

A Field Guide To  
Kelp Forests of the Santa  
Barbara Channel

Revised Fifth Edition

 Santa Barbara Coastal  
Long Term Ecological Research Program



**A Field Guide to  
Kelp Forests of the Santa Barbara  
Channel**

**Santa Barbara Coastal  
Long Term Ecological Research Program**

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**Revised Fifth Edition**

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# Introduction

This guide contains information on the common marine seaweeds, invertebrates, and fish that inhabit the shallow rocky reefs of the Santa Barbara Channel. Its purpose is to aid students, staff and faculty researchers of the Santa Barbara Coastal Long Term Ecological Research program (SBC LTER) in field identification. It also provides those less familiar with the Santa Barbara Channel with a glimpse of the diverse marine life that inhabits the kelp forests in this region.

## How To Use This Book

Taxa in this book are generally arranged in phylogenetic order. Each organism is identified by its scientific name and common name, if available. The accompanying one to five letter code in BOLD is the species code that is used to identify the taxa in all SBC LTER databases. Brief information on key characteristics used in identification, including the size, and habitat of most common occurrence, is provided for each taxon. The occurrence and distribution of each organism is described as follows:

**Abundant** = frequent and numerous

**Common** = frequent and moderately abundant

**Uncommon** = infrequent and sparse

**Rare** = infrequent and extremely sparse

**Local** = present at only a few sites

**Widespread** = ubiquitous, present at most sites



**Santa Barbara Coastal**  
Long Term Ecological Research

**About the Santa Barbara Coastal Long Term  
Ecological Research Program**

The Santa Barbara Coastal Long Term Ecological Research Program (SBC LTER) is part of the National Science Foundation's (NSF) Long Term Ecological Research (LTER) Network. NSF established the LTER Network in 1980 to support research on long-term ecological phenomena. The LTER Network is a collaborative effort involving more than 1100 scientists and students investigating ecological processes over long temporal and broad spatial scales. The 26 sites in the LTER network represent diverse ecosystems and research emphases. The Network promotes synthesis and comparative research across sites and ecosystems and among other related national and international research programs. The research focus of the SBC LTER is on ecological systems at the land-ocean margin. Although there is increasing concern about the impacts of human activities on coastal watersheds and nearshore marine environments, there have been few long-term studies of linkages among oceanic, reef, beach, wetland, stream, and terrestrial habitats. SBC LTER is helping to fill this gap by studying the effects of oceanic and coastal watershed influences on kelp forest ecosystems in the Santa Barbara Channel. Additional information on the research activities of SBC LTER can be found at <http://sbc.lternet.edu>.

## Phylum Bacillariophyta



### Benthic Diatoms

#### DIAT

**Identification:** Common yellow-brown algae forms a fuzzy film on reef and sand. Delicate strands of these diatoms look like filamentous brown algae but break apart when touched. Common genera: *Vaucheria*

**Size:** Mats usually under 1 cm tall but can cover several meters of reef. Occasionally 2-4 cm tall strands form and can also cover large areas of reef.

**Occurrence:** Widespread and abundant

## Phylum Chlorophyta



### Ulvoid spp.

Sea Lettuce

#### UV

**Identification:** Very thin bright green algae with leafy transparent blades. Includes species in the genus *Ulva* and species formerly in the genus *Enteromorpha*.

**Size:** 5-20 cm

**Occurrence:** Locally common



### *Cladophora graminea*

#### CG

**Identification:** Grows grayish-green to dark green tufts. Sometimes appear striped. Very long coarse filaments with few orders of branching in upper portions. Primarily dichotomous or trichotomous in lower portions.

**Size:** 4-10 cm in height

**Occurrence:** Locally common

## Phylum Chlorophyta



### Filamentous green algae FG

**Identification:** Usually small, finely branched, green algae. Common genera include *Enteromorpha* and *Spongomorpha*.

**Size:** To 10 cm in height, 2-5 cm common locally

**Occurrence:** . Sometimes epiphytic, common on newly cleared reef in spring, otherwise locally uncommon.



### *Codium fragile*

Dead Man's Fingers

#### COF

**Identification:** Spongy, compact, tubular finger like branches extend from a broad base. Color dark green to blackish-green. Often covered in filamentous red algal epiphytes.

**Size:** To 40 cm in height, 10-20 cm common locally

**Occurrence:** Locally common on ridges at high relief sites.

## Phylum Phaeophyta



### Filamentous brown spp. FB

**Identification:** Tiny, finely branched, brown filaments which can form dense mats. Common genera include *Ectocarpus*, *Giffordia* and *Hincksia*.

**Size:** To 30 cm, 5-10 cm common locally

**Occurrence:** Widespread and abundant

## Phylum Phaeophyta



### *Scytosiphon lomentaria* SELO

**Identification:** Slender tubular branching clusters arise from a common holdfast. Larger plants inflated and irregularly constricted.

**Size:** 5-20 cm in height, branches thin, 1 cm or less in diameter

**Occurrence:** Locally uncommon, occasionally found on sheltered rocks and on oceanographic moorings.

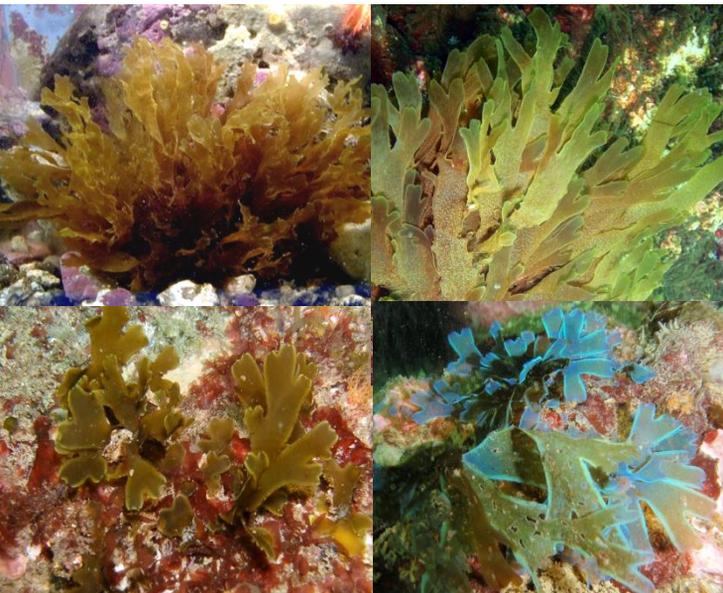


### *Colpomenia* spp. CP

**Identification:** Sac-like alga with broad basal attachment. Color from olive to medium brown.

**Size:** To 10 cm in diameter, 3-5 cm common locally

**Occurrence:** Common at island sites, uncommon on mainland reefs



### *Dictyota* spp. DP

**Identification:** Smooth thin blades with small indentations on the rounded tips. Olive to dark brown, often with iridescent margins. Dichotomous to pinnate branching arising from a branched stolon. No midrib.

**Size:** To 45 cm in height, 5-10 cm common locally; blades 1-2 cm wide

**Occurrence:** Widespread and common

# Phylum Phaeophyta



## *Dictyopteris undulata*

### DU

**Identification:** Distinct midrib running through branches. Thalli irregularly dichotomous with short terminal branches. Color yellowish-brown to olive with some iridescence.

**Size:** 8-12 cm in height, sometimes reaching 30 cm

**Occurrence:** Locally uncommon



## *Taonia lennebackerae*

### TALE

**Identification:** Thallus very thin and blade-like with no midrib. Light to medium brown in color. Blades often split or torn along the top margin at maturity.

**Size:** 10-30 cm in height

**Occurrence:** Locally common



## *Desmarestia ligulata*

Acid Weed

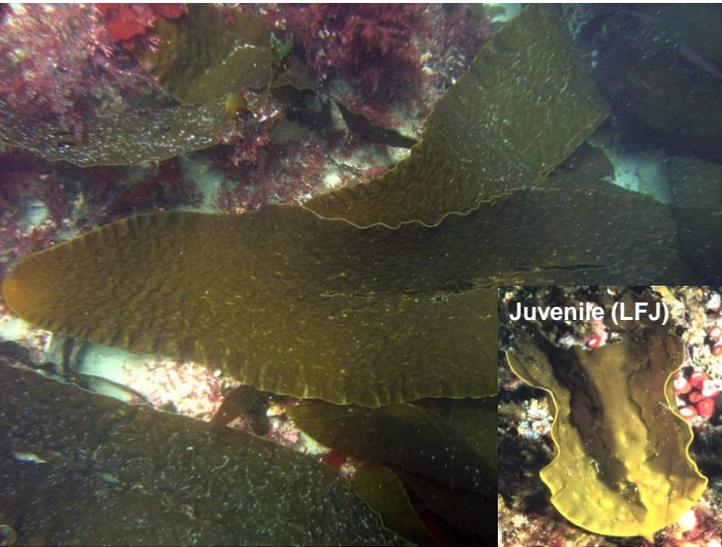
### DL

**Identification:** Thin annual thalli with a midrib that rises from a small discoid holdfast. Olive to dark brown with fine branching in young specimens becoming broader with less branching in mature individuals. Blades lie low along substrate, can blanket the bottom at high densities. Fast growing.

**Size:** To 3 m long locally

**Occurrence:** Widespread and abundant

# Phylum Phaeophyta



## *Laminaria farlowii*

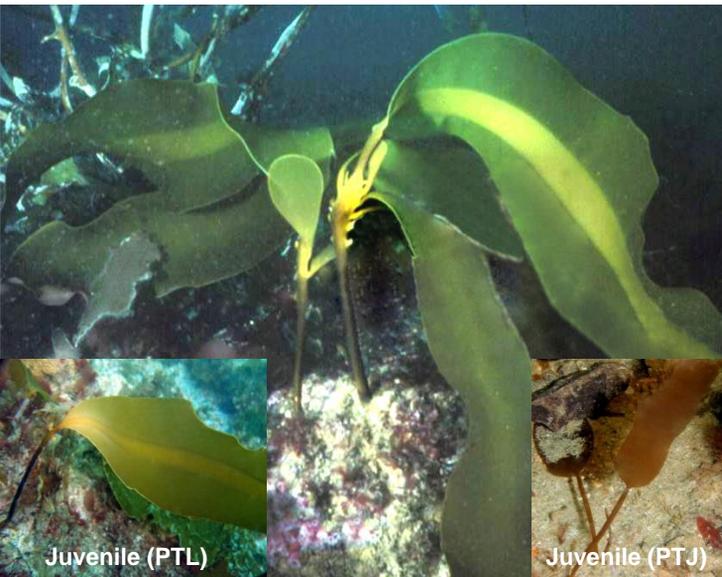
Oar Weed

**LAFA / LFJ / LH**

**Identification:** Single long, wide blade with deep depressions in longitudinal rows. Dark brown color with short stipe and strong compact branching haptera.

**Size:** To 4 m in blade length, with up to a 7 cm stipe length. Juveniles (**LFJ**) < 15 cm blade width

**Occurrence:** Locally common



## *Pterygophora californica*

Palm Kelp

**PTCA / PTL / PTJ / PH**

**Identification:** Long woody stipe flattens at apex to support numerous lateral sporophylls and a terminal blade with a midrib. Medium to dark brown. Juvenile blades similar to *L. farlowii* but with thickening or midrib.

**Size:** Stipe to 1 m, blades 1-2 m common locally. Juveniles counted in two size classes: **PTJ** < 20 cm stipe length, **PTL** > 20 cm stipe length and < 0.7 cm stipe diameter

**Occurrence:** Widespread and abundant



## *Eisenia arborea*

Southern Sea Palm

**EA / EAJ / EAH**

**Identification:** Erect tree-like stipe that terminates into two branches bearing leafy blades with toothed margins. Juveniles (**EAJ**) begin as a single blade with wavy lobes and spines around the edges (lower left picture).

**Size:** 1-2 m in height

**Occurrence:** Abundant at island sites, rare on mainland reefs

# Phylum Phaeophyta



## *Macrocystis pyrifera*

Giant Kelp

**MAPY / MPJ**

**Identification:** The largest of kelps possessing many round stipes each bearing numerous blades attached by gas filled floats. Large conical holdfast of root like haptera. Juvenile pictured in corner.

