Common Intertidal Flora and Fauna of the Cherry Point Aquatic Reserve

L - Low intertidal; M - Mid intertidal; H - High intertidal; VH - Very high intertidal, splash zone	1 in. = 2.5 cm	
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- P.1 Lichens, Eelgrass, Green SeaweedsP.6 CrabsP.2 Brown SeaweedsP.7 Anemones, Hydroids, BivalvesP.3,4 Red SeaweedsP.8 GastropodsP.5 Insects, Arachnids, Barnacles,P.9 Sea Slugs, Chitons
- P.10 Worms
- P.11 Echinoderms
- P.12 Bryozoans, Sponges
 - Tunicates, Fish

Amphipods, Isopods, Shrimp, Hermit Crabs

Kingdom Fungi: Phylum Ascomycota - LICHENS



Kingdom Plantae: Phylum Tracheophyta



Zostera japonica Japanese Eelgrass M Thin-bladed up to 2 mm wide; tends to be higher on beach than native eelgrass



Kingdom Plantae: Phylum Chlorophyta — GREEN SEAWEEDS



Acrosiphonia sp. Green Rope M-L

Derbesia sp.

Sea bottle or Sea grapes L Filamentous phase branching filamentous tuft; up to 1 cm Spherical phase hollow, spherical ball on a short stalk; up to 1 cm Found on encrusting coralline algae and rocks



Urospora sp. Green Hair H May be on high cobble in spring



Ulvales Sea Lettuce H-M Ulva, Ulvaria, and others; foliose & tubular For abnormally large bloom events, add a note to the swath sheet

Kingdom Chromista: Phylum Ochrophyta — BROWN SEAWEEDS





Alaria marginata Ribbon Kelp L Long, narrow, single terminal blade with midrib above smaller lateral blades



Costaria costata Five-ribbed Kelp L 5 ribs; wide blade; profusely puckered



Nereocystis luetkeana Bull Kelp L Long, narrow blades projecting from gas-filled pneumatocyst; long stipe



Saccharina latissima (Laminaria saccharina) Sugar Kelp L No midrib; narrow blades may be puckered along margins leaving a smooth center







Scytosiphon lomentaria Soda Straws M-L Long strands of 10 mm tubes; S. promiscuus - 4 mm dia.



Sargassum muticum Japanese Wireweed H-L Well-branched and wiry; branches interspersed with small rounded floats

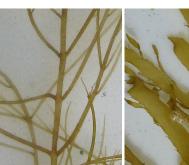


Fucus sp. Rockweed H-L Common and abundant; flattened blades with puffy air bladders at the ends; thick clumps



Desmarestia Acid Kelp L

D. aculeata alternate branching



D. viridisD. herbaceaopposite branchingflattened branches > 1 cmD. ligulata - flattened, side branches much less than 1 cm



Ralfsia sp. M-L Sea Fungus Smooth, thin brown crust; may be circular to lobed; firmly adhered to substrate



→

Colpomenia sp. Bulb Seaweed M-L Light to golden brown; irregular; easily torn cohesive wall; pops when squeezed; on rocks or other algae



Leathesia marina Sea Cauliflower M-L Yellowish-brown, globular cushions; irregular; disintegrates when squeezed



Soranthera sp. M-L Studded Sea Balloons Brownish, hollow sacs with dark brown bumps; grows on Neorhodomela & Odonthalia

Kingdom Plantae: Phylum Rhodophyta — RED SEAWEEDS

Coralline Red Algae L





Encrusting



Hildebrandia sp. Rusty Rock H-L Reddish; thin; tightly adhered



Articulated



Petrocelis phase Foliose rough bumps on surface Thick; can dent with fingernail (formerly Gigartina) Mastocarpus sp. - Turkish Washcloth H-L



Chondracanthus sp. (formerly Gigartina) Turkish Towel L



Osmundea spectabilis Sea Laurel L Feather-like branching with no





Callophyllis sp. Red Sea Fan L Flattened; fan-shaped; width of blades varies with species





Constantinea subulifera Cup and Saucer L Cup-shaped blade; stipe centered in blade; grows in layers along stipe



