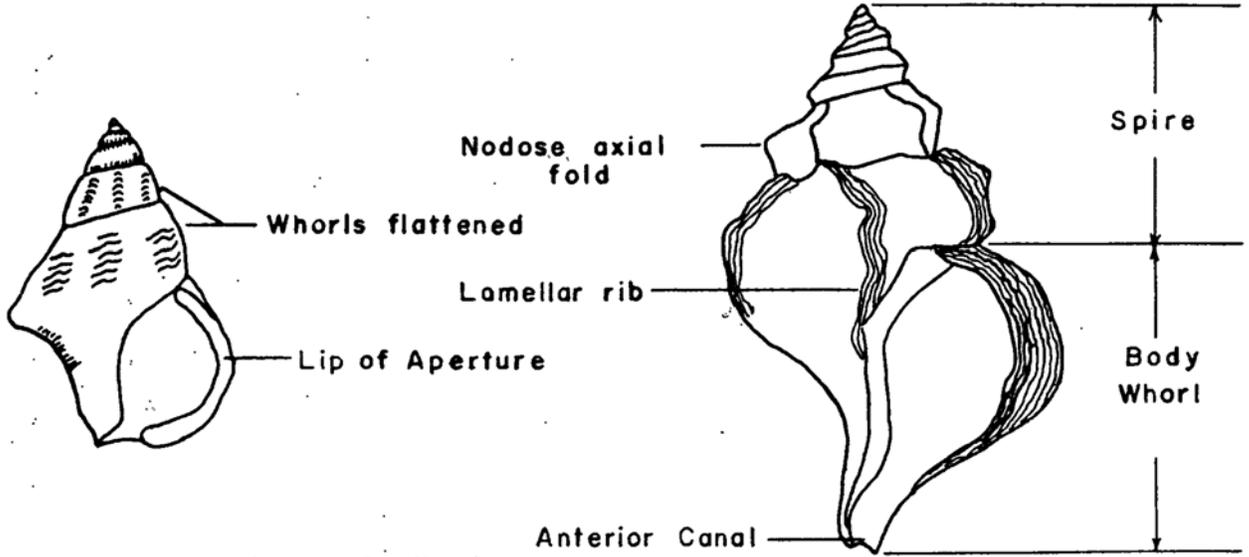
Boreal (Northern) Astarte *Astarte borealis* 74641

DESCRIPTION: Concentric ridges strong only near umbo; outer shell covering thick, black, sometimes yellowish; beaks are overhanging; wide hinge is thick toothed; margin not toothed.

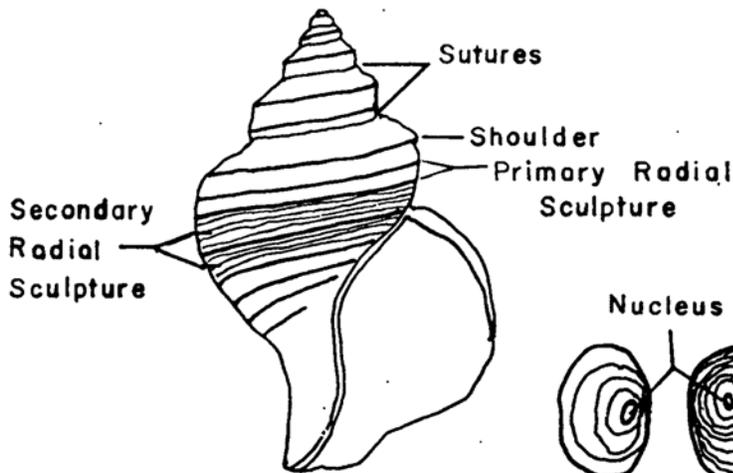
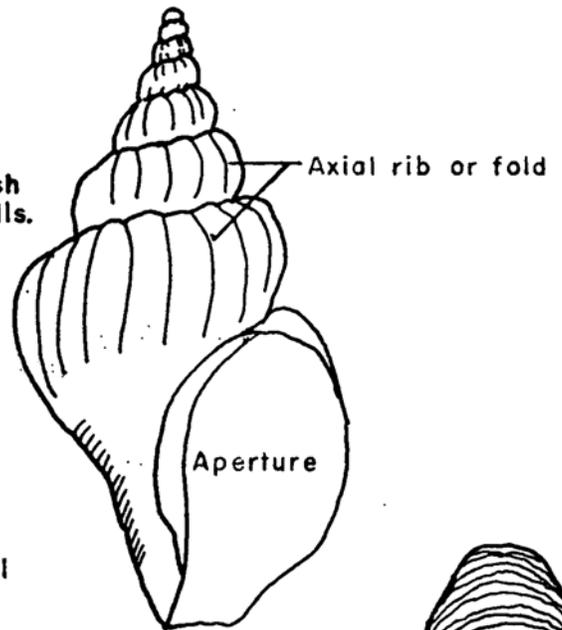
SIZE: Length to 5 cm.
(Kessler 1985)



