



Cnidaria: Anemones


Annelida: segmented worms




Bamboo Worm long slim fragile like bamboo to 18cm




Sand Worm green blue or pink iridescence to 30cm




Proboscis Worm light yellow, pointed head opens and jaw shoots out, can bite, to 30cm



Spaghetti Worm long feeding tentacles, 20 segments, to 16cm




Lug Worm coiled casting on surface, drab yellow brown, U shaped burrow, to 20cm




Thread worm thin segmented black casting on surface, dark red, to 30cm


Nemertea: ribbon worms



Primitive ribbon worm bright6 orange, tublar shape to 30 cm, rocky exposed areas



Blood worm bright red,thing tublar, to 5 cm, upper intertidal,



Marine plants. intertidal grasses that flower


Seagrasses
Eel Grass (Zostera)
lower intertidal to upper subtidal
dull green leaves, flat in cross section
leaves > 4mm width, to 3m long
mud or sand substrate wave protected



Surf Grass (Phyllospadix)
lower intertidal to upper subtidal
bright green leaves
leaves often < 4mm width, to 1m long
rooted to solid rock in wave areas

Green Seaweeds and Sea Grasses (light to dark green)
identification groupings


- **Seagrasses** with leaves arising from a root system
- **Filaments** with threadlike filaments <1mm in width
- **Blades** leaflike 2 mm to 30 cm wide
- **Cylinders** leaves or hollow tubes 2 mm to 50 cm wide
- **Spongy** texture, crusts and branched forms to 50 cm
- **Spheres** diameters to 1.5 cm
- **Unicellular** very small green dots to soup like appearance



Filaments
Green Tuft (Cladophora)
upper tidal to lower crevases
on rocky shores
bright green mossy clumps
branched filliments 1 to 3cm high clumps




Green Rope (Acrosiphonia)
mid to low intertidal crevases
on rocky shores
bright green rope like complexes
branched filliments to 30cm long



Blades
Sea Lettuce (Ulva)
throughout intertidal and subtidal
on rocky shores, forms mats when washed ashore
pale to emerald green blades 2 cells thick
may be long and narrow to fan shaped



Short Sea Lettuce (Prasiola)
upper and mid zones
bright green blades usually <1cm
on rock where high nitrates accoumlate



Dark Sea Lettuce (Ulvaria)
throughout intertidal and subtidal
on rocky shores
turn dark green when dry blades one cells thick
fan like blades



Cylinders
Green String Lettuce (Entromorpha)
throughout intertidal and subtidal
usually <20 cm long, bright green
branched and unbranched



Spongy
Sea Staghorn (Codium)
low intertidal, Y branched to 40 cm, 5 cm branch
also cushin form, spongy texture dark green
on rocks on open coasts



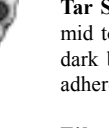
Spheres
Green Sea Grape (Derbesia)
on rock low to subtidal, emerald to dark green
one cell spheres to 1 cm dia

Brown Seaweeds (Yellowish to brown to dark brown)
identification groupings

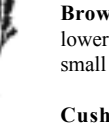
- **Crusts**, lack upright portions to 40cm in dia
- **Filaments**, filamentous thread like <1mm wide
- **Cushiony, Globular**, sac like to 30 cm in widest
- **Small Flat Blades** unbranched blades<10 cm long
- **Dichotomously branched**, forming Y's usually <40cm
- **Cylinders**, throughout branched or unbranched to 1m lengt
- **Radially branched with flattened parts** to3 m long
- **Feather like branching**, flattened usually 1 m long
- **Kelps**: 5 to 55 m long tough flattened blades



Simple blades lacking ribs



Winged Kelp many small blades from stem




Ribbed Kelp unbranched blades with ribs



Repeatedly branched Kelp

Crusts (some are a life cycle phase of other orders)
Tar Spot (Ralfsia)
mid to low intertidal to 20 cm dia
dark brown to greenish concentric rings
adheres tightly to rock substrate



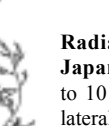
Filaments
Brown Rock Fuzz (Sphacelaria)
lower intertidal to subtidal
small brown tufts on rock to 4 cm