Cryptopleura / Hymenena complex L Multiple similar species which cannot be identified in the field; papery thin blades; delicate veins radiating out from near base of blade



Devaleraea mollis (Palmaria mollis) Red Ribbon L Long blades; irregular lobes



Mazzaella splendens (Irideae splendens) Iridescent Seaweed L Wide blades; very iridescent



Polyneura latissima Criss-cross Network L Pinkish-red; net-like veins branch and fuse back together



Dry Porphyria / Pyropia complex Nori (Laver) H-L Common; 1-2 cells thick; dries quickly & may turn greenish



Smithora naiadum Seagrass Laver L Grows on eelgrass

Kingdom Plantae: Rhodophyta - RED SEAWEEDS CONT.

Endocladia muricata Sea Moss H-M Mossy appearance on rock; short spines on wiry branches; other similar algaes may be present - beware of differences in form





Cryptosiphonia woodii Bleached Brunette M-L Bleaches very pale in sun; well-branched



Neorhodomela larix Black Pine L (Rhodomela larix) Coarse, bushy mass; dark; rounded ends resemble bottle brushes



Odonthalia



O. washingtoniensis \rightarrow O. floccosa Sea Brush L Coarse, bushy mass; ends of stems are pointed & branched



Farlowia mollis Farlow's Seaweed L Narrow; strap-like; fringelike laterals



Prionitis sp. Bleachweed L Strap-like with branched bladelets; smells like bleach

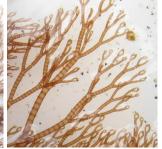


Gracilaria / Gracilariopsis complex Red Spaghetti L Thick strands with some side shoots often in curled bunches on beach; multiple similar species among two genera



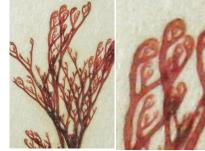
Sarcodiotheca gaudichaudii (Neoagardhiella gaudichaudii) Sea Noodles L Thick, red stems resemble noodles; branches slightly restricted at base





Ceramium sp. Staghorn Felt L Soft feel; stems have dark bands; terminal branches pinched like crab claws





Microcladia sp. Coarse Sea Lace M-L Dark red to olive brown: terminal branches pinched like crab claws

Plocamium sp. Sea Comb L Thick stems where the end of the final branchlets end in a comb-like formation



Ahnfeltia fastigiata Bushy Ahnfelt's Seaweed M-L Wiry, cylindrical branches which repeatedly fork

Phylum Arthropoda:

Class Insecta: Dermaptera Class Insecta: Diptera



Anisolabis maritima Marine Earwig H Black; up to 3 cm



Diptera Flies & Midges H Small; dark brown-black; on algae, wrack or barnacles; one "cranefly" type on Ulvales

Class Insecta: Coleoptera

Liparocephalus sp. Marine Beetle M Black; up to 4 mm



Ocypus olens **Devil's Coach** Horse Beetle VH Black; up to 3 cm

Class Arachnida

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Neomolgus littoralis Red Velvet Mite H Red; up to 3 mm



Chthalamus dalli Little Brown Barnacle H Small, tan-brown plates; inner plates form a cross, the shorter crossbar has a slight wave



Balanus glandula Acorn Barnacle H-M Most common intertidal barnacle; inner plates form a sinuous W or M



Balanus crenatus Crenate Barnacle M-L Outer plates white & smooth; inner plates form a "sharp" W or M; squat with wide base



Semibalanus cariosus Haystack Barnacle M-L Outer plates may be ridged and inner plates form a recessed beak; the largest of these four species

Phylum Arthropoda: Subphylum Crustacea — AMPHIPODS & ISOPODS



Caprellidae Skeleton Shrimp M-L Amphipod; up to 4 cm



Exosphaeroma russellhansoni L Up to 1.5 cm; wide "tail fan"



Senticaudata Amphipod H-L Up to 2 cm



Gnorimosphaeroma oregonense Pill Bug Isopod M-L Dark gray to tan; can roll up into a ball; up to 1 cm



Pentidotea resecata **Eelgrass Isopod M-L** Reddish-brown to green, forked tail; up to 4 cm



Pentidotea wosnesenskii Rockweed Isopod M-L Highly variable color, rounded tail; to 4 cm