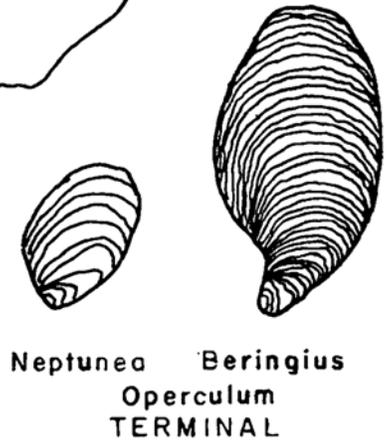
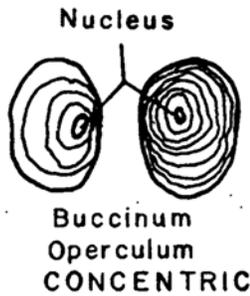
Diagrams of some Gastropod features



PERIOSTRACUM:
A paper-like brownish covering on some shells.



Anterior end of the Shell



SNAILS



Oregon (Hairy) Triton
Fusitriton oregonensis 72500

DESCRIPTION: Shell covered with bristle like hairs; spiral and axial sculpturing form a pattern of small rectangles.

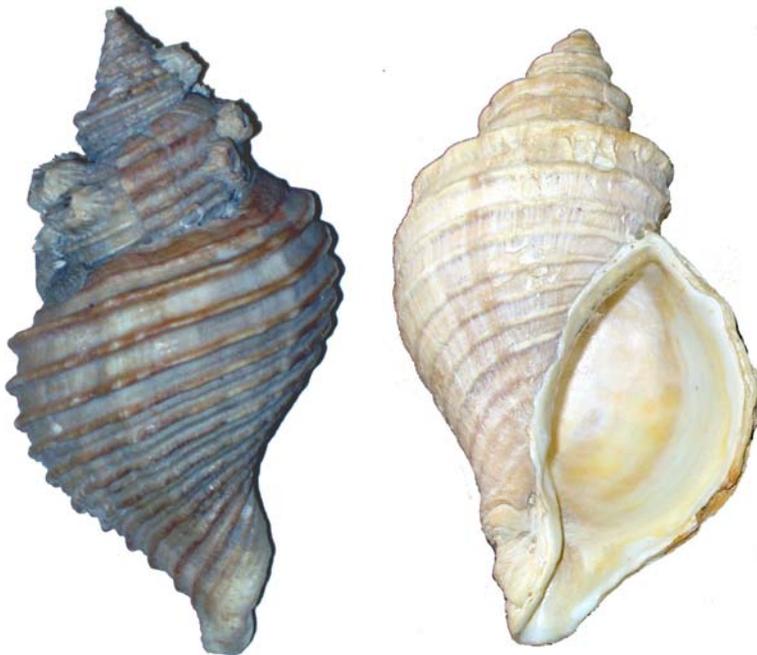
SIZE: Height to 15 cm.
(Kessler 1985)



Colus Whelk Unidentified
Colus 71710

DESCRIPTION: Small size; aperture white inside; shell smooth, brown; terminal operculum; fine striations on upper part of body whorl not slanting obliquely.

SIZE: Height to 5 cm.
(Kessler 1985)



Lyre (Ribbed) Whelk
Neptunea lyrata 71870

DESCRIPTION: Strong spiral ribs on body and whorl; flattish shoulders; shell heavy and thick; aperture elongate; anterior canal long and straight; operculum flame-shaped, yellow-brown.