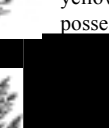
Cushiony or Globular
Studded Sea Balloon (Soranthera)
dimpled hollow globe to 6 cm growing on red seaweed
hard sori on globe surfaces
mid to low intertidal



Small Flat Blades
False Kelp (Petalonia)
light brown blade from a crust like holdfast
mid to low intertidal, usually < 10cm
light and temp determine crust or blade development



Sea Cauliflower (Leathesia)



Dichotomously branched
Rockweed (Fucus)
midridge length of flat branches, tips often inflated
mid to low intertidal, to 50 cm, blades to 1 cm
olive green to yellow brown, branching into Y's

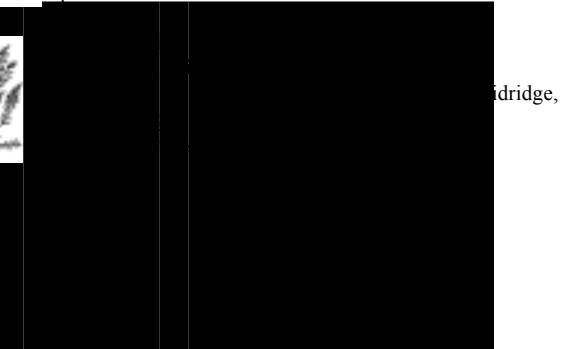


Little Rockweed (Pelvetiopsis)
mid to low intertidal, to 10 cm, wave exposed shores
oval blades with no midridge, light tan olive
many branches



Cylinders
Soda Straws or **Whip Tube** (Scytosiphon)
unbranched hollow tube >1 cm in dia to 50 cm long
mid to c pale brown
like links of sausages, rocky coasts

Radially branched with flattened parts
Japanese Weed (Sargassum)
to 10 m in length, attaches to rocks or shells,
lateral branches from the base of blades
yellowish brown stalk that branches repeatedly
posses smooth rounded floats



Midridge,

Kelps, Simple blades
Tangle or Sugar Whack (Laminaria)
brown blades to 3 m length and to 20 cm wide
low intertidal to subtidal, sand, or rocky coasts
range from tough to delectiate blades

Winged Kelp
Winged Kelp (Alaria)
branched holdfast with stalk usually 30 cm
two rows of sporophyll blades along lower stalk
blades usually < 2 m, dark brown to olive,
long slender wavey blades
low intertidal to upper subtidal, rocky coasts

Feather Boa (Egreglia)
intertidal to 20 m subtidal, rocky open coast
long flexible stalk numerous blades to 5 cm
some blades with round or oval floats
olive to dark brown, to 20 m long

Ribbed kelp
Broad Ribbed Kelp (Pleurophycus)
branched holdfast, stalk to 20 cm,
blade to 1.5 m , single midrib length of blade,
low intertidal to upper subtidal, rocky coasts

Repeatedly branched Kelp
Bull Kelp (Nereocystis)
stalk to 20 m long, bulb float to 12 cm, blades to 3 m
subtidal to 20 m, rock open coast to protected areas
olive to dark brown, grow in kelp forests

Sea Palm (Postelsia)
stubby rubbery stalk topped with up to 100 blades
blades to 25 cm, green to olive brown, to 60 cm tall
mid to low intertidal, open wave washed rock coast

Giant Kelp (Macrocystis)
to 30 m subtidal, rocky open coast
to 30 m long, many blades from along stalk,
blades to 30 cm long, 8 cm wide
olive to dark brown, branching holdfast

Red Seaweeds (Yellowish to red to pink to purple)
identification groupings

- **Hard crusts**, lack upright portions
- **Branched and hardened**, branched hardened segmen
- **Soft crusts** lack upright portions
- **Parasitic plants**, on other red algae
- **Filamentous**, thread like filaments
- **Solid or Hollow**, cylindrically sparsely branched
- **Blades with regular bumps**, few if any branches
- **Blades with ribs** blades with noted ribs
- **Simple Blades**, bladed and simple
- **Branched and flat**, branched in one plane
- **Bushy branched**, branched in all directions