Phylum Arthropoda: Subphylum Crustacea — SHRIMP & HERMIT CRABS



Pandalus danae Dock Shrimp L Diagonal stripes on abdomen, blue dots often on body

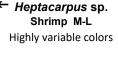




Pagurus hirsutiusculus Hairy Hermit H-M Hairs on legs; white stripes on legs disappear as crab ages; likes shells that seem too small



Pagurus granosimanus Grainyhand Hermit M-L Granular appearance to claws; likes shells that are too big - can withdraw completely





Pagurus beringanus Bering Hermit L

Walking legs are pale blue with red spots and bands; claws reddish with spines; juveniles easily mistaken for Grainyhand hermit

Phylum Arthropoda: Subphylum Crustacea — CRABS





Hemigrapsus nudus Purple Shore Crab H-M Usually purple but can be green and juveniles are variably colored; hairless walking legs; carapace to 5 cm



notch

Hemigrapsus oregonensis Yellow Shore Crab H-L Usually greenish, but can be purple or white and juveniles may be quite variable; a fringe of hair on the walking legs; slight notch between eyes; carapace averages 2 cm



Cancer gracilis Graceful Crab L Carapace widest at the 9th tooth; white edging along the carapace; carapace to 11 cm



Cancer magister Dungeness Crab L Carapace widest at the 10th (last) tooth; juveniles are highly variable in color; carapace to 23 cm





Juveniles

Cancer productus Red Rock Crab M-L Bright red; strong black-tipped pincers; juveniles are colorful & sometimes patterned; carapace to 20 cm



Lophopanopeus bellus Black-claw Crab L Carapace color variable - purple to orange, brown or white; black claws; carapace to 4 cm



Oregonia gracilis Graceful Decorator Crab M-L Very slender legs; long rostrum; frequently decorated with seaweed and other invertebrates as camouflage; carapace to 4 cm



Telemessus cheiragonus Helmet Crab L Usually a yellowish color; covered in stiff, bristly hairs; carapace to 10 cm



Petrolisthes eriomerus Flattop Porcelain Crab M-L Dark brown to blue; blue spot at base of the moveable finger of claw; carapace to 2 cm



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Cancer oregonensis Pygmy Rock Crab L Rounded carapace; usually brownish-red to white; sometimes warty; hairy legs and black tipped claws; carapace to 3 cm



Pinnotheridae Pea Crabs M-L

Small, wide-bodied crabs usually found inside live bivalves; occasionally found out in the open when between hosts; carapace to 2.5 cm



Crab larvae Many possible



Pugettia gracilis Graceful Kelp Crab L Slender legs; color white to bright red; often decorated with a single piece of seaweed over rostrum; carapace to 9 cm



Pugettia producta Northern Kelp Crab L Color kelp brown to dark red; carapace smooth and broad; shorter rostrum than similar species; only juveniles seem to decorate rostrum with seaweed; carapace to 9 cm

Phylum Cnidaria: Class Anthozoa - ANEMONES



Anthopleura artemisia Moonglow Anemone L May be white to green to brown with white stripes on the tentacles; usually buried in the sand; up to 15 cm wide



Anthopleura elegantissima Aggregating Anemone M-L Green with pink tentacles; usually grouped in masses but occasionally solitary; up to 8 cm wide



Metridium senile Short Plumose Anemone L May be white to orange to brown; smooth body; attached to boulders; may be solitary or in groups; up to wide 12 cm



Urticina clandestina Stubby Buried Anemone L White to pinkish to red stubby tentacles with a thin band; red column with tubercles; always buried in the sand; up to 15 cm (U. coriacea is not a Pacific species)



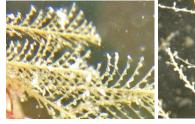
Urticina grebelnyi Painted or Christmas Anemone L ay be solid red or olive brown or a combi

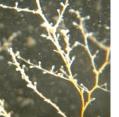
Column may be solid red or olive brown or a combination of each; faint to prominent bumps along the column; banded tentacles; attached to base of boulders; up to 20 cm wide (formerly grouped with *U. crassicornis* which is a separate species - completely smooth, no bands on tentacles)