SIZE: Height to 20cm.
(Kessler 1985, Morris 1980)



Pribilof Whelk
Neptunea pribiloffensis 71820

DESCRIPTION: Shell is thin, inflated, and short spired. All whorls have a primary radial rib forming a more or less well defined shoulder. Axial sculpture absent. Secondary radial sculpture consists of 3-5 close set threads. The aperture is broad and outer lip thin; anterior canal not long.
SIZE: Height to 15 cm.
 (MacIntosh 1976)



Fat Whelk
Neptunea ventricosa 71882

DESCRIPTION: Axial folds and shoulder nodes usually prominent but often absent; axial folds spaced close together near aperture; shell heavy, squat; aperture wide; operculum flame-shaped, yellow-brown; anterior canal twisted; aperture interior occasionally purple.
SIZE: Height to 15 cm.
 (Kessler 1985)



Kroeyer's Plicifus
Plicifusus kroeyeri 71891

DESCRIPTION: Prominent axial ribs, closely spaced (1); operculum not pointed at nuclear end; spire high without shoulders; anterior canal moderately long (2).

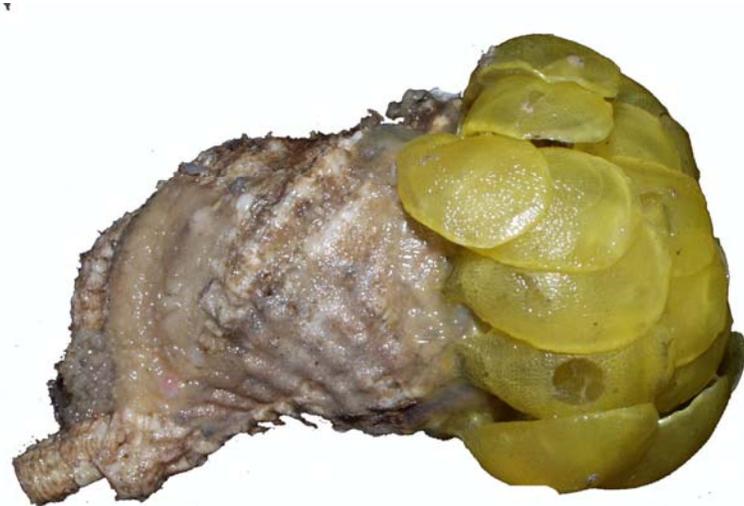
SIZE: Height to 11 cm.
 (Kessler 1985)



Buccinum Whelk Unidentified
Buccinum. 72740

DESCRIPTION: Identified as a *Buccinum* by the concentric growth rings forming around the nucleus of the operculum. The shell is thin and breaks easily; axial ribs rounded; radial sculpture difficult to observe; no prominent shoulder.

SIZE: Length 5.5 to 7.5 cm
 (MacIntosh 1976)



Neptune eggs
Neptunea eggs 71004

DESCRIPTION: Single capsules, individually attached to shells or substrate but not to one another; arranged in a compact, one layer cluster.
 (Kessler 1985)

TUNICATES



Sea Onion

Boltenia ovifera 98105

DESCRIPTION: Two siphon like openings; body globelike, with a stalk; grows singly or in large clumps.

SIZE: Height including stalk to 30 cm.
(Kessler 1985)