**Size:** To 30 m in length. Juveniles (**MP J**) counted in three size classes: 0-33cm, 34-66cm, 67-99cm

**Occurrence:** Widespread and abundant



## *Macrocystis pyrifera* holdfast

Giant Kelp holdfast

**MH / DMH**

**Identification:** The many long and branched haptera that anchor giant kelp to the reef. Dead holdfast material still attached to the bottom is denoted with the code **DMH**.

**Size:** To 3 m in diameter

**Occurrence:** Widespread and common on rocky substrate



## Unidentified Phaeophyceae

Juvenile laminariales

**BLD**

**Identification:** Newly recruited algae in the order laminariales that is too small to be identified to species.

**Size:** 1-3 cm

**Occurrence:** Widespread and common

# Phylum Phaeophyta



## *Egregia menziesii*

Feather Boa Kelp

**EGME / EGJ / EH**

**Identification:** Canopy forming kelp with a thick, flat stipe with numerous small ovate blades and floats along its entire length. Juvenile (**EGJ**) shown in left picture.

**Size:** To 15 m in height, blades to 8 cm in length. Juveniles (**EGJ**) < 1m thallus height

**Occurrence:** Locally common on shallow reefs



## *Stephanocystis osmundacea*

Bladder Chain Kelp

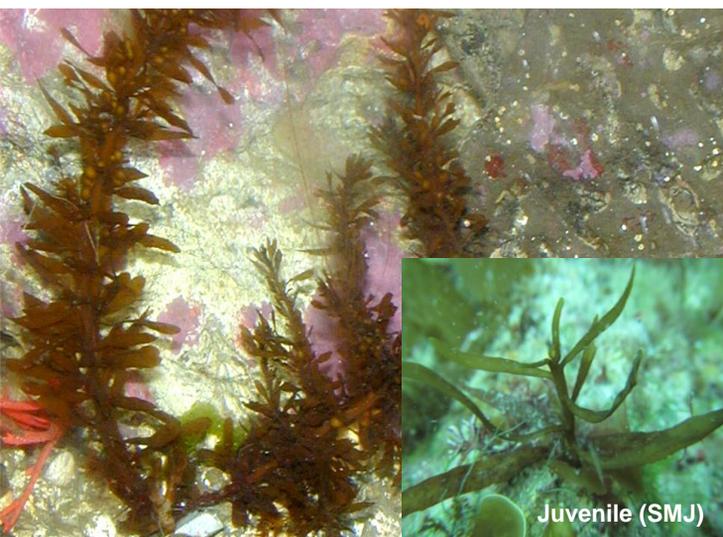
Formerly *Cystoseira osmundacea*

**CYOS / CYJ**

**Identification:** Dark brown to light tan bipinnate radial branches flattened in lower portion. Cylindrical holdfast. Often covered in epiphytes. Numerous reproductive fronds rise to the canopy annually, buoyed by many small gas filled bladders.

**Size:** Reproductive fronds to 8 m, thallus to 1 m in height. Juveniles (**CYJ**) < 5 cm diameter

**Occurrence:** Widespread and common



## *Sargassum muticum*

Wire-weed

**SAMU / SMJ**

**Identification:** Large fucoid alga with small leaf like blades and toothed margins that occur singly along the thallus. Medium to dark brown in color. Small cylindrical vesicles borne in clusters. Juvenile **SMJ**  $\leq$  10 cm height, Adult **SAMU** > 10 cm height

**Size:** To 2 m in height, blades to 10 cm long

**Occurrence:** Locally common

## Phylum Phaeophyta



### *Sargassum horneri*

Devil-weed

**SAHO / SHJ**

**Identification:** Furoid alga with pointed leaf like blades and teardrop shaped vesicles. Juveniles ( $\leq 10$  cm height) low lying fern-like blades that can form dense mats.

**Size:** Juvenile **SHJ**  $\leq 10$  cm height, Adult **SAHO**  $> 10$  cm to 4m tall

**Occurrence:** Widespread and common to Catalina Island.

## Phylum Rhodophyta



### *Anisocladella pacifica*

**ANPA**

**Identification:** Blades erect, deep rose pink, forming entangled masses frequently buried in fine sand.

**Size:** 1.5-3cm tall, Blades 2.5-5mm broad

**Occurrence:** Locally abundant in sandy places, low intertidal.



### *Fauchea* spp.

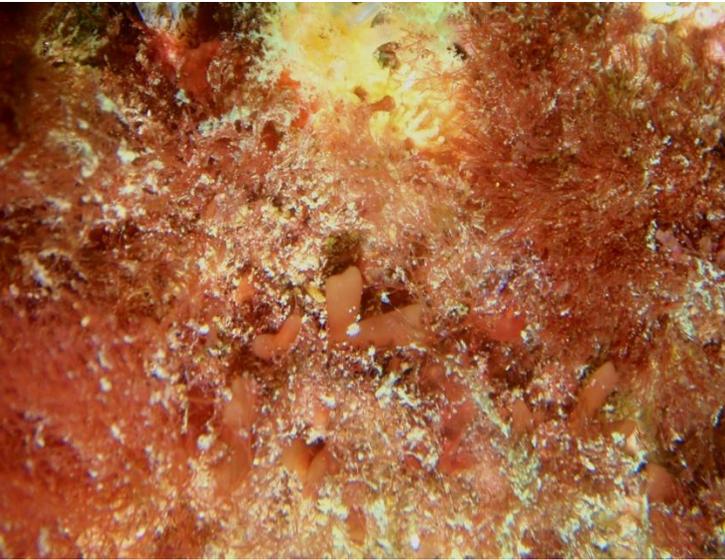
**FASP**

**Identification:** Thalli erect or repent, arising from small, discoid bases. Blades usually sessile, irregularly flabellate divided. Brownish red to deep red, or deep red with bluish cast.

**Size:** Thalli 3-12cm tall.

**Occurrence:** Widespread but uncommon

# Phylum Rhodophyta



## Red algal turf species RAT

**Identification:** Low growing turf consisting of filamentous and juvenile red algae often mixed with invertebrates. Common genera include: *Polysiphonia*, *Pterosiphonia*, and *Tiffaniella* as well as juveniles of many species that are difficult to tell apart.

**Size:** 1-3 cm in height

**Occurrence:** Widespread and common



## *Scinaia confusa* SCCA

**Identification:** Rose pink densely branched thallus. Tubular gel filled branches divided dichotomously with pointed tips.

**Size:** 3-15 cm in height

**Occurrence:** Common at Carpinteria and Naples Reefs, uncommon elsewhere



## *Gelidium robustum*

Agarweed

## GR

**Identification:** Mostly compressed ovate dark red branches with unbranched basal axes. Lateral branchlets occasionally produce unbranched branchlets from flattened surfaces. Often covered by white encrusting bryozoans.

**Size:** To 40 cm in height, branches 2-5 mm wide

**Occurrence:** Locally abundant on ridges of high relief reefs

# Phylum Rhodophyta



## Encrusting red spp.

### ER

**Identification:** General category used for encrusting leathery species of red algae that form a thin fleshy layer over hard substrates. Common genera include: *Mastocarpus* and *Hildenbrandia*

**Size:** Variable, patches 3-30 cm in diameter

**Occurrence:** Locally common in urchin barren areas, uncommon elsewhere



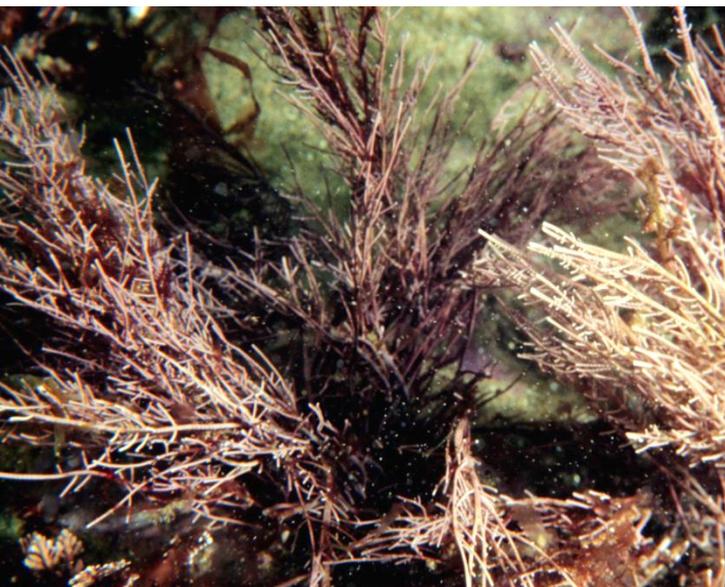
## Encrusting coralline spp.

### EC

**Identification:** Calcified crusts of pinkish algae that cover the surface of hard substrates. Most common species in the genera *Pseudolithophyllum*. Often intermixed with other erect species of coralline algae.

**Size:** Variable

**Occurrence:** Widespread and abundant



## *Lithothrix* spp.

Stone Hair

### LI

**Identification:** Thinly branched calcified alga. Dull purple to pink in color. Primary branching dichotomous, but irregular lateral branches gives a stringy look. Branched in many planes

**Size:** To 13 cm in height

**Occurrence:** Rare

# Phylum Rhodophyta



## *Corallina chilensis*

Formerly *Corallina offinalis* var. *chilensis*

Pink Feather Coralline

**CO**

**Identification:** Pink to purple calcified fronds with white tips. Bipinnate to tripinnate branches become shorter near apex and tend to lie in one plane.

**Size:** To 15 cm in height, 3-10 cm common locally

**Occurrence:** Common and widespread



## *Bossiella orbigniana*

**BO**

**Identification:** Pink to purple calcified alga with numerous delicate branches. Branches articulated and nearly always dichotomous with thicker center. Wings curve convexly down midrib. Raised conceptacles in center of segments.

**Size:** To 15 cm in height, 5-10 cm common locally

**Occurrence:** Common and widespread



## *Calliarthron cheilosporioides*

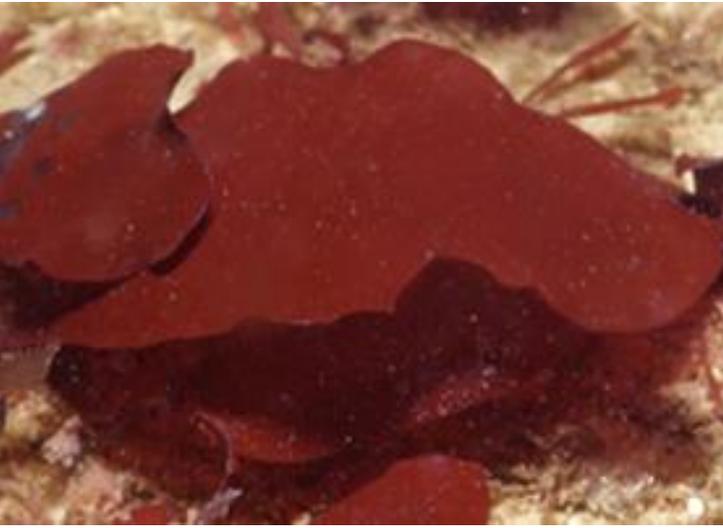
**CAL**

**Identification:** Articulate pink coralline alga with coarse pinnate branching. Branching sometimes dichotomous near base. Wings angle upward toward long axis of branch. Raised conceptacles along the edge of segments

**Size:** To 30 cm in height, segments to 7 mm wide

**Occurrence:** Common at island sites, uncommon but widespread elsewhere

# Phylum Rhodophyta



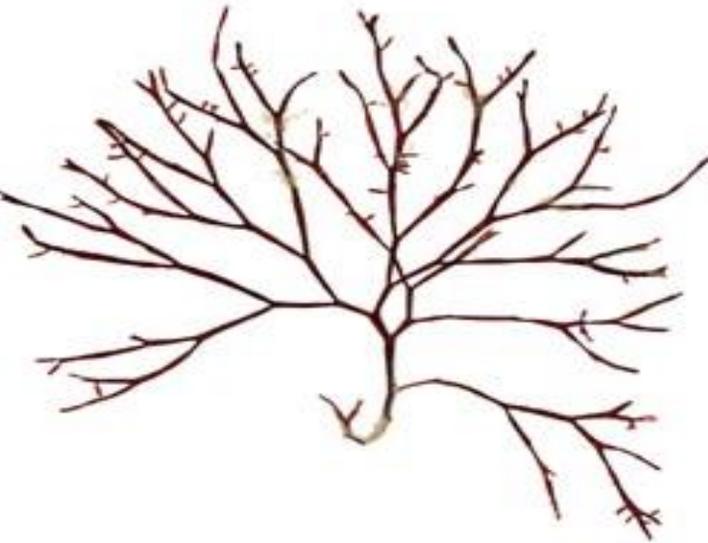
## Bladey red spp.