Urticina sp. L Pinkish-red; smooth body; no obvious tubercles, rows of white dots; banded tentacles; attached to boulders; previous name is now Atlantic-only species, local species remains unnamed

Phylum Cnidaria: Class Hydrozoa - HYDROIDS







Hydrozoa Hydroids L Flexible fuzzy, feather-like or bushy colonies; branching slightly from a creeping stolon; brown; up to 10 cm or more

Phylum Mollusca: Class Bivalvia - BIVALVES



Mytilus trossulus Pacific Blue Mussel M-L Usually blue-black but can be brown; found in clusters attached with byssal threads



Pododesmus macrochisma Green False-Jingle M-L Gray-white mostly circular shell attached to rocks; up to 13 cm



Macoma inquinata Pointed Macoma M-L White; often stained with brown; pointed end; up to 6 cm



Leukoma staminea (Protothaca staminea) Pacific Littleneck M Shell is usually fairly equal in height & width; lattice sculpture usually obvious; up to 8 cm



Tresus sp. Gaper Clam M-L Large shell living deep in sand; up to 28 cm; generally only see leathery looking siphons in survey area; may be one of two *Tresus* sp.



Hiatella arctica Arctic Hiatella L

Small, white and elongate; somewhat irregular shapes; found under rocks; usually < 3 cm

Saxidomus gigantea Butter Clam M-L Inhalent siphon has short tentacles on rim; openings ~ 10-15 mm



Phylum Mollusca: Class Gastropoda - GASTROPODS



Lottia persona Mask Limpet VH-H On boulders; low to high shell height; patterned shell; sometimes finely ribbed; up to 5 cm



Littorina scutulata Checkered Periwinkle H-M Small, black to checkered pattern; tall spire; abundant on rocks; usually less than 1 cm



Lottia digitalis Ribbed Limpet H-M Ribbed shell with apex pointed well forward; up to 3.5 cm



Littorina sitkana Sitka Periwinkle H-M Solid black, white, orange or striped; smooth to ribbed; wide, squat shape; up to 2.5 cm



Lottia pelta Shield Limpet M-L Most abundant and variable of the limpets; may be smooth to ribbed; variably patterned; apex slightly forward of center; found on rocks, shells, and eelgrass; up to 5 cm





Lottia scutum Plate Limpet L Found on rocks; patterned shell with apex fairly central; juveniles may be finely ribbed; up to 6 cm



Lacuna sp. Lacuna M-L

Very small; solid brown, striped, or chevron pattern; identified by the indent in its columnella; yellow eggs often found on seaweeds; usually less than 5 mm



Calliostoma ligatum Blue Topsnail L Blue-gray to brown; may have blue to reddish rings; found on rocks; up to 3 cm



Margarites pupillus Puppet Margarite L Gray to pinkish; found on rocks & algae; up to 1 cm

Margarites have an opening near the aperture at base of shell. Topsnails do not.



"Bittium" sp. Mud Snail M-L Gray-brown or striped; 3 possible genera; usually less than 3 cm



Lirabuccinum dirum Dire Whelk M-L Gray-brown with a dark brown interior; wide axial ribs & fine spiral ridges; up to 5 cm



Nucella lamellosa Frilled Dogwinkle M-L

Highly variable shell; may be white to orange to brown or striped; smooth to frilled; juveniles have well defined spiral ribs; frequently found with its eggs; up to 12 cm



Alia carinata
Carinate Dovesnail M-L
Small, brownish and may be patterned; sometimes encrusted with algae; under rocks and in dead shells; up to 1 cm



Alvania compacta Compact Alvania L Small, brown with cancellate sculpture; up to 3 mm





Nucella ostrina H-M Northern Striped Dogwinkle Variable from white to orange to black or striped, and smooth to lightly frilled; may also have well-defined spiral ribs; up to 3 cm



Pyramidellidae Odostomid M-L

Tiny white snail; may be found feeding on other invertebrates; up to 1 cm



Onchidella borealis Leather Limpet VH-H Small brown shell-less snail; up to 1.5 cm