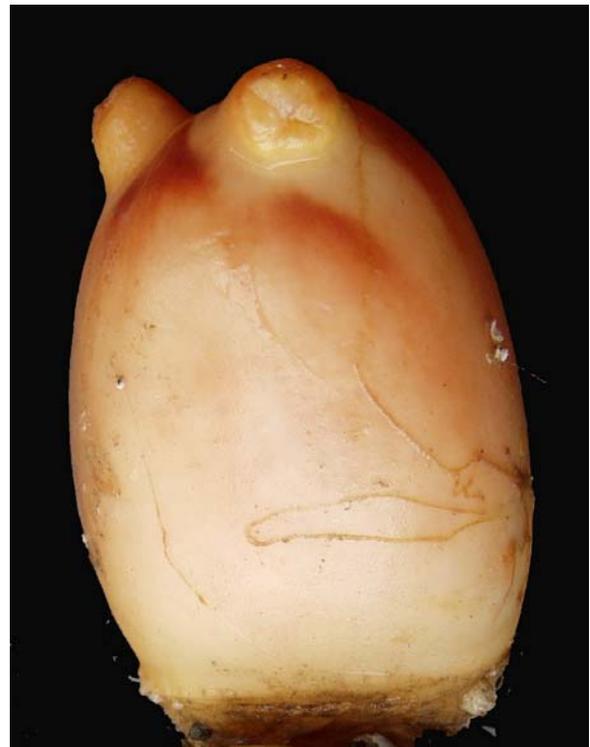


Sea Potato

Styela 98080

DESCRIPTION: Brown, potato-shaped; tiny pointed tip on upper end; usually grows in clumps.

SIZE: Height to 18 cm.
(Kessler 1985)



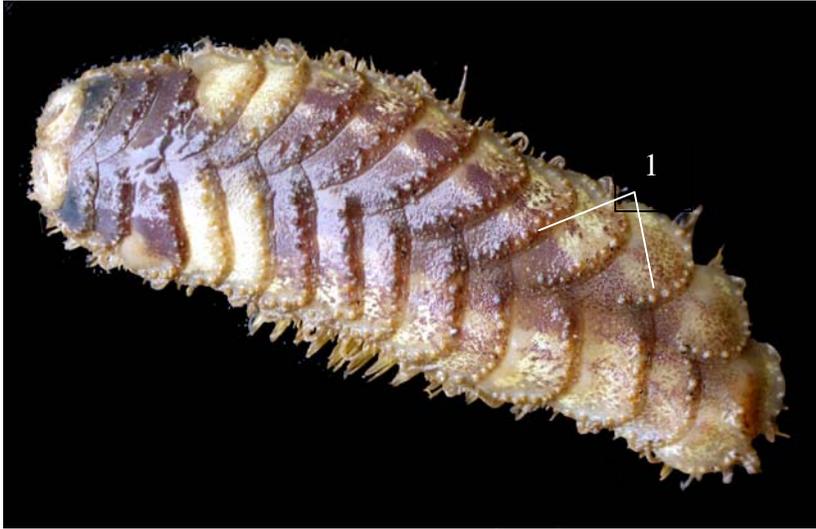
Sea Peach

Halocynthia aurantium 98205

DESCRIPTION: Peach like, orange or orange-red body; smooth or wrinkled skin; fuzzy skin texture caused by minute tubercles.

SIZE: Height to 18 cm.
(Kessler 1985)

LEECHES AND WORMS



Giant Scale Worm

Eunoe nodosa 56311

DESCRIPTION: Large size; greenish brown color; scale tubercles in narrow band near outer scale margin (1); often found in empty snail shells.

SIZE: Length to 10 cm.
(Kessler 1985)



Depressed Scale Worm

Eunoe depressa 56312

DESCRIPTION: Small size; yellow-brown color; scale tubercles scattered uniformly over scale surface; often found on sponges.

SIZE: Length to 5 cm.
(Kessler 1985)



Striped Sea Leech

Carcinobdella cyclostomum 59111

DESCRIPTION: Elongated body; anterior sucker separated from body by a constriction; posterior sucker larger, with inverted margin (1); striped reddish-brown color pattern; often found on king or Tanner crabs, on which they often lay their egg cases (2).

SIZE: Length to 10 cm.
(Kessler 1985)

SPONGES



Hermit Sponge
Suberites ficus 91016

DESCRIPTION: Firm, oval-shaped colony smooth rubbery texture; grows over a snail shell which eventually dissolves; brown, yellow, or brick red.
SIZE: Length to 15 cm.
(Kessler 1985)

CORALS



Sea Raspberry
Gersemia 41201

DESCRIPTION: Brainlike shape when contracted; white or red in color; no hard skeleton.
SIZE: Contracted diameter to 10 cm.
(Kessler 1985)

BRYOZOANS



Leafy Bryozoan
Flustra 95030

DESCRIPTION: Leafy colony of tiny individuals.
SIZE: Height to 15 cm.
(Kessler 1985)

BARNACLES



Crab Barnacle

Balanus hesperius 65204

DESCRIPTION: Small size; orifice more or less rectangular, about one-third shell diameter; shell wall solid, without tubes; often found on crab and snail shells.