### BR

**Identification:** General category used for species with large ovate blades that are difficult to distinguish. Common Genera: *Halymenia* and *Schizymenia*.

**Size:** To 40 cm

**Occurrence:** Common and widespread



## *Prionitis* spp.

### PRSP

**Identification:** Dichotomous or irregularly branched thalli. Deep red flattened blades lie in one plane. Blades taper at tips and branching junctions. Small proliferations along the side of the blades common. Local species *augusta* and *linearis*.

**Size:** 10-25 cm in height

**Occurrence:** Rare



## *Prionitis lanceolata*

### PL

**Identification:** 1-2 stipes originating from a discoid holdfast. Irregular branching blades pinnate, tapered to a sharp tip, and frequently longer toward base of plant. Dark red turning to yellow in color.

**Size:** 20-30 cm in height, branches 1-3 cm wide

**Occurrence:** Locally uncommon

## Phylum Rhodophyta



### *Callophyllis flabellulata* CF

**Identification:** Branched, firm cartilaginous thallus with apices of branches uneven and finely dissected. Blades without midrib or veins.

**Size:** 4-10 cm in height

**Occurrence:** Widespread and common



### *Sarcodiotheca furcata* SAFU

**Identification:** Drab red color with irregular branching that is narrow below, arising from rounded stipes and a small discoid holdfast. Sharply terminated blades.

**Size:** To 25 cm in height, blades 10-20 mm wide and to 1 mm thick

**Occurrence:** Widespread but uncommon



### *Gracilaria* spp. GS

**Identification:** Numerous thin cylindrical branches arising from a discoid base. Radial branching in irregular directions. Includes all local *Gracilaria* spp. as well as *Sarcodiotheca gaudichaudii*.

**Size:** 6-20 cm, branches 2-5 mm broad

**Occurrence:** Widespread and common especially on reefs with sand channels and sand flats

## Phylum Rhodophyta



### *Gymnogongrus* complex GYSP

**Identification:** Includes *G. chiton* (formerly *G. Platyphyllus*), *Ahnfeltiopsis leptophyllus*, and *Ahnfeltiopsis linearis* (formerly *G. leptophyllus* and *G. linearis*). Thalli thick bushy and clumped. Similar to *Prionitis* but with large circular reproductive structures throughout that cover almost the entire width of the blade. Color dark red.

**Size:** To 15 cm in height

**Occurrence:** Locally uncommon



### *Stenogramma interrupta* STIN

**Identification:** Dichotomously branched. Resembles *Rhodymenia*, but has a discoid holdfast and an interrupted midrib when reproductive. May have dark blotches on blade. Color deep red

**Size:** 6-30 cm

**Occurrence:** Locally uncommon



### *Chondracanthus* spp.

Formerly *Gigartina* spp., *Mazzaella californica*

### CC

**Identification:** Broad, deep red blades sometimes iridescent, rarely divided but taper to a narrow holdfast. Larger blades are covered in bulbous papillae growths. Local species include *C. corymbiferus* and *C. exasperatus*.

**Size:** To 1 m in length, holdfasts to 1-5 cm wide

**Occurrence:** Widespread and abundant

# Phylum Rhodophyta



## *Chondracanthus spinosa*

Formerly *Gigartina spinosa*

### CZ

**Identification:** Broad, deep red blades with main branches commonly narrow and repeatedly branched. Blades noticeably narrower than *C. corymbiferus* with larger papillae and numerous spine-like to blade-like branchlets.

**Size:** 20-30 cm in height, 4-6 cm wide

**Occurrence:** Locally common at shallow depths, rare elsewhere



## *Halosaccion glandiforme*

Sea Sacs

### HAGL

**Identification:** Several simple sacs which originate from a single holdfast. Pink to dark purple in color. Bladder filled with seawater.

**Size:** Sac to 25 cm in length, 3-5 cm common locally

**Occurrence:** Widespread but rare. Occasionally found at Naples



## *Rhodymenia* spp.

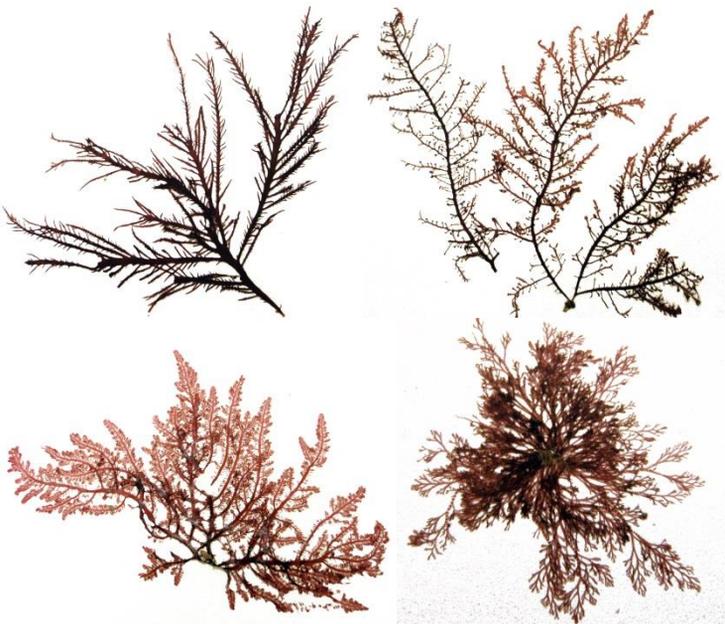
### R

**Identification:** Includes *R. californica*, *R. pacifica*, *R. rhizoides*, etc. Thalli bushy and clumped. One to many erect or spreading blades dichotomously or flabellately branched on short stipes. Color dark red to a bleached pink.

**Size:** To 15 cm in height

**Occurrence:** Widespread and abundant

# Phylum Rhodophyta



## Feathery Red Algae

### FTHR

**Identification:** General category for red feather-like branching algae that are difficult to distinguish to species underwater. Common genera include *Microcladia*, *Ptilota*, *Neoptilota*, *Plocamium*, *Rhodoptilum*

**Size:** 10-50 cm in height

**Occurrence:** Widespread but uncommon



## *Phycodryx setchellii*

### PHSE

**Identification:** Dark pink to brownish-red. Leaf-like dichotomous divisions from base with rounded apices, conspicuous percurrent midribs and lateral veins.

**Size:** To 20 cm in height

**Occurrence:** Widespread but uncommon



## *Polyneura latissima*

### POLA

**Identification:** Thin, pink to red crinkly blades with a net-like system of macroscopic veins. Blade margins entire when young, becoming uneven with age..

**Size:** 12-15 cm in height

**Occurrence:** Widespread and common

# Phylum Rhodophyta



## *Nienburgia andersoniana*

NA

**Identification:** Alternating irregular branches with spines on margins usually in one plane. Upper portions have inconspicuous midrib with lateral veins.

**Size:** Main axes 1-2 cm broad, 5-20 cm in height

**Occurrence:** Widespread and common



## *Acrosorium ciliolatum*

Formerly *Acrosorium uncinatum*

AU

**Identification:** Thin, ribbon-like, irregularly branched blades. Blades irregularly hooked at ends. Frequently epiphytic. Color deep rose red. Commonly found attached to *Diopatra ornata* tubes.

**Size:** 3-10 cm diameter clumps

**Occurrence:** Locally common



## *Cryptopleura* spp.

CRYP

**Identification:** Thalli differentiated into erect, ribbon-like bases. Blades characterized by a collection of macroscopic veins dividing and gradually spreading upward, becoming narrow and eventually microscopic.

**Size:** 10-30 cm in height

**Occurrence:** Locally uncommon

# Phylum Rhodophyta



## *Cryptopleura ruprechtiana*

Formerly *Botryoglossum farlowianum*

Grape Tongue

**BF**

**Identification:** Large deep red slightly iridescent blades with visible veins and densely ruffled blade margins.

**Size:** Erect axes 10-50 cm in height, blades 2-3 cm wide

**Occurrence:** Widespread and common



## Filamentous red spp.

**FR**

**Identification:** Thin, finely branched polysiphonous red algae. Frequently forms tufts or clumps. Common genera include *Ceramium* and *Polysiphonia*

**Size:** To 20 cm in height

**Occurrence:** Widespread and common



## *Osmundea spectabilis*

Formerly *Laurencia spectabilis*

**LX**

**Identification:** Dense cluster of axes on a conical base. Blades are thick, pinnate, flattened, with round tips. Texture tough, elastic. Color purplish red.

**Size:** To 30 cm

**Occurrence:** Locally uncommon

## Phylum Rhodophyta



*Laurencia* spp.

LS

**Identification:** Erect bushy thalli with short stubby pinnate or radial branches ending in a blunt tip with terminal cystocarps. Color ranging from brown to rich red. Often encrusted with many epiphytes and silt.

**Size:** 3-10 cm in height

**Occurrence:** Locally common

## Phylum Magnoliophyta



*Phyllospadix torreyi*

Surfgrass

PHTO

**Identification:** Bright green narrow wiry leaves with flowering stems arising from a densely mingled rhizomous mat. Separate sexes. Flowers arranged in spadices.

**Size:** Leaves 2-4 mm wide, 1-2 m long.

**Occurrence:** Widespread and common at shallow depths



*Zostera marina*

Eelgrass

ZOMA

**Identification:** Dull, light green, strap-like leaves with long flowering stems. Monecious. Flowers inconspicuous in spadices.

**Size:** Leaves 6-12 mm wide and 30-150 cm long, flowering stems 1-3 m long

**Occurrence:** Locally abundant in sand at protected sites

# Phylum Porifera



## *Leucilla nuttingi*

Urn Sponge

**LNUT**

**Identification:** Urn-shaped, cream white with a single osculum at the distal end. Usually found in groups of 5-10 individuals.

**Size:** To 4 cm tall

**Occurrence:** Widespread and common



## *Spheciospongia confoederata*

Moon Sponge

**SC**

**Identification:** Massive, smooth gray sponge, leathery in texture, with numerous crater-like oscula on outer ridge.

**Size:** To 1 m in diameter, to 30 cm thick

**Occurrence:** Locally common



## *Tethya californiana*

Formerly *Tethya aurantia*

Orange Puffball Sponge

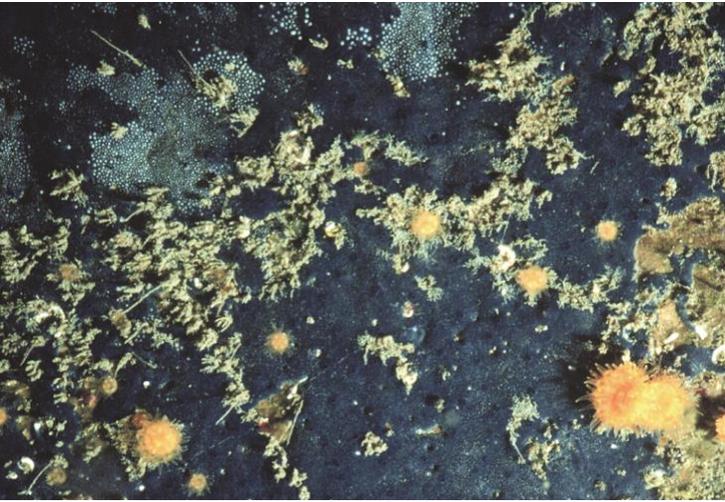
**TEAU**

**Identification:** Porous, globose sponge with very rough outer surface. Color ranges from orange to yellow. Cylindrical or ball shaped.