Phylum Mollusca: Class Gastropoda - GASTROPODS - SEA SLUGS



Haminoea vesicula White Bubble Shell L Shell hidden by body; found among sea lettuce and eelgrass; often with yellow egg masses; up to 2.5 cm



Doris montereyensis Monterey Sea Lemon L Creamy to yellow to gray-yellow; black specks on tubercles; yellow Brownish to yellow; found gills; up to 15 cm



Onchidoris bilamellata Barnacle-eating Nudibranch M-L

on rocks near barnacles; up to 2 cm

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Diaulula odonoghuei Spotted Leopard Dorid L Light to dark brown with darker spots; smooth body; up to 12.5 cm D. sandiegensis has rings & is subtidal in this area



Aeolidia loui/papillosa Shag Rug Nudibranch L Cream to brown; long cerata; up to 10 cm; The species have only subtle differences and overlap in range locally.



Hermissenda crassicornis L **Opalescent Nudibranch** White body; white and blue lines on body; cerata have white lines and orange tips; up to 5 cm



Dendronotus iris **Rainbow Dendronotus L** White to red body with red or orange cerata; sometimes in large numbers after mating events; up to 30 cm



Melibe leonina Lion's Melibe L Transparent body with a large hooded head; digestive tract visible; up to 10 cm



Dirona albolineata Frosted Nudibranch L White to yellow-orange; translucent; white edge along cerata; up to 18 cm

Phylum Mollusca: Class Polyplacophora - CHITONS



Mopalia lignosa Woody Chiton M-L Variable colors; distinctive ray pattern on plates; moderate hairiness; up to 8 cm



Mopalia hindsii Hind's Mopalia L Usually brown, can be greenish; ribbed sculpture on plates; fine hairs; to 8 cm



Mopalia muscosa Mossy Chiton M-L Very common; blue-green to brown plates with strong sculpture; long, stiff, bristly hairs; to 10 cm



Cryptochiton stelleri Gumboot Chiton L May find baby specimens; yellow-orange to brown; plates hidden; up to 35 cm



Mopalia vespertina

Smooth Chiton L

Cyanoplax dentiens Gould's Baby Chiton M-L Small. smooth chiton: hairless: variable patterns of gray to green to brown; up to 2.5 cm







Tonicella lineata Lined Chiton L

Girdle may be red, yellow or green; no hairs; plates variably colored with blue & dark red stripes; solid colored possible; juveniles show less developed markings; up to 5 cm

We have many chiton species in the Northwest. There are many other uncommon species which might be found.

Mopalia kennerleyi

Northern Hairy Chiton L

Uncommon in survey area; highly

Phylum Platyhelminthes: FLATWORMS

Phylum Nemertea: RIBBON WORMS



Kaburakia excelsa Giant Flatworm L Reddish-brown; rounded to oval with irregular outline: white digestive tract visible on underside; up to 10 cm



Micrura verrilli L

Purple dorsal with light transverse

stripes; white ventral; orange triangle

on head; up to 50 cm

Tubulanus

Orange; smooth;

up to 1 m



Platyhelminthes Flatworm M-L A number of other flatworm species

exist in our area which are very difficult to identify; range in colors and size

Phylum Annelida: OLIGOCHAETA



Oligochaete VH Pale tan to translucent; segmented; found in high driftline



Carinoma mutabilis M-L

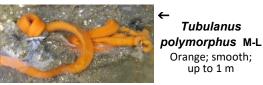
Whitish with milky head;

Paranemertes peregrina M-L Dorsal is brown to ourple-brown; ventral is creamy yellow

Emplectonema gracile M-L

Dorsal is dark shade of green;

ventral is yellow-green

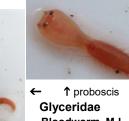


Phylum Annelida: POLYCHAETES



Capitellidae Gallery Worm M-L Often red; threadlike when stretched out; tolerates polluted waters





Bloodworm M-L Distinctive habit of everting its clubshaped proboscis; up to 35 cm



Brownish; long setae along sides; white hind segment; up to 4 cm; other species may be differently colored

-

Opheliidae L

Pointed head; ventral groove; gills on most segments Armandia brevis - eyes on most segments;20 mm long; 1-1.5 mm wide; pale color to orange-red