SIZE: Diameter to 1 cm.
(Kessler 1985)

GLOSSARY

Adipose - fat, fatty.

Adipose fin - a fleshy fin, without rays and usually small, on the dorsal median line of the body, in front of the tail.

Anal - near or pertaining to the anus.

Anterior - in or toward the front or head end.

Anus - opening at the lower end of the alimentary canal, through which solid waste is expelled.

Axial - along the midline of the body or of an appendage. Roughly parallel to the axis of coiling in snail shells.

Calcareous - of, containing, or like calcium carbonate.

Cirrus - a slender appendage or fringe on the head of a fish.

Columellar - pertaining to the axis or central pillar of a spiral shell.

Coronal - pertaining to the upper portion of the head or crown.

Coronal spine - between the frontal and parietal bones of the head.

Dacty - finger or toe, applied to the distal joint of the crustacean leg.

Distal - farthest from the body.

Dorsal - on or toward the back or dorsum.

Eversible - capable of being turned outward.

Evert - to turn outward or inside out.

Exopodite - a lateral extension from the base of a leg in certain shrimps.

Fathom - unit of measurement equal to 6 feet.

Hermaphrodite - individual with both male and female generative organs. Includes nudibranchs and other mollusks.

Lateral - to the right or left of the midline.

Lunate - crescent-shaped.

Madreporite - the sieve plate of an echinoderm (includes sea stars, sea urchins).

Maxillae (maxilla) - paired mouth parts just behind the mandibles (jaws).

Maxilliped - appendage just behind the maxilla.

Merus - fourth joint, counting back from the tip, of a crustacean leg.

Nuchal - relating to the nape, or just behind the head.

Operculum - in many gastropod mollusks, a horny plate that covers the opening of the shell when the animal is retracted; in higher fishes, the bony flap covering the gills.

Pallial line - line along which the shell is attached to the mantle.

Pallial sinus - notch in the pallial line which marks the attachment of the muscle that retracts the siphon.

Papilla - a small elevation; modified tube feet not used for locomotion.

Parietal - dorsal bone of skull enclosing brain case.

Pectoral - of, near, on or pertaining to the breast or chest.

Pectoral fin - one of the frontmost pair of ventral fins.

Pedicle - a small stalk or stalklike support.

Pedicellaria - one of the tiny pincerlike structures of certain echinoderms.

Pelagic - living in the open sea, free from the bottom, usually near the surface.

Pelvic - pertaining to the lower body cavity.

Pelvic fin - either of the pair of fins on the ventral surface of the body.

Polyp - a sedentary type of animal form with a more or less fixed base, columnar body and free end with mouth and tentacles; an individual of a colonial or compound organism.

Process - natural outgrowth or appendage.

Proximal - nearest the body.

Rostrum - a bony projection or shelf on the snout of a fish. The forward projection of the carapace of a crab.

Septum (septa) - a dividing wall or membrane in the animal structure.

Serrated - notched on the edge like a saw.

Seta (setae) - stiff hair, bristle, or bristle like part.

Sinus - a depression, curve, indentation, or any of various cavities or passages, as a hollow in a bone.

Spicule - one of the small, bony or siliceous parts which stiffen the body of an echinoderm or sponge.

Stria (striae) - a slight or narrow line, ridge, stripe or streak, usually one of a number in parallel arrangement.

Subchela - a structure resembling a claw; a pincerlike organ.

Suprocular - above the eye.

Tegum - in arthropods, the dorsal part of a segment; in barnacles, the dorsal plate.

Umbo - an elevation or knob; in mollusks, a projection above the hinge; in barnacles, at the base of the shell.

Ventral - relating to the undersurface, abdomen or belly; opposite of dorsal.

Vomer - median bone, sometimes toothed, at the back of the roof of the mouth.

Whorl - one of the turns of a spiral shell.

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