**Size:** To 20 cm in diameter, 5-10 cm locally

**Occurrence:** Common and widespread

## Phylum Porifera



### *Acanthancora cyanocrypta*

Formerly *Hymenamphistra cyanocrypta*

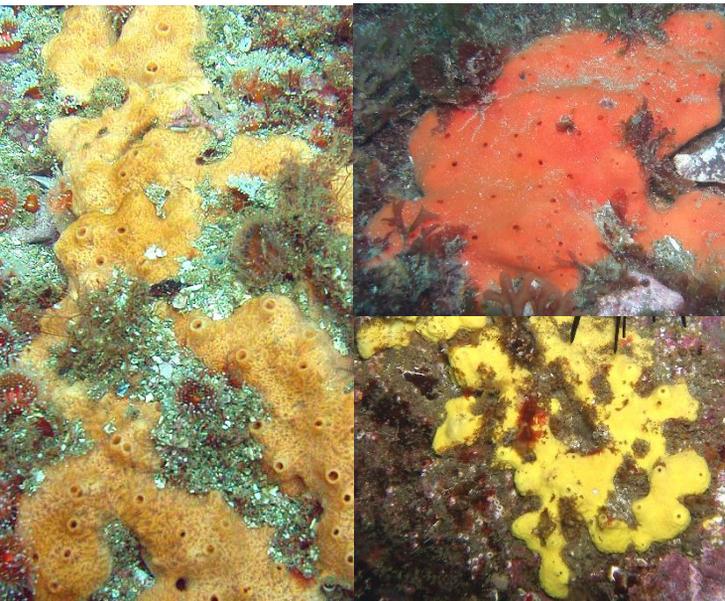
Cobalt Sponge

**HC**

**Identification:** Thin encrusting sponge. Cobalt blue in color.

**Size:** To 1 m diameter

**Occurrence:** Uncommon



### Encrusting sponge spp.

**ES**

**Identification:** Encrusting growth form. Numerous species that vary widely in color. Species distinguished by spicules. Genera include: *Halichondria*, *Cliona*, *Leucetta*, *Acarus*, *Haliclona*, *Aplysina*, and *Plocamia*.

**Size:** Commonly cover 30 cm in diameter or more and can be up to 5 cm thick, usually thin 1-3 cm

**Occurrence:** Widespread and abundant

## Phylum Cnidaria



### *Aglaophenia* spp.

Ostrich-Plume Hydroid

**AS**

**Identification:** Large feather-like brown plumes consisting of a central stalk with numerous alternating pinnate branches. Local species include *A. latirostris*, *A. struthionides*, *A. epizoica*, and *A. inconspicua*.

**Size:** To 12 cm in height

**Occurrence:** Widespread and abundant

# Phylum Cnidaria



## *Abietinaria* spp.

Coarse Sea Fir Hydroid

**AB**

**Identification:** Large, flask-shaped polyp with pinnate alternate branching. There are over seven known species found locally.

**Size:** To 5 cm in height

**Occurrence:** Widespread and common



## *Obelia* spp.

Wine-Glass Hydroid

**OBSP**

**Identification:** Long, branching colonies that have polyps with clear sheaths. Often covered in silt, resulting in a brownish appearance. There are over four known species found locally, some of which are believed to be introduced. Species distinguished by branching pattern. Common species are often dichotomously branched.

**Size:** To 10 cm in height

**Occurrence:** Uncommon



## *Plumularia* spp.

Plume Hydroid

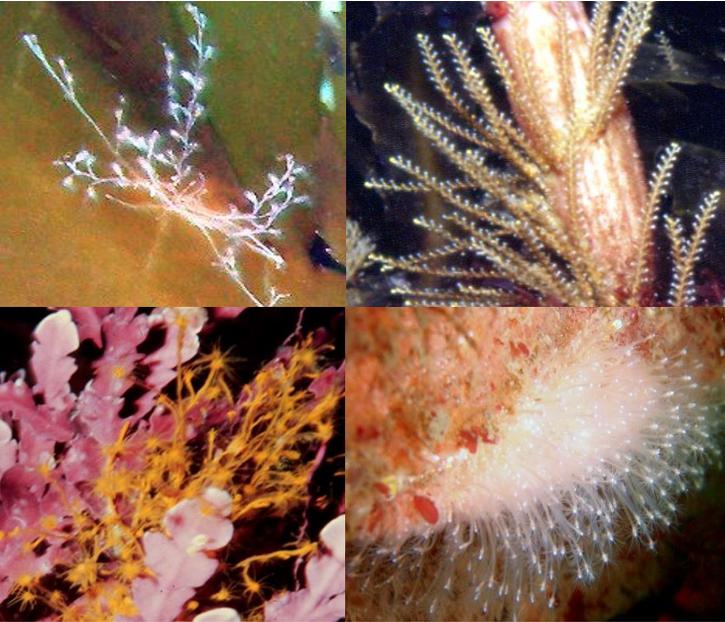
**PLUM**

**Identification:** Colony of upright feather-shaped plumes. There are over five known species found locally.

**Size:** To 2 cm in height

**Occurrence:** Widespread and abundant

# Phylum Cnidaria



## Unidentified Hydroid spp. UIH

**Identification:** Colonial, plant-like animals that can either have a branching sessile structure attached to the substrate or it can have erect fern-like 'fronds' with microscopic polyps arranged along the individual branches. Often epiphytic. Includes *Hydractinia milleri*, *Garveia annulata*, *Tubularia crocea*, *Clava* sp., and *Halecium* sp.

**Size:** To 15 cm in height, locally 1-5cm

**Occurrence:** Widespread and Abundant



## *Pachycerianthus fimbriatus*

Tube Dwelling Anemone

### PAFI

**Identification:** Long, slender outer tentacles and shorter inner tentacles. Soft body protected by parchment-like tube. Tentacles may vary in color from tan to orange to purple.

**Size:** Tube height to 30 cm, diameter to 4 cm

**Occurrence:** Widespread and common



## *Metridium senile*

Short Plumose Anemone

### MISE

**Identification:** Column and tentacles range from white to brown to orange. Tentacular crown is not lobed. Often completely carpets the bottom in shallow, rocky areas exposed to high current.

**Size:** Column diameter to 8 cm, height to 10 cm

**Occurrence:** Locally common

# Phylum Cnidaria



## *Urticina piscivora*

Fish Eating Anemone

### URPI

**Identification:** Deep, red column with tentacles that are usually white, but occasionally red.

**Size:** Crown diameter to 20 cm, locally 2-5 cm

**Occurrence:** Uncommon at most sites, occasionally seen at Bulito reef.



## *Urticina lofotensis*

White-Spotted Rose Anemone

### URLO

**Identification:** Column is very distinctive red, with white spots. Tentacles are scarlet to crimson.

**Size:** Crown diameter to 10 cm

**Occurrence:** Widespread and common



## *Anthopleura sola*

Aggregating Anemone

### ANSP

**Identification:** Longitudinal rows of adhesive tubercles on column, and the tentacles are short and abundant. Striped oral disc. Occur in aggregations or as solitary individuals.

**Size:** Crown diameter to 10 cm

**Occurrence:** Widespread and common

# Phylum Cnidaria



## *Anthopleura artemisia*

Moonglow Anemone

### ANAR

**Identification:** Many different color variations, white bands on arms, central disk often buried in sand. Tubercles on column.

**Size:** Crown diameter 2-4 cm locally

**Occurrence:** Widespread and abundant



## *Anthopleura* spp.

### ANSP

**Identification:** Found in aggregations or as solitary individuals. Covered with abundant adhesive tentacles that are short, conical, and either pointed or blunt. *A. xanthogrammica* featured here. All *Anthopleura* spp. have tubercles on the column.

**Size:** Crown diameter up to 25 cm

**Occurrence:** Locally common



## *Phyllactis* spp.

Sand Anemone

### PHSP

**Identification:** Short, slender, clear tapering tentacles that have black stripes. Oral disk level with sand surface and covered with sand particles. Retracts quickly when touched and has smooth column.

**Size:** Crown diameter 1-3 cm locally

**Occurrence:** Widespread and abundant

# Phylum Cnidaria



## *Corynactis californica*

Club-Tipped Anemone

**CY**

**Identification:** Small colonial anemone with bulbous-tipped tentacles. Color of column varies from orange, red, purple, pink, to almost white.

**Size:** Crown diameter to 2.5 cm

**Occurrence:** Widespread and abundant



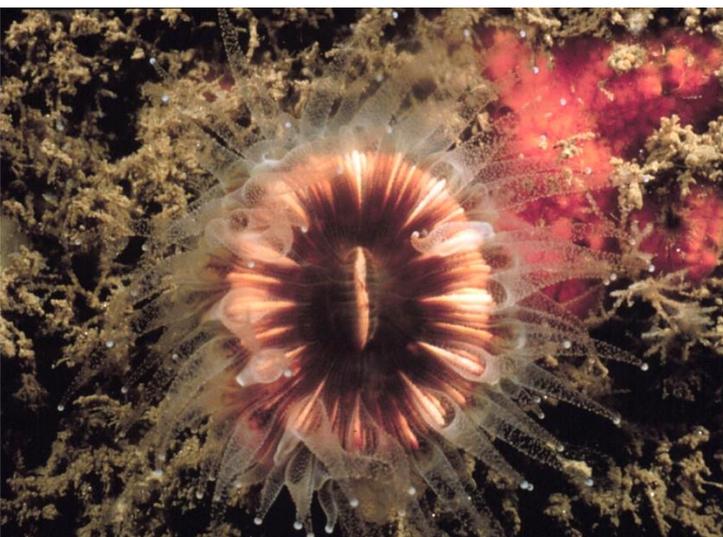
## Unidentified Anemone spp.

**UNAN**

**Identification:** Color is highly variable among the remaining anemone species. Some are aggregating, while others are solitary. Includes *Epiactus* spp., *Epizoanthus* spp., and *Halcampa* spp.

**Size:** Crown diameter 1-4 cm

**Occurrence:** Widespread and common



## *Paracyathus stearnsi*

Brown Cup Coral

**PAST**

**Identification:** Large, brown, solitary hard corals with long, semi-transparent tentacles and oval shaped disc.

**Size:** Crown diameter to 3 cm

**Occurrence:** Uncommon

# Phylum Cnidaria



## *Astrangia lajollaensis*

Aggregating Cup Coral

**AL**

**Identification:** Small solitary hard corals forming large colonies. The stony cups are brownish-orange and tentacles are yellowish-orange.

**Size:** Crown diameter to 1.5 cm

**Occurrence:** Widespread and common



## *Balanophyllia elegans*

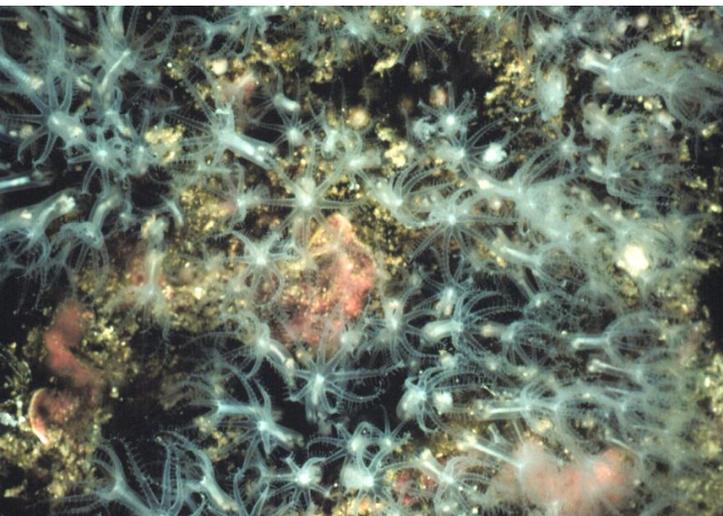
Orange Cup Coral

**BAEL**

**Identification:** Solitary orange cup-shaped hard coral with orange tentacles. Each tentacle has wart-like nodules.

**Size:** Crown diameter to 2.5 cm

**Habitat:** Widespread and common



## *Alcyonium rudyi*

Octocoral

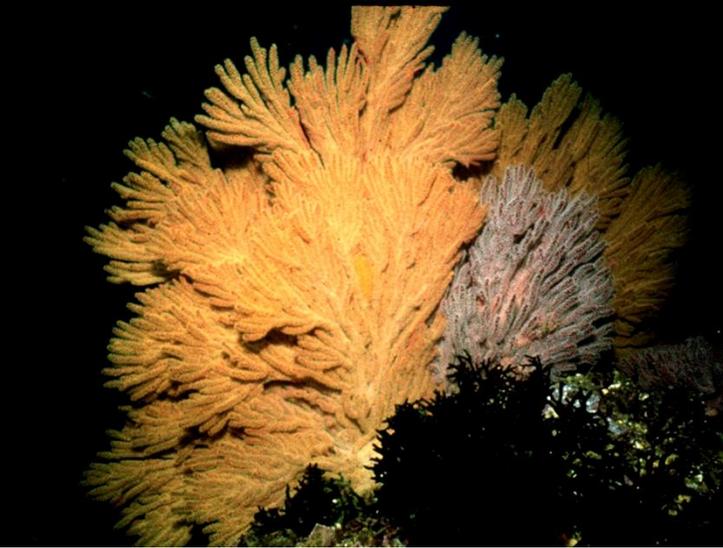
**ARUD**

**Identification:** A colonial soft coral that has cream white to pink translucent polyps each with eight branched tentacles.