Nereidae L **Pile or Sand Worm** Glossy; green to brown to red; sturdy short setae; strong jaws - shown right Large pile worms: Alitta brandti - green; up to 1.5 m Nereis vexillosa - green to red; up to 30 cm



Serpulidae Calcareous Tubeworm L White calcareous tube: red body



Syllidae Small, relatively short & slender, <10 mm; numerous appendages from head to tail; very long setae



Terebellidae M-L Spaghetti Tube Worm Pink-brown-green; usually in tubes made of sand & shell debris under rocks; tentacles numerous and long; common; up to 28 cm



Polynoidae - Scaleworms M-L Variable colors; overlapping scales down each half of body; up to 10 cm



Tubiculous Polychaete M-L Includes all genera of tube worms which form parchment

Phylum Echinodermata: Class Holothuroidea - SEA CUCUMBERS



Cucumeria miniata Orange Sea Cucumber L Orange; lives under rocks but sometimes peek out from underneath; frilly orange tentacles; up to 20 cm



Eupentacta quinquesemita White Sea Cucumber L White to cream; 5 rows of tentacles which do not retract fully; under rocks; up to 10 cm Pentamera sp. could also be present

CPAR Page 11 Class Echinoidea - SEA URCHINS



Strongylocentrotus droebachiensis Green Sea Urchin L White to green; young specimens sometimes found intertidally; up to 8 cm

Phylum Echinodermata: Class Asteroidea - SEA STARS





Evasterias troschelii Mottled Star L Highly variable color; baby specimen on right; up to 40 cm



Henricia leviuscula Blood Star L Orange-red; sometimes with white shoulders; up to 12 cm; likely includes more than one species



Henricia pumila Dwarf Mottled Star L Multi-toned shades of yellow, orange, red, gray; up to 5 cm



Leptasterias hexactis Six-arm Star L Variable coloring; 6 arms; usually under 6 cm



Pisaster ochraceus Purple Star or Ochre Star L Purple; sometimes orange to brown; thick arms; up to 35 cm



Pycnopodia helianthoides Sunflower Star L Orange to gray; up to 26 arms; up to 1 m

Phylum Echinodermata: Class Ophiuroidea - BRITTLE STARS



Ophiuroidea Brittle Stars L White to gray; several species may be present; up to 12 cm

Phylum Bryozoa: BRYOZOANS



Bryozoan "branching" L Many genera; need microscopic study to identify

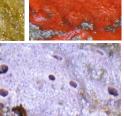
Bryozoan

"encrusting" L Many genera; need microscopic study to identify

Phylum Porifera: SPONGES CPAR Page 12



Porifera Sponge L Many genera; most need microscopic study to identify



Recent DNA studies have split some common genera. Field identification is not reliable.

Phylum Chordata: Subphylum Tunicata - TUNICATES & ASCIDIANS



Ascidiacea Tunicate - "solitary" L Hard to identify; two siphons that are hard to see out of water or when retracted



Cnemidocarpa finmarkiensis Broadbase Tunicate L Bright reddish-orange; smooth body; two visible siphon holes; a solitary form; up to 5 cm

Cottidae

Sculpin L

Under rocks in shallow pools of water; wide heads

and usually large pectoral fins; variable colors

Phylum Chordata: Subphylum Vertebrata - PISCES



Ascidiacea Tunicate - "colonial" L Variable colorings; can't be identified in the field; a colony is a jelly-like mass



Liparidae Snailfish L Variable colors and patterns; tail curves back toward head; up to 30 cm



Ammodytes hexapterus

Pacific Sand Lance L

Slender silver fish sometimes seen vertically

poking out of sand; up to 26 cm

Gobiesox sp. Clingfish L May be found clinging to undersides of rocks; up to 16 cm



Lumpenus sagitta Snake Prickleback L Body stays relatively straight; brown bars and spots; up to 50 cm



Gunnels & Blennies L Often found in the barest bit of water & under small boulders; variable coloring; narrow bodies; average ~15 cm; "crescents" & "saddles" can be subjective; characteristics of tail fin are diagnostic





Pleuronectidae Flatfish - Sole & Flounder L Flatfish sometimes seen in tide pools; color often blends with substrate

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