Hard crusts
Rock Crust (Pseudolithophyllum)
high to lower intertidal, 3mm thick to 10 cm dia
pink to purple to chalky crusts, calcite hardens

Branched and hardened
Coral Seaweed (Corallina)
purplish pink with rounded calcified segments,
white rimmed miniature vases on tips
shafts to 2 mm dia, to 10 cm long, pools and
lower intertidal, on rock substrate

Soft crusts
Turkish Washcloth (Mastocarpus)
Tarspot alternate phase
simple blade with regular bumps, crust spongy
to 1 m long, 30 cm wide, subtidal to 20 m
brick red to purple, iridescent when wet

Filamentous
Black sea hair (Bangia)
one branch to 10 cm, rusty black hairs
compact growth on surfaces, high intertidal

Solid or Hollow
Deadman's finger (Halosaccion)
mid to low intertidal, sacks yellow to deep red
to 20 cm tall, sacks like squirt bottles

Blades with regular bumps
Turkish Towel, (Chondrocanthus)
tough blades red to yellow, usually <30 cm
lower intertidal to subtidal

Blades with ribs
Red Sea Leaf (Erythrophyllum)
rich red narrow blades to 40 cm length
low intertidal on wave exposed shores
ribs run length of blades

Simple Blades
Iridescent Seaweed (Mazzaella)
lobed blades usually <50 cm, in dense stands
blades re iridescent, slick rubbery blades
deep reddish purple to yellow

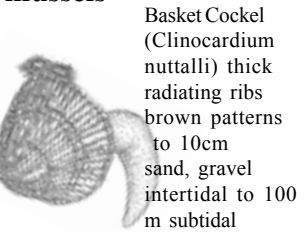
Purple laver (Phorphyroia)
brownish purple blades turn black when dry
to 30cm, on rocks protected shores,
upper and mid intertidal, food source

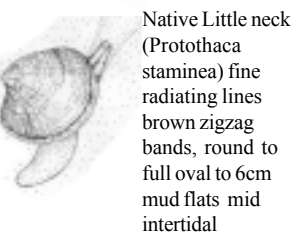
Branched and flat
Sea Lace (Microcladia)
terminal branch like crab claws, to 40 cm
mid to lower intertidal, brown to purple

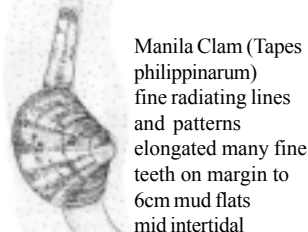
Black Pine (Neorhodomela)
high to low intertidal, 20 cm tall
sand swept rocky shores, dark black brown
wiry branches with clusters of 1 cm branches,

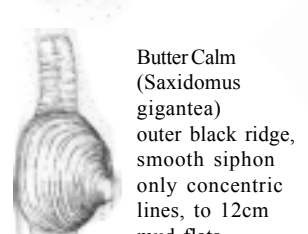
Bushy branched
SeaBush (Odonthalia)
branched with bushy appearance, to 50 cm long
branch tips sharp and tightly packed
mid to lower intertidal, tide pools

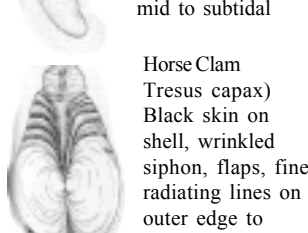
Mollusca: Bivalvia, Clams, Oysters, mussels