**Size:** Polyp height to 2.5 cm, 5-30 cm colony diameter

**Occurrence:** Uncommon

# Phylum Cnidaria



## *Muricea californica*

California Golden Gorgonian

### MUCA

**Identification:** Thick brown branches. Yellow polyps distinguish it from brown gorgonian (the small gorgonian on right side of photo).

**Size:** To about 1 meter in height

**Occurrence:** Locally abundant



## *Muricea fruticosa*

Brown Gorgonian

### MUFR

**Identification:** Sea fan with thick brown to brownish-red branches and white polyps, usually in one plane.

**Size:** To about 1 meter in height

**Occurrence:** Locally common



## *Lophogorgia chilensis*

Red Gorgonian

### LOCH

**Identification:** Sea fan with red branches and white polyps. Branches are not in a single plane.

**Size:** To about 1 meter in height

**Occurrence:** Locally common

# Phylum Annelida



## *Cirriformia luxuriosa*

### CILU

**Identification:** Polychaete with long slender tentacles of reddish branchiae and orange-red tentacular filaments (dense cluster on dorsum). Few black spines from sides of body from middle to posterior end.

**Size:** To 15 cm

**Occurrence:** Uncommon



## *Dodecaceria fewkesi*

Colonial Tube Worm

### DOFE

**Identification:** Calcareous tubes clustered into colonies with exposed dark brown to black tentacles.

**Size:** Tube diameter to 5 mm, colony diameter 5-50 cm

**Occurrence:** Locally common



## *Phragmatopoma californica*

Colonial Sand Tube Worm

### PA

**Identification:** Extensive, reef building colonies. Tubes constructed of cemented sand. Short lavender tentacles. Common in *Macrocystis* holdfasts.

**Size:** Tube diameter to 1 cm, colony diameter to 2 m

**Occurrence:** Widespread and abundant

# Phylum Annelida



## *Diopatra ornata*

Ornate Tube Worm

### DIOR

**Identification:** Tubes usually completely covered with attached pieces of shell, algae, or other debris. Common in sand or cobble.

**Size:** To 7 cm tall

**Occurrence:** Widespread and abundant



## *Salmacina tribranchiata*

Fragile Tube Worm

### ST

**Identification:** Small whitish tubes that form tangled complex masses. Short red-orange tentacles.

**Size:** Tube diameter < 2 mm, colony diameter to 20 cm

**Occurrence:** Uncommon



## *Pista elongata*

### PIEL

**Identification:** Solitary tubeworms terminating in a globular shaped, reticulated network of fibers.

**Size:** To 8 cm tall

**Occurrence:** Uncommon

## Phylum Annelida



### *Eudistylia polymorpha*

Feather Duster Worm

#### **EUPO**

**Identification:** A solitary tube worm identified by its feathery plume of branched gills. Varies in color from tan to orange to purple. Will retract gills into tube rapidly if disturbed.

**Size:** Plume diameter to 5 cm

**Occurrence:** Locally abundant



### Sabellid spp.

#### **SABW**

**Identification:** Worms in the family Sabellidae. All species will retract into tubes when disturbed. Local species include *Myxicola infundibulum*, *Sabella crassicornis*, *Pseudopotamilla ocellata*, and *Bispira turneri*.

**Size:** Plume diameter to 3 cm

**Occurrence:** Widespread and common

## Phylum Phoronida



### Phoronid spp.

Horseshoe worm

#### **PHOR**

**Identification:** Tubeworm with horseshoe-shaped ring of tentacles projecting above sediment. Colors of tentacles may be pink, green, orange or peach-colored. Tubes that may be buried in sand or intertwined forming compact masses attached to hard substrates.

**Size:** To 2 cm in body length and 40 mm projecting above sand

**Occurrence:** Widespread and Uncommon

# Phylum Mollusca



## *Haliotis rufescens*

Red Abalone

**HARU**

**Identification:** Shell usually brick-red, occasionally with bands of green or white. Three to four of the holes are open. Smooth epipodium, usually black but can have a barred black and cream pattern. Tentacles are black.

**Size:** To 30 cm

**Occurrence:** Uncommon



## *Haliotis assimilis*

Formerly *Haliotis kamtschatkana*

Threaded Abalone

**HAKA**

**Identification:** Flat oblong shell with four to six open holes that are slightly raised. Bumpy epipodium, mottled pale yellow to dark brown with a frilly edge. Tentacles are yellowish brown.

**Size:** To 18 cm

**Occurrence:** Rare



## *Haliotis corrugata*

Pink Abalone

**HACO**

**Identification:** Shell is rounded with a scalloped edge and is usually heavily fouled. Two to four raised shell holes remain open. Mottled black and white epipodium with a lacy edge and black tentacles.

**Size:** To 25 cm

**Occurrence:** Uncommon

# Phylum Mollusca



## *Megathura crenulata*

Giant Keyhole Limpet

**MECR**

**Identification:** Mantle color varies from black to mottled gray and usually covers the entire shell. Shell has a large opening in the center.

**Size:** To 25 cm

**Occurrence:** Widespread and common



## *Serpulorbis squamigerus*

Scaled Worm Snail

**SE**

**Identification:** Shell is a partially coiled tube attached to substrates. No operculum. Usually occurs in aggregations.

**Size:** Up to 12 cm long and 1.5 cm in diameter

**Occurrence:** Uncommon



## *Cypraea spadicea*

Chestnut Cowry

**CYSP**

**Identification:** Smooth shell with a brown dorsal surface and white margins on the ventral side. Foot and mantle are orange-brown with dark spots.

**Size:** To 8 cm

**Occurrence:** Widespread and common

# Phylum Mollusca



## *Lithopoma* complex

Wavy Turban Snail

**LIGL/LIGS**

**Identification:** Heavily sculptured or low, spiral shell that is frequently covered with encrusting coralline algae. Local species include *Lithopoma gibberosum* and *Megastrea undosa* (formerly *Lithopoma undosum*).

**Size:** LIGL if > 9 cm, LIGS if < 9 cm

**Occurrence:** Locally abundant



## Turban Snails

Formerly *Tegula* spp.

**TESP**

**Identification:** Shell is typically a smooth, rounded-conical shape. Shell color varies and is often covered by encrusting organisms. Foot with dark brown or black sides, white or cream color below. Includes species in the genera *Chlorostoma*, *Agathistoma*, and *Promartynia*.

**Size:** To 3 cm in diameter

**Occurrence:** Locally common



## *Pteropurpura trialata*

Three-Winged Murex

**PTTR**

**Identification:** Three distinctive wing-like processes protrude from the central shell, one on top and one to each side. Brown bands common on shell.

**Size:** 3-7 cm locally

**Occurrence:** Uncommon

# Phylum Mollusca



## *Kelletia kelletia*

Kellet's Whelk

**KEKE**

**Identification:** White or gray, robust shell with heavy sculpturing crossed by thin spiral lines. Skin is yellow, mottled with black and white markings.

**Size:** To 18 cm

**Occurrence:** Locally abundant



## Small whelk spp.

**SKE**

**Identification:** Category for small whelk shaped snails. May include juvenile *Kelletii* or other genera such as *Pteropurpura*.

**Size:** To 2.5 cm

**Habitat:** Locally common



## *Mitra idae*

Ida's Miter

**MIID**

**Identification:** Dark brown, smooth shell covered with a black periostracum. The foot is white.

**Size:** To 8 cm in length

**Occurrence:** Uncommon

# Phylum Mollusca



## *Norrisia norrisi*

Norris' Top Snail

**NONO**

**Identification:** Red-brown flattened spiral shell with a bright red foot.

**Size:** 2-4 cm locally

**Occurrence:** Uncommon



## *Aplysia californica*

California Brown Sea Hare

**APCA**

**Identification:** Color varies from reddish to brownish, and/or greenish, overlaid with dark lines and spots.

**Size:** Can exceed 40 cm

**Occurrence:** Widespread and common



## *Aplysia vaccaria*

California Black Sea Hare

**APVA**

**Identification:** Body dark reddish brown to black, with white speckled patches. Distinguished from *A. californica* by larger size.

**Size:** To 75 cm

**Occurrence:** Uncommon

# Phylum Mollusca



## *Conus californicus*

California Cone Snail

**COCA**

**Identification:** Smooth, light brown shell with a transparent to white foot and a black proboscis.

**Size:** To 4 cm in length

**Occurrence:** Widespread and common



## *Mytilus californianus*

California Mussel

**MC**

**Identification:** Shell thick, pointed at anterior end, broad at posterior, sculptured with strong radial ridges and irregular growth lines. Surface often eroded or worn. Blue-black in color.

**Size:** 5-10 cm

**Occurrence:** Locally abundant



## *Chaceia ovoidea*

Wart-Neck Piddock

**CHOV**

**Identification:** Boring clam, with distinct dark brown siphon which usually protrudes from rock 3-5 cm.

**Size:**  $\geq 2.5$  cm siphon hole diameter

**Occurrence:** Widespread and abundant

# Phylum Mollusca



## *Crassedoma giganteum*

Formerly *Hinnites giganteus*

Rock Scallop

**CRGI**

**Identification:** Orange mantle. Adults cemented to substrate and have thick valves with spines protruding from ribs.

**Size:** Shell diameter up to 20 cm

**Occurrence:** Widespread and common



## *Parapholas californica*

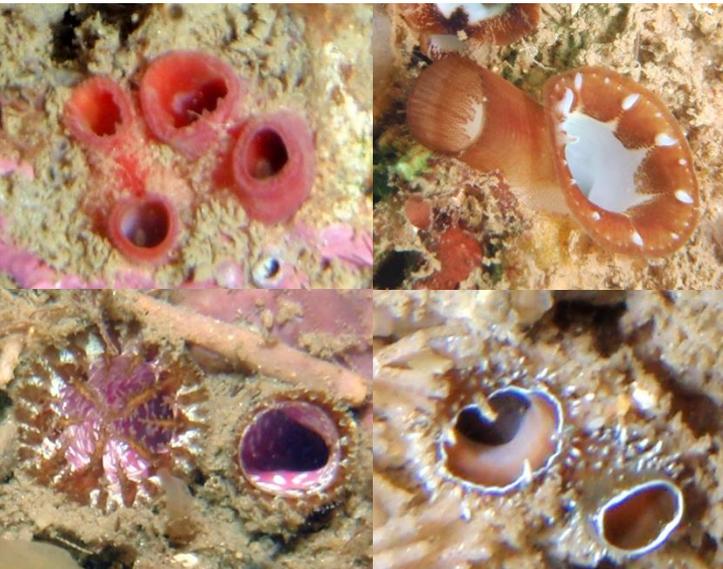
Scaleside Piddock

**PACA**

**Identification:** Boring clam, with white siphon that usually has reddish-brown spots and blotches.

**Size:** Shell length up to 15 cm, siphon diameter 2-4 cm locally

**Occurrence:** Widespread and abundant



## Pholad spp.

**PU**

**Identification:** Only the siphons may be visible. May include juvenile *Parapholas californica*, juvenile *Chaceia ovoidea*, (< 2.5cm) *Penitella* spp., and *Hiatella arctica*.

