



Georgia Strait Alliance Quadrat Study

Intertidal Zone Species Description

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Seaweeds and Algae

Black Crust



Pink Crust

(Lithothamnion sp.)

- coralline algae
- pig pink
- 1-4mm high, 4-10 cm across
- may cover rocks as well as shells
- may be smooth or rough



Brown Crust



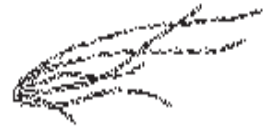
Brown Beard



Green Filament



Sausage Links



Red Sea Hair



Sea Lettuce

(Ulva sp.)

- green algae
- bright green, thin leaves
- looks like leaf lettuce



Shiny Blade



Green Ribbon

(Enteromorpha sp.)

- green algae
- bright green strands
- 1-4mm wide
- up to 14cm long



Yellow Sacs



Tan Cauliflower



Black Brush



Blackknob Blade

(*Gigartina papillata*)

- black, short branching straps
- a few cm high, with papillae



Japanese Weed

(*Sargassum muticum*)

- brown
- approx. 1m high
- finely branched



Rock Weed

(*Fucus distichus*)

- olive-brown branching straps
- usually with air bladders
- up to 30cm high



Railroad Strap



Acid Kelp

(*Desmarestia viridis*)

- 30-40cm long
- light brown to red
- smooth and rubbery
- secretes sulphuric acid



Tunicates and Bryozoans

Tan Bryozoan Crust

- 2-3 cm
- brown, black, gray or white
- on rocks, tidepools

Orange Bryozoan Crust

- crusty patches with definite patterns



Leafy Soft Bryozoan



Branching Bryozoan



Sea Pork

(*Aplidium californicum*)

- <20cm in diameter and 1cm thick
- brownish orange to pink
- low intertidal



Red Sea Squirt



Warty Sea Squirt

(*Pyura haustor*)

- up to 5cm
- thick, wrinkled, brown, warty skin

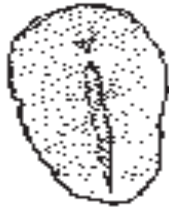


Annelids and Flatworms

Brown Flatworm

(Notoplana sp.)

- tan or grayish
- 1-3cm long
- <1mm high



Ribbon Worms

Green=*Emplectonema gracile*

- dark green-black above, white-yellow below

Orange/Red=*Tubulanus polymorphus*

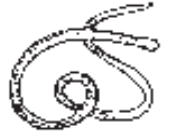
- bright red

Purple=*Paranemertes peregrina*

- dark brown-purple above, pale tan below

All Ribbon Worms:

- are thin and can stretch, therefore their length varies



Green Mussel Worm

(*Nereis vexillosa*)

- 5-30 cm long
- obviously segmented



Scale Worm

(*Halosydna brevisetosa*)

- up to 5cm long, grayish brown
- 18prs. of mottled over-lapping scales



Tiny Tube Worm

(*Spirobis* spp.)

- white, calcareous, coiled tubes
- tubes are 2-3mm in diameter, 2-3 cm long
- actual worm is rarely out of the



Peanut Worm

(*Phascolosoma agassizii*)

- unsegmented, tough, wrinkled skin
- tan head, tail is pale with black blotches
- slender when extended
- like a shelled peanut when contracted



Leather Tube Worm



Cnidarians

Red/Green Anemone

(*Urticina crassicornis*)

- column is olive green, streaked with red
- up to 30cm across (but usually smaller)



Burrowing Anemone

(*Urticina coriacea*)

- large (to 15cm across)
- pale pink or green

Sponges and Hydroids

Sponges

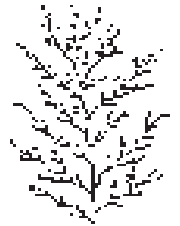
(Phylum porifera)

- velvety or gelatinous mats (algae are hard and rough)
- various colours-tan, red, green, yellow, purple
- approx. 1cm high, 10cm across



Beard Hydroid

- strands <1cm long
- large groups can cover from a few cm to a metre
- fine hairlike or fuzzy



Molluscs

Masked Limpet

(*Tectura persona*)

- up to 4cm long
- apex is more forward



Plate Limpet

(*Tectura scutum*)

- up to 6cm long, 5cm wide and 16mm high
- brown with white and dark spotting
- occasionally, green algae covers shell
- found mid to low intertidal



Ribbed Limpet

- 2-3 cm
- brown, black, gray or white
- on rocks, tidepools



Shield Limpet

(*Lottia pelta*)

- up to 4cm long
- highly variable appearance
- can be ribbed
- more raised than plate limpet

Finger Limpet

(*Lottia digitalis*)

- up to 2cm long
- distinct ribs

Mossy Chiton

(*Mopalia* sp.)

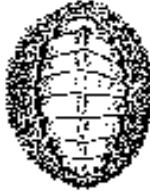
- eight shell plates in a row
- up to 10cm long and 5cm high
- dull brown, grey to green



Hair Chiton

(*Mopalia lignosa*)

- up to 7cm
- low intertidal
- light sensitive



Black Chiton

- 4-25cm
- black, grey, mottled, rust
- low tide zone



Lined Chiton

(*Tonicella* sp.)