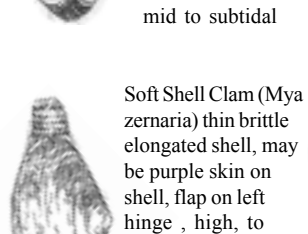


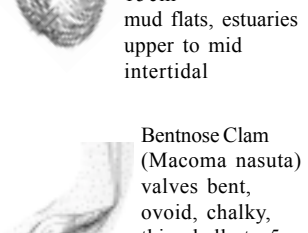


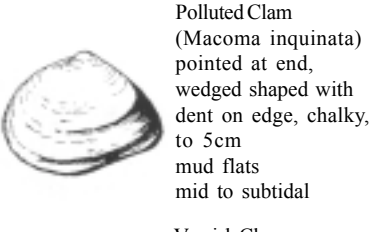


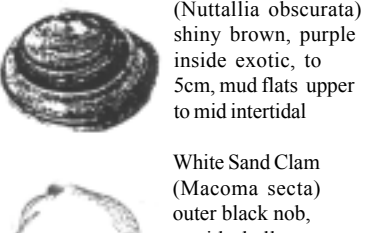


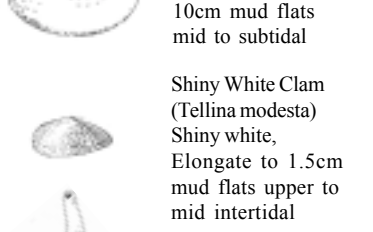


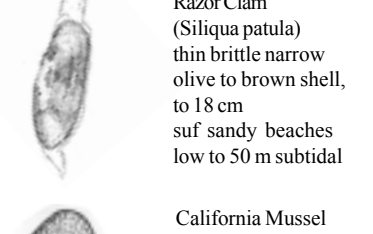





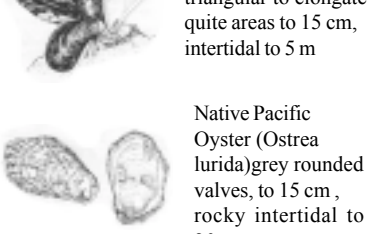


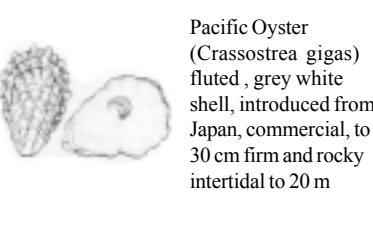










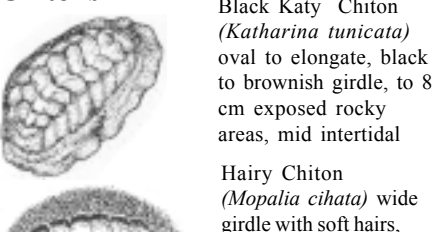


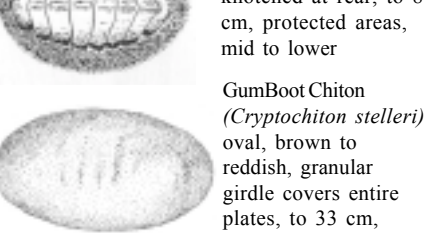


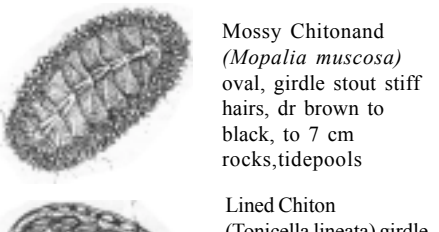


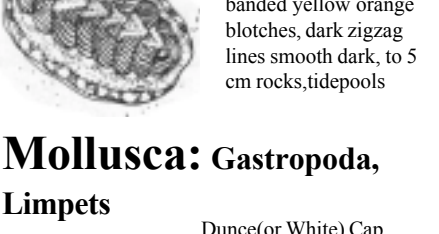