**Size:** Siphon hole diameter < 2.5cm

**Occurrence:** Locally common

## Phylum Mollusca



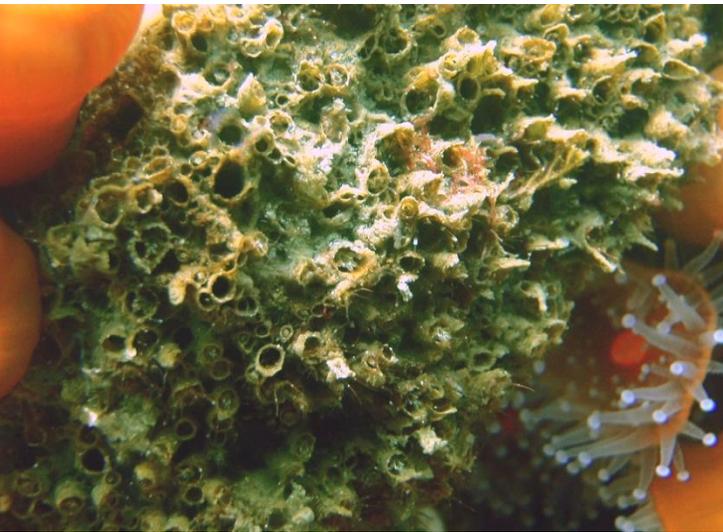
### *Octopus* spp. OCTO

**Identification:** Arms usually reach 3-5 times the length of the body. Color varies with background and mood. Local species include *O. bimaculoides* (featured here), *O. rubescens*, and *Enteroctopus dofleini*.

**Size:** Arm span up to 300 cm

**Occurrence:** Uncommon

## Phylum Arthropoda

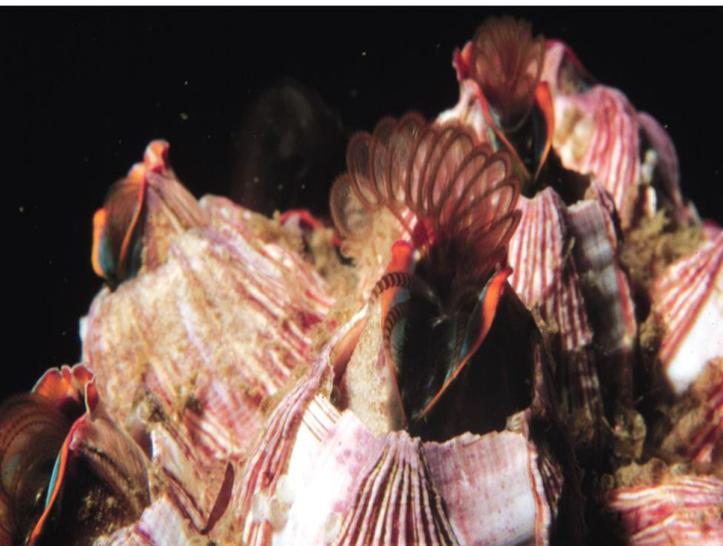


### Amphipod Tube Mat ATM

**Identification:** Colonies of small tube forming amphipods often intermixed with other small invertebrates and algae. Spongy texture. Color is usually dark brown to tan.

**Size:** To 5 cm in height, variable colony diameter

**Occurrence:** Locally common



### Balanus complex

Barnacles

### BA

**Identification:** Assorted barnacle species. Plates or paired beaks cover the opening of the feeding tentacles in live individuals. *Megabalanus californicus* shown here.

**Size:** Basal diameter from 0.5 to 10 cm depending on species. Height 0.5 to 7.5 cm.

**Occurrence:** Widespread and common

## Phylum Arthropoda



### *Panulirus interruptus*

California Spiny Lobster

**PAIN**

**Identification:** Large reddish brown decapod crustacean with long antennae covered with small sharp spines. Anterior portion of the thorax with sharp spines. Large spines on tail. Claws absent.

**Size:** To 60 cm

**Occurrence:** Widespread and common



### *Pugettia producta*

Kelp Crab

**PUPR**

**Identification:** Smooth carapace with yellowish brown to reddish coloring. Feeds on algae.

**Size:** Carapace to 9 cm in width

**Occurrence:** Widespread and common



### *Cancer* spp.

Cancer Crab

**CASP**

**Identification:** Oval shaped carapace. Body and legs may be hairy or smooth. Local species include *C. antennarius*, *C. gracilis*, *C. productus*, and *C. anthonyi*.

**Size:** Carapace to 20 cm in width

**Occurrence:** Locally common

## Phylum Arthropoda



### *Loxorhynchus grandis*

Sheep Crab

**LOGR**

**Identification:** Large spider crab with robust, oval carapace covered with spines and tubercles. Males have larger chelipeds (claws) than females.

**Size:** Carapace to 25 cm in width, up to 1 m leg span

**Occurrence:** Widespread and common

## Phylum Ectoprocta



### *Watersipora subtorquata*

**WASP**

**Identification:** Colonies can be erect and leaf-like, with extensive overlapping calcareous crusts and curled edges. Usually red.

**Size:** To 25 cm in height

**Occurrence:** Widespread and uncommon



### *Phidolopora labiata*

Lattice-Work Bryozoan

**PLAB**

**Identification:** Upright colonies form a mass of lattice-like structures, usually orange.

**Size:** Diameter to 20 cm, height to 10 cm, 3-7 cm common locally

**Occurrence:** Uncommon

# Phylum Ectoprocta



## *Hipporina mexicana*

Formerly *Hippodiplosia insculpta*

Southern Fluted Bryozoan

### HIP

**Identification:** Colonies consist of erect, fan-like, curled folds. Color is typically light yellow to orange and tan.

**Size:** To 10 cm in height but 3-7 cm common locally, to 13 cm in diameter

**Occurrence:** Uncommon



## *Bugula californica*

Spiral Bryozoan

### BCAL

**Identification:** Colony composed of fronds that have spiral whorls of branches. White to orange in color.

**Size:** To 8 cm in height, to 50 cm in diameter

**Occurrence:** Widespread and abundant



## *Bugula neritina*

### BN

**Identification:** Bushy colonies of erect branching fronds, reddish brown or purple in color. Branches curve slightly inward toward central axis.

**Size:** To 15 cm in height, to 20 cm in diameter

**Occurrence:** Widespread and common

# Phylum Ectoprocta



## *Crisia occidentalis*

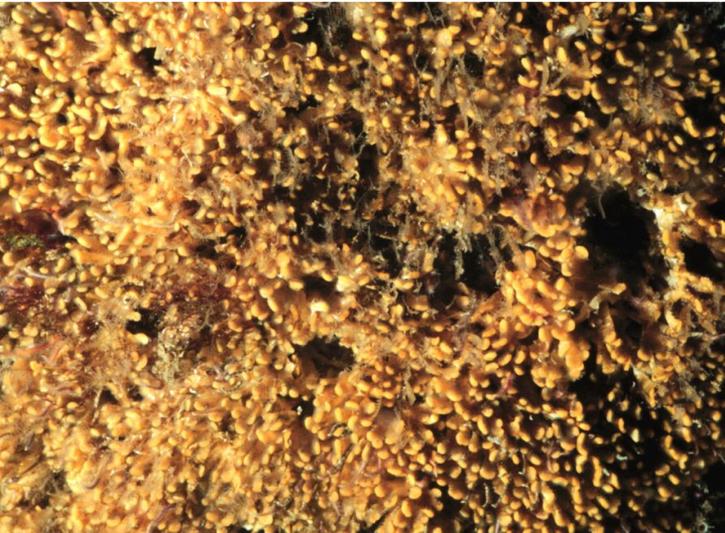
White Tuft Bryozoans

**CROC**

**Identification:** White erect fragile colonies with a branching, bushy structure. Tubular zooids with round terminal apertures.

**Size:** To 3 cm in height

**Occurrence:** Widespread and abundant



## *Diaperoforma californica*

Formerly *Diaperoecia californica*

Southern Staghorn Bryozoan

**DC**

**Identification:** Colonies calcified in coral-like masses, with flattened branches. Color varies from light to dark yellow.

**Size:** Height to 10 cm, diameter to 30 cm

**Occurrence:** Widespread and abundant



## *Heteropora pacifica*

Northern Staghorn Bryozoan

**HPAC**

**Identification:** Calcified colonies often mistaken for coral because of their superficial resemblance. Cross sections of colony branches are round. Typically light yellow to cream in color.

**Size:** To 10 cm in height but 3-7 cm common locally, to 15 cm in diameter

**Occurrence:** Uncommon at mainland sites, common at island sites

# Phylum Ectoprocta



## *Celleporina robertsoniae*

Formerly *Costazia robertsoniae*

Orange Bryozoan

**COST**

**Identification:** Colonies formed of erect single or forked nodules. Often fuzzy in appearance. Color is typically orange to red-orange. Typically epiphytic.

**Size:** Height to 5 cm, diameter to 8 cm

**Occurrence:** Widespread and uncommon



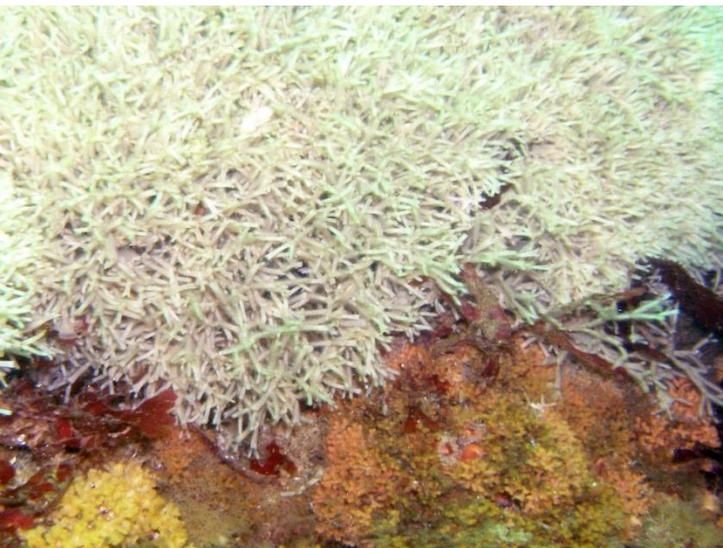
## *Cellaria* spp.

**CESP**

**Identification:** Dichotomous 'Y'-shaped branching pattern emphasized at tips. Long circular nodes. Dull white in color with dark joints. Local species include *C. difusa* and *C. madibulata*.

**Size:** To 8 cm in height, to 30 cm in diameter

**Occurrence:** Uncommon



## *Thalamoporella californica*

**TC**

**Identification:** White to off-white colonies with many dichotomously branched projections and a basal crust.

**Size:** To 15 cm in height, colony diameter variable to 2 m

**Occurrence:** Widespread and abundant

## Phylum Ectoprocta



### *Membranipora serrilamella*

Encrusting Bryozoan

**MT**

**Identification:** Small white zooids forming crustose colonies having a honeycomb appearance. Usually epiphytic. Seen here on *Macrocystis*.

**Size:** Variable

**Occurrence:** Widespread and abundant



### Encrusting bryozoan spp.

**ECB**

**Identification:** Colonies can become one of the dominant species under kelp canopies and in low light areas under ledges and on walls. Color variable, requires a dissecting scope for species identification.

**Size:** Variable

**Occurrence:** Widespread and abundant

## Phylum Echinodermata



### *Cucumaria piperata*

Salt and Pepper Cucumber

**CUPI**

**Identification:** Small cucumber with 10 branched tentacles. Usually white, with brown or black speckles.

**Size:** To 6 cm in length, 2-4 cm common locally

**Occurrence:** Widespread and common

## Phylum Echinodermata



### *Cucumaria miniata*

Red Sea Cucumber

#### CUSP

**Identification:** Bright orange cucumber with 10 branched tentacles and 5 rows of tube feet.

**Size:** To 15 cm in length

**Occurrence:** Uncommon



### *Cucumaria salma*

#### CUSP

**Identification:** Body salmon to orange color with 5 rows of tube feet. Tentacles black and goldish yellow, with white banding.

**Size:** To 15 cm in length

**Occurrence:** Locally common



### *Lissothuria nutriens*

#### LINU

**Identification:** Thick body wall without scales. Dorsal surface is orange to red in color. Flattened ventral side with three rows of tube feet and pale pink in color. Mouth and anus directed upward. 10 clear to pale orange branched tentacles.