- eight shell plates in a row
- up to 5cm long and 2.5cm wide
- mottled reddish-brown



Checked Winkle

(*Littorina scutulata*)

- up to 1cm high
- slender shell
- brown to bluish-black with white checkerboard pattern



Dire Whelk

(*Lirabuccinum dira*)

- up to 4cm
- gray
- fine raised ridges



Wrinkled Whelk

(*Nucella lamellosa*)

- pale brown or grey
- up to 5cm high and 2cm wide
- heavily ridged



Leafy Hornmouth



Dove Shell



Banded Whelk



Rock Jingle

(*Pododesmus cepio*)

- up to 8cm
- white
- lower shell is smaller and thinner with a hole through

Blue Mussel

(*Mytilus edulus*)

- up to 5cm
- blue-black



Pacific Oyster

(*Crassostrea gigas*)

- up to 20cm long; white
- fluted shell



Echinoderms

Green Urchin

(*Strongylocentrotus droebachiensis*)

- up to 8cm wide; spines are 1 to 3 cm long
- dull green or yellow-green



Mottled Star

(*Evasterias troscheli*)

- up to 25-30cm across;
- mottled purple, brown, orange, green
- has blunt spines; rays are thinner than the purple sea star



Purple Sea Star

(*Pisaster ochraceus*)

- up to 40cm across
- purple or orange
- has blunt spines



Six Armed Star

(*Leptasterias hexactis*)

- up to 9cm in radius
- grey/brown, olive green to purple/red



Leather Star

(*Dermasterias imbricata*)

- up to 25cm across; brownish red
- rays are webbed; feels slimy; lacks spines



Blood Star

(*Henricia leviuscula*)

- 10-18cm in radius
- found in the low intertidal to subtidal zones
- thin arms and smooth texture
- orange and orange red



Sunflower Star

(*Pycnopodia helianthoides*)

- 15-24 arms
- brownish orange or purple gray



Brittle Star

(*Amphipholis squamata*)

- about 3cm
- gray with white bands or spots
- very fragile



Medusa Worm

(*Psolus chitonoides*)

- up to 7cm long and 5.8cm wide
- pale yellow to bright orange



Orange Cucumber

(*Cucumaria miniata*)

- 20-25cm long and 4-5cm wide
- smooth tough skin with ten branched tentacles
- reddish/orange to brown



White Cucumber

(*Eupentacta quinquesemita*)

- narrow with short, thick, slimy tentacles around the mouth
- creamy/white to pale yellow
- found under rocks and in crevices



Arthropods

Common Barnacle

(*Balanus glandula*)

- up to 1.5cm wide;
- dingy white
- heavily ribbed



Brown Barnacle

(*Chthamalus dalli*)

- up to .5cm wide and .4cm high
- smallest barnacle on our coast
- brownish-grey



Thatch Barnacle

- up to 4cm across
- greyish white
- Cemented to rocks in high tide zone



Sphere Pill Bug

(*Gnorimospheroma* sp.)

- up to 1cm long



Seaweed Isopod

(*Idotea wosnesenskii*)

- 4cm long by 1.5cm wide
- greenish yellow
- high to low intertidal



Speckled Pill Bug



Kelp Flea

(Gammarid amphipods)

- up to 1.5cm long, brown
- sideswimmers



Shrimp

- from microscopic to 15cm
- pale pink to bright green
- found in tidepools, borrowing in sand and mud and low tide zones



Hermit Crab

(*Pagurus* spp.)

- crabs that live in snail shells



Purple Crab

(*Hemigrapsus nudus*)

- carapace up to 5cm across; purple
- purple spots on pincer
- juveniles have white patches on carapace



Drab Crab

(*Hemigrapsus oregonensis*)

- carapace up to 4cm wide; army green
- hairy fringed legs



Porcelain Crab

(*Petrolisthes eriomerus*)

- up to 2cm wide by 2.5cm long
- brownish green to redish brown
- high to low intertidal



Decorator Crab

(*Oregonia gracilis*)

- up to 5cm across
- often 'decorated' with seaweeds and hydroids



Black Clawed Crab

(*Lophopanopeus bellus*)

- 2.5 cm across
- heavy bodied with black tipped claws



Red Rock Crab

(*Cancer productus*)

- carapace up to 15cm across; red,
- juveniles may be streaked or mottled pincers tipped in black



Fishes

Tidepool Sculpin

(*Oligocottus maculosus*)

- approx. 5cm long
- variable color, shades of grey, black, brown, white, green



Clingfish

(*Gobiesox maeandricus*)

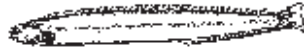
- up to 15cm long
- grey/brown with marbled spots
- mid to low intertidal zone



Penpoint Gunnel

(*Apoidichthys flavidus*)

- up to 45cm long
- bright green
- dark line running across the eyes



High Cockscomb

(*Anoplarchus purpureus*)

- up to 30cm
- green/gray/brown/black
- found under the rocks
- dorsal fin runs into the tail