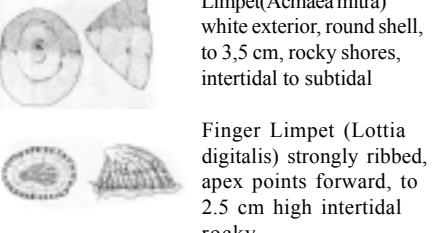
Mollusca: Polyplacophora, Chitons

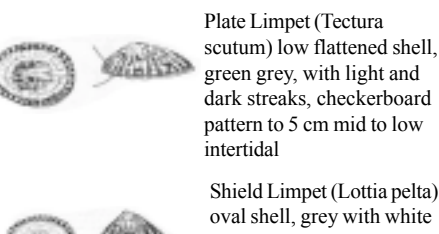


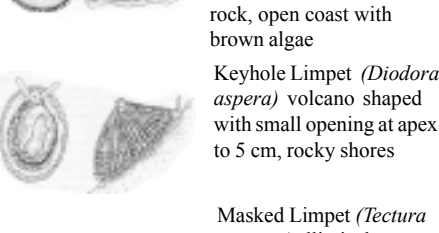


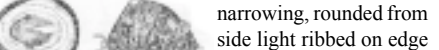


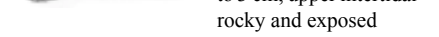










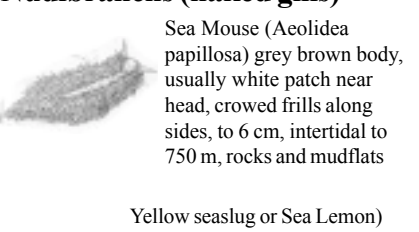


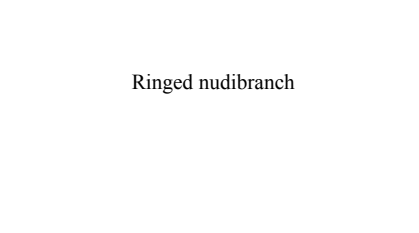


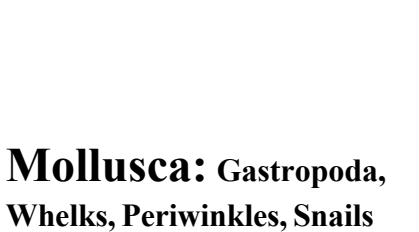


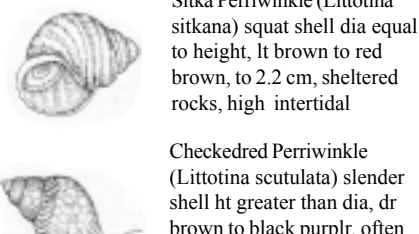


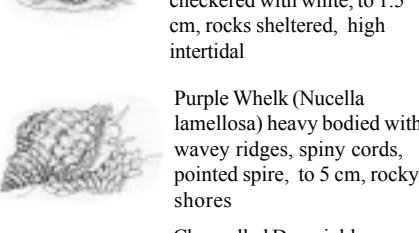
Mollusca: Gastropoda, Nudibranchs (naked gills)