**Size:** To 2 cm in length

**Occurrence:** Widespread and common

## Phylum Echinodermata



### *Eupentacta quinquesemita*

White Sea Cucumber

**EUQU**

**Identification:** Small white to cream colored sea cucumber. Cannot completely retract its rows of long tube feet.

**Size:** To 8 cm in length

**Occurrence:** Widespread and common



### *Pachythyone rubra*

**PRUB**

**Identification:** Small cucumber, with white to brown feeding tentacles. Body color varies, can be brown, white, or orange. Tube feet are scattered over entire body and can retract completely.

**Size:** To 5 cm in length, 1-3 cm common locally

**Occurrence:** Locally common



### *Parastichopus californicus*

California Sea Cucumber

**CUKE**

**Identification:** Dark red, brown, or yellow sea cucumber has stiff, conical papillae. Tube feet only on ventral surface.

**Size:** To 40 cm in length

**Occurrence:** Locally uncommon

# Phylum Echinodermata



## *Parastichopus parvimensis*

Warty Sea Cucumber

**PAPA**

**Identification:** Brown to orange sea cucumber is covered with small black-tipped papillae or pseudospines. Tube feet located on ventral surface.

**Size:** To 25 cm in length

**Occurrence:** Widespread and abundant



## *Strongylocentrotus purpuratus*

Purple Sea Urchin

**SPL/SPS**

**Identification:** Medium sized sea urchin with short purple spines. Frequently bores depressions in rocks. Occasionally juveniles less than 2.5 cm have greenish-white spines.

**Size:** To 8 cm test diameter, **SPL** if > 2.5 cm, **SPS** if  $\leq$  2.5 cm

**Occurrence:** Widespread and abundant



## *Strongylocentrotus franciscanus*

Red Sea Urchin

**SFL/SFS**

**Identification:** Large urchin with sharp, long spines. Color ranges from red to dark reddish-purple to black.

**Size:** To 25 cm test diameter, **SFL** if > 2.5 cm, **SFS** if  $\leq$  2.5 cm

**Occurrence:** Widespread and abundant

# Phylum Echinodermata



## *Lytechinus anamesus*

White Sea Urchin

### LA

**Identification:** Small sea urchin with sharp, short white spines. Test is usually white with dark blotches.

**Size:** To 8 cm in diameter, 2-4 cm common locally

**Occurrence:** Widespread and uncommon



## *Ophiothrix spiculata*

Spiny Brittle Star

### OPSP

**Identification:** Small brittle star with long, erect spines on the arms and disc. Often aggregates.

**Size:** To 30 cm in diameter, 10-20 cm common locally

**Occurrence:** Widespread and abundant



## *Ophioplocus esmarki*

Smooth Brittle Star

### OPES

**Identification:** Relatively smooth, with a large disc and short spines that can be folded against the arms. Color brown to gray-brown.

**Size:** To 15 cm in diameter

**Occurrence:** Widespread and common

# Phylum Echinodermata



## *Pisaster brevispinus*

Short Spined Sea Star

**PBL/PBS**

**Identification:** Five armed sea star. Pink to white in color. Short aboral spines.

**Size:** To 60 cm in diameter, **PBL** if > 2.5 cm, **PBS** if < 2.5 cm

**Occurrence:** Widespread and common prior to 2014 wasting disease



## *Pisaster giganteus*

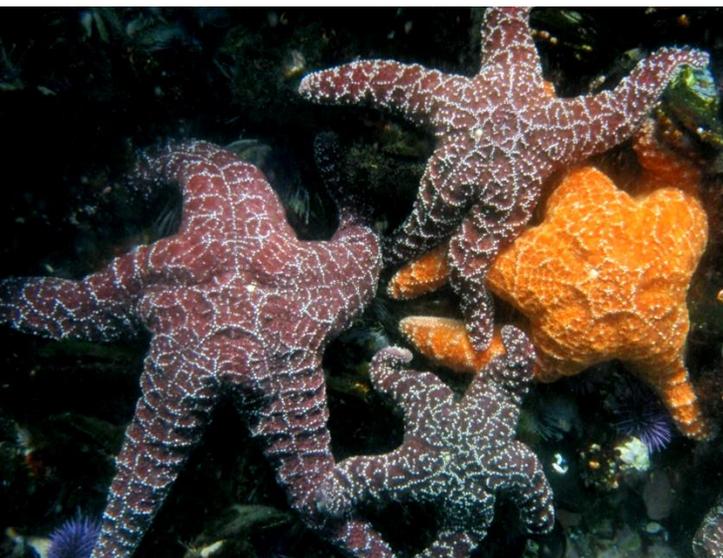
Giant Spined Sea Star

**PGL/PGS**

**Identification:** This sea star has long uniformly spaced spines with swollen tips. Each spine is surrounded by a blue circle.

**Size:** To 60 cm in diameter, **PGL** if > 2.5 cm, **PGS** if < 2.5 cm

**Occurrence:** Widespread and abundant prior to 2014 wasting disease



## *Pisaster ochraceus*

Ochre Sea Star

**POL/POS**

**Identification:** Thick armed star with numerous small white spines on the aboral surface arranged in a reticular pattern. Color varies.

**Size:** To 35 cm in diameter, **POL** if > 2.5 cm, **POS** if < 2.5 cm

**Occurrence:** Widespread and common prior to 2014 wasting disease

# Phylum Echinodermata



## *Dermasterias imbricata*

Leather Star

**DIL/DIS**

**Identification:** This sea star feels smooth and almost leather-like.

**Size:** To 25 cm in diameter, **DIL** if > 2.5 cm, **DIS** if < 2.5 cm

**Occurrence:** Widespread and common prior to 2014 wasting disease



## *Orthasterias koehleri*

Rainbow Sea Star

**OKL/OKS**

**Identification:** Vivid color, ranging from pink with gray to bright red with yellow banding. Small disk with 5 slender arms.

**Size:** To 40 cm in diameter, **OKL** if > 2.5 cm, **OKS** if < 2.5 cm

**Occurrence:** Uncommon



## *Patiria miniata*

Formerly *Asterina miniata*

Bat Star

**AML/AMS**

**Identification:** This webbed sea star varies greatly in color. Lacks pedicellariae or spines. Number of arms usually 5, but can be 4 to 9.

**Size:** To 20 cm in diameter, **AML** if > 2.5 cm, **AMS** if < 2.5 cm

**Occurrence:** Widespread and abundant prior to 2014 wasting disease

## Phylum Echinodermata



### *Pycnopodia helianthoides*

Sunflower Sea Star

#### PHL/PHS

**Identification:** Large sea star has 20 to 24 flexible arms. Juveniles have 5 arms. Color varies from purple to orange.

**Size:** To 90 cm in diameter, **PHL** if > 2.5 cm, **PHS** if < 2.5 cm

**Occurrence:** Widespread and common prior to 2014 wasting disease

## Phylum Chordata



### *Styela montereyensis*

Stalked Tunicate

#### STMO

**Identification:** Long stalked, solitary tunicate with longitudinal ridges. Color yellow to dark red-brown.

**Size:** To 25 cm in height

**Occurrence:** Widespread and abundant



### *Chelyosoma productum*

Disc-Top Tunicate

#### CHPR

**Identification:** A small flat tunicate that occurs in colonies. Often covered with silt and difficult to see. It is usually a translucent brown and unlike most tunicates feels hard to the touch.

**Size:** Zooid diameter about 3 cm

**Occurrence:** Uncommon

# Phylum Chordata

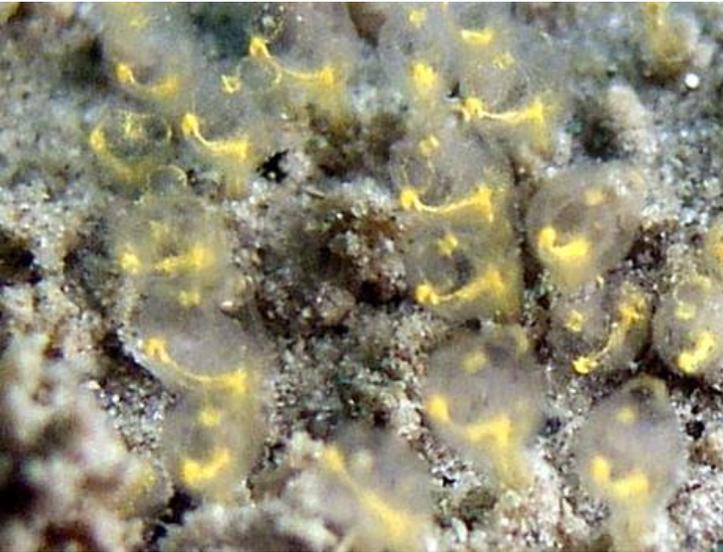


## Compound tunicate spp. UT

**Identification:** Smooth colonies with many small openings and a few larger apertures. Variable in color. Some of the local species that may fall in this category include *Didemnum* spp, *Botrylloides* spp, *Aplidium* spp, and *Cystodytes* spp.

**Size:** Irregular

**Occurrence:** Widespread and common



## *Pycnoclavella stanleyi*

Yellow Social Tunicate

### PYST

**Identification:** Branchial baskets of expanded zooids in upright orange or gold striped projections. Pictured at left magnified 2x.

**Size:** To 1 cm in height, 5-30 cm clumps

**Occurrence:** Locally uncommon



## *Euherdmania claviformis*

Tunic-Band Compound Tunicate

### EUCL

**Identification:** This tunicate is found in clumps or colonies of elongate, almost transparent lobes. They are often covered in light sand or silt.

**Size:** Commonly 1-4 cm in height in 5-10 cm clumps

**Occurrence:** Locally common

# Phylum Chordata



## *Clavelina* spp.

Light Bulb Tunicate

**CL**

**Identification:** Grows in clusters. Pharynx contains two luminescent pink lines that resemble the glowing filaments of a light bulb.

**Size:** Locally 1-2 cm in height

**Occurrence:** Uncommon



## *Polyclinum planum*

Elephant Ear Tunicate

**POPL**

**Identification:** Ear-like, lobed colony of zooids attached to substrate by slender stalk. Brown to yellow color.

**Size:** Diameter of lobe to about 30 cm

**Occurrence:** Uncommon except at Bulito where they are abundant



## *Archidistoma psammion*

Sand Tunicate

**AR**

**Identification:** Colonies form flat slabs or oval lobes. Zooids arranged in circular systems. Test is firm and leathery. Color varies from dark brown to purple, maroon, gray, or whitish..

**Size:** Typically 1-2 cm thick, to 20 cm in diameter

**Occurrence:** Widespread and common

## Family Myliobatidae



### *Myliobatis californica*

Bat Ray

**BRAY**

**Identification:** Thick bodied with large bulbous head, long pectoral fins, whip-like tail, and long venom injecting barb at base of tail.

**Size:** To 1.8 m wingspan

**Occurrence:** Uncommon

## Family Squatinidae



### *Squatina californica*

Pacific Angel Shark

**SCAL**

**Identification:** Flattened body with blunt head and large pectoral fins. Rear body and base are tubular. Two dorsal fins near base of tail.

**Size:** To 1.5 m in length

**Occurrence:** Uncommon

## Family Rhinobatidae



### *Rhinobatos productus*

Shovelnose Guitarfish

**RPRO**

**Identification:** Brown to gray, sometimes lightly blotched. Distinctive long v-shaped head. Small spines along dorsal ridge and tail.

**Size:** To 1 m in length

**Occurrence:** Uncommon

## Family Triakidae



### *Triakis semifasciata*

Leopard Shark

#### **TSEM**

**Identification:** Short, rounded snout and dark saddle blotches that run the length of the body.

**Size:** To 2 m in length

**Occurrence:** Uncommon

## Family Heterodontidae



### *Heterodontus francisci*

Horn Shark

#### **HEFR**

**Identification:** Brown to gray in color with black spots, Both dorsal fins have a spine on the leading edge. Spiral egg casings.

**Size:** To 1 m in length, 30-50 cm common locally

**Occurrence:** Locally common

## Family Scyliorhinidae



### *Cephaloscyllium ventriosum*

Swell Shark

#### **CVEN**

**Identification:** Dark spotted elongated body with flattened head. Two posterior dorsal fins.

**Size:** To 1.5 m in length, 40-70 cm common locally

**Occurrence:** Locally common

## Family Paralichthyidae



### *Paralichthys californicus*

California Halibut

#### **PCAL**

**Identification:** Large mouth, upper jaw extends to or behind eye, and tail arched in middle with outer edges square cut.