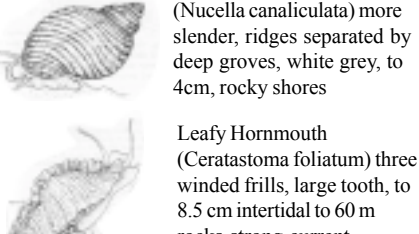


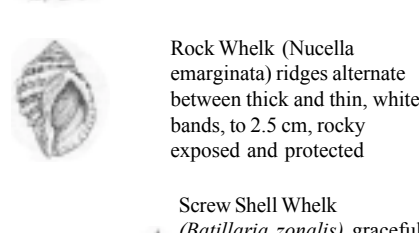


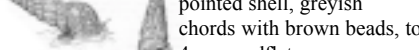








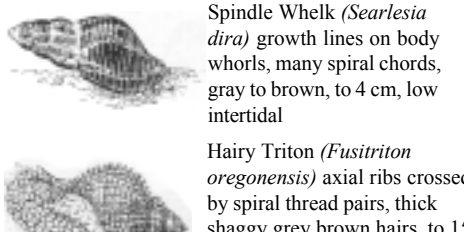


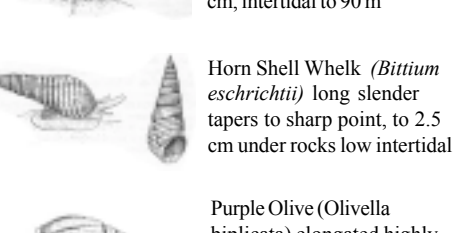


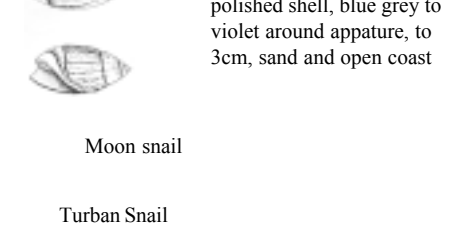


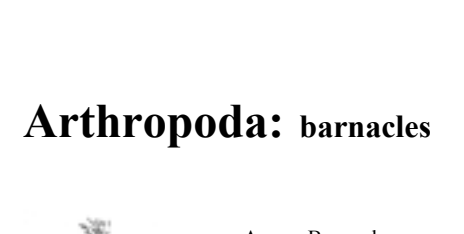


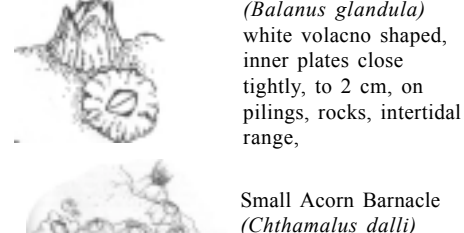


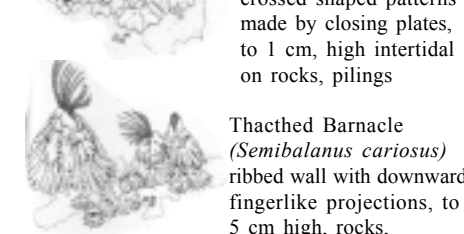


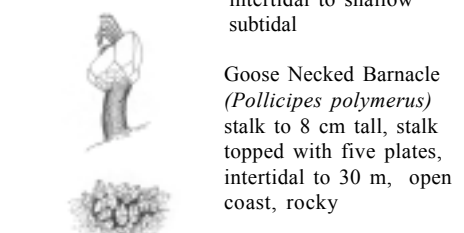













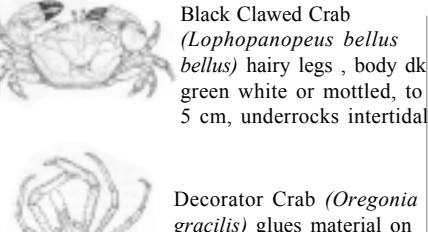


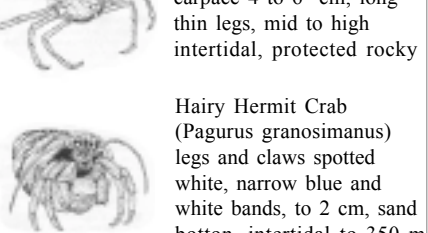


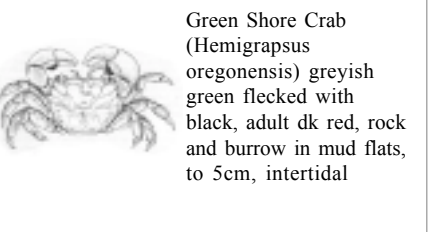


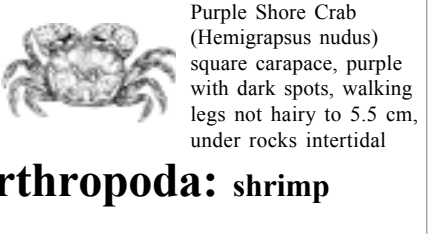


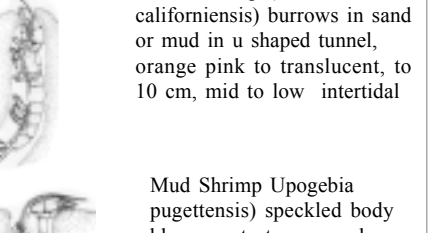
Arthropoda: crabs

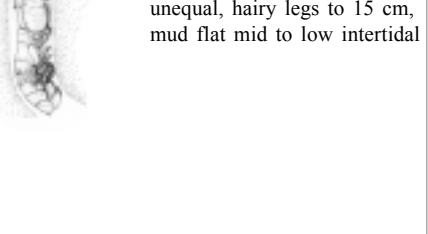















Arthropoda: isopods and amphipods