**Size:** To 1.5 m in length

**Occurrence:** Widespread but uncommon



### *Citharichthys stigmaeus*

Speckled Sand Dab

#### **CSTI**

**Identification:** Speckles, often small blotches, and ventrally compressed.

**Size:** To 18 cm, 3-10 cm common locally

**Occurrence:** Widespread and abundant in sandy areas

## Family Scorpaenidae



### *Scorpaena guttata*

California Scorpionfish

#### **SGUT**

**Identification:** Many spines, short barbels and skin flaps on head. Brown spots on head, body and fins.

**Size:** To 43 cm, locally 10-25 cm

**Occurrence:** Uncommon

## Family Scorpaenidae



### *Sebastes atrovirens*

Kelp Rockfish

**SATR**

**Identification:** No distinctive markings. Mottled shades of tan to brown to greenish brown. Can change color and markings with background.

**Size:** To 42 cm, 5-30 cm common locally

**Occurrence:** Widespread and abundant



### *Sebastes auriculatus*

Brown Rockfish

**SAUR**

**Identification:** Blotched shades of brown to tan. Pectoral and fore-dorsal fins pale coral to tan, distinguished from other mottled rockfish by a solid dark brown blotch or spot at the top rear of the gill cover.

**Size:** To 45 cm, 5-30 cm common locally

**Occurrence:** Widespread and common



### *Sebastes carnatus*

Gopher Rockfish

**SCAR**

**Identification:** Three pale colored splotches on back that extend into dorsal spines. Two diagonal bands extend from lower eye, and pale blotches on dorsal spines.

**Size:** To 40 cm, 5-30 cm common locally

**Occurrence:** Widespread and uncommon

## Family Scorpaenidae



### *Sebastes paucispinis*

Bocaccio

**SPAU**

**Identification:** Elongated gray body often with spots as seen in juvenile pictured below left. Concave head, large mouth, maxilla extends beyond eye.

**Size:** To 90 cm, 5-15 cm common locally

**Occurrence:** Locally uncommon (juvenile) and rare (adult)



### *Sebastes serranoides*

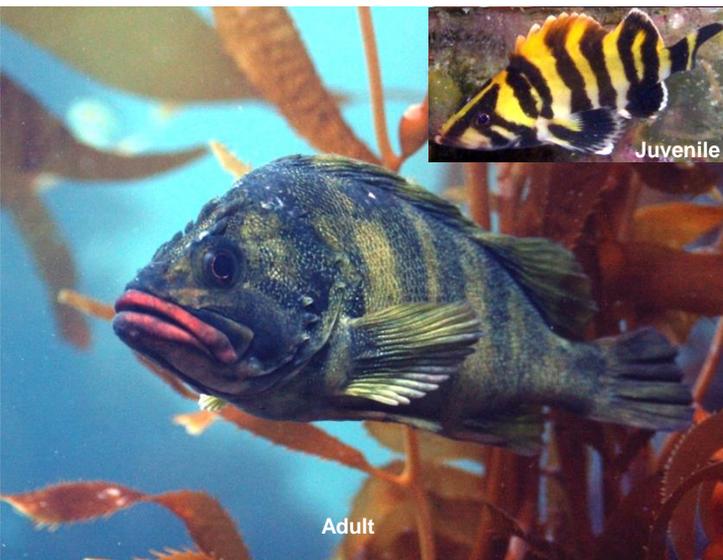
Olive Rockfish

**SSER**

**Identification:** Olive green with lighter coloring below lateral line and several pale spots below dorsal fin.

**Size:** To 60 cm, 5-35 cm common locally

**Occurrence:** Locally common



### *Sebastes serriceps*

Treefish

**STRE**

**Identification:** Yellowish body with 5 to 6 black bars across back and base of tail. Two dark bands from eye to pectoral fin, with pink to red lips. Juveniles often have brighter coloring than adults.

**Size:** To 40 cm, 5-30 cm common locally

**Occurrence:** Locally uncommon

## Family Scorpaenidae



### *Sebastes caurinus*

Copper Rockfish

**SCAU**

**Identification:** White belly, pale fins, and dark band that slopes downward from eye toward pectoral fin. White lateral line extending from dorsal fin toward tail.

**Size:** To 60cm, 20-25 cm common locally

**Occurrence:** Widespread but uncommon



### *Sebastes chrysomelas*

Black and Yellow Rockfish

**SCHR**

**Identification:** Two dark diagonal bands extend from lower eye. Bright yellow spots and blotches over dark under-color.

**Size:** To 40 cm, 5-25 cm common locally

**Occurrence:** Widespread and abundant



### *Sebastes mystinus*

Blue Rockfish

**SMYS**

**Identification:** Mottled blue to gray in color, juveniles with red coloration. Slightly projected jaw that extends to midpoint of eye, 2-4 curved bands around front of head.

**Size:** To 40 cm, 5-30 cm common locally

**Occurrence:** Adults common at island sites, juveniles common along the mainland

Juvenile

Adult

## Family Scorpaenidae



### *Sebastes miniatus*

Vermilion Rockfish

#### SMIN

**Identification:** Bright red mottled body coloration on gray skin background. Juveniles mottled and banded color not as bright as adults, speckled head.

**Size:** To 70 cm, 4-10 cm common locally

**Occurrence:** Widespread but uncommon (juveniles) to rare (adults)



### *Sebastes flavidus*

Yellowtail Rockfish

#### SFLA

**Identification:** One or two areas or streaks of yellow behind eye on gill cover. Several pale spots below dorsal fin. Dark brown to green brown or gray back, often pale below lateral line. Light green to yellow-green, yellow or dusky yellow fins.

**Size:** To 66 cm, 30-55 cm

**Occurrence:** Widespread but locally rare



### Rockfish spp.

Young of year rockfish

#### SCSP

**Identification:** Juvenile rockfish that are difficult to distinguish to species.

**Size:** To 5 cm

**Occurrence:** Widespread and common

## Family Muraenidae



### *Gymnothorax mordax*

California moray

**GYMO**

**Identification:** Light to dark brown green. No pectoral fins. Often mottled. Mouth filled with numerous sharp teeth.

**Size:** To 1.5 m. 60 cm – 1.2 m

**Occurrence:** Widespread and abundant

## Family Syngnathidae



### *Syngnathus* spp.

Pipefish

**SYNG**

**Identification:** Green to brown in color, underside often white. Long trumpet-like snout, small fan-shaped tail. Of the six species that occur in the area, only *S. leptorhynchus* (pictured here) and *S. californiensis* (Kelp Pipefish) are commonly seen.

**Size:** To 50 cm

**Occurrence:** Uncommon

## Family Malacanthidae



### *Caulolatilus princeps*

Ocean Whitefish

**CAPR**

**Identification:** Elongate compressed silver blue body with small terminal mouth. Fins often yellowish and may have bluish stripes.

**Size:** To 50 cm

**Occurrence:** Uncommon

## Family Hexagrammidae



### *Hexagrammos decagrammus*

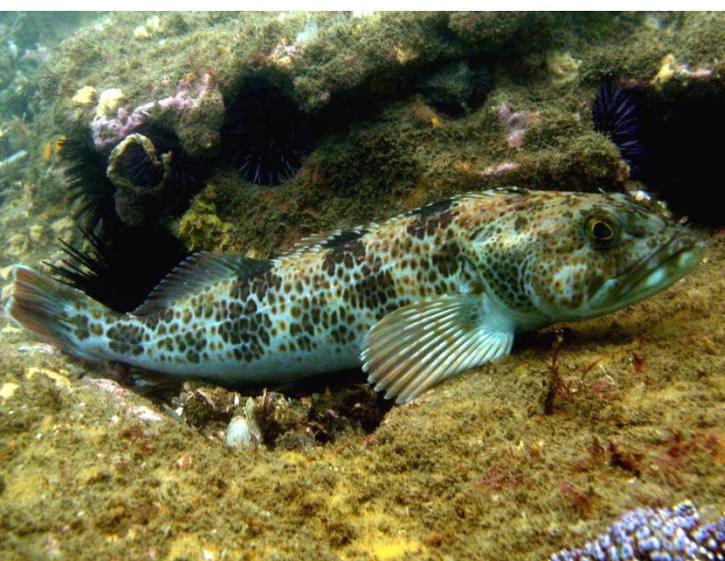
Kelp Greenling

**HDEC**

**Identification:** Male: (above) Blue irregular spots outlined by small dark spots on head and fore body and a pair of cirri above eyes. Female: (below) Speckled with red-brown to gold over a pale under-color.

**Size:** To 60 cm, 15-40 cm common locally

**Occurrence:** Locally uncommon



### *Ophiodon elongatus*

Lingcod

**OELO**

**Identification:** Single, whitish lateral line, large mouth and prominent canine teeth. Long, even spinous dorsal fin separated by a notch before soft rear dorsal fin.

**Size:** To 1.5 m, 20-60 cm common locally

**Occurrence:** Locally common



### *Oxylebius pictus*

Painted Greenling

**OPIC**

**Identification:** Pointed snout with 5-6 dark bands encircling fins and body. Two pairs of cirri, males can be almost black during winter mating season

**Size:** To 25 cm, 5-20 cm common locally

**Occurrence:** Widespread and abundant

## Family Cottidae



### *Leiocottus hirundo*

Lavender Sculpin

#### **LHIR**

**Identification:** Slender, tapered elongated body. First two extremely long dorsal fin spines form a spike-like projection, and red to blue spots on spines of dorsal fins aligned diagonally.

**Size:** To 25 cm

**Occurrence:** Locally common



### Cottid spp.

Sculpin

#### **COTT**

**Identification:** Tapered tubular body, large bony head, obvious scales. Large pectoral fins. Common genera: *Orthonopias* and *Artedius*

**Size:** To 10 cm

**Occurrence:** Widespread and abundant



### *Scorpaenichthys marmoratus*

Cabezon

#### **SMAR**

**Identification:** Bulbous head and stout body with prominent fleshy cirrus above each eye.

**Size:** To 1 m, 5-40 cm common locally

**Occurrence:** Widespread and common

## Family Percichthyidae



### *Stereolepis gigas*

Giant Sea Bass

#### **SGIG**

**Identification:** Large mouth, bulky body, low profile foredorsal fin, tall soft dorsal, and sizable black spots.

**Size:** To 2.3 m

**Occurrence:** Rare

## Family Serranidae



### *Paralabrax clathratus*

Kelp Bass

#### **PCLA**

**Identification:** Square cut tail, first two spines of fore dorsal fin short, and large, pale blotches on back.

**Size:** To 72 cm, 10-40 cm common locally

**Occurrence:** Widespread and abundant



### *Paralabrax nebulifer*

Barred Sand Bass

#### **PNEB**

**Identification:** Square cut tail, dusky bars on side, and third fore dorsal spine distinctly longer.

**Size:** To 66 cm

**Occurrence:** Widespread and common

## Family Kyphosidae



### *Girella nigricans*

Opaleye

**GNIG**

**Identification:** Dull green, thick, body with one to three white spots on back, and bright blue to blue-green eyes.

**Size:** To 66 cm, 30-45 cm common locally

**Occurrence:** Widespread and common



### *Medialuna californiensis*

Halfmoon

**MCAL**

**Identification:** Silver blue compressed body. Darker coloring on back graduating to pale shades on sides and belly. Dusky spot on upper posterior portion of gill cover.

**Size:** To 45 cm, 15-25 cm common locally

**Occurrence:** Locally common

## Family Haemulidae



### *Anisotremus davidsonii*

Sargo

**ANDA**

**Identification:** Silver with single black vertical bar from base of anterior dorsal fin to level of pectoral fin.

**Size:** To 50 cm

**Occurrence:** Locally uncommon

## Family Haemulidae



### *Xenistius californiensis*

California Salema

#### **XCAL**

**Identification:** Elongate, compressed; head conical, compressed with large eyes. Chin has 2 pairs of pores, rear pores larger, well separated. Lower jaw projecting. Color silvery with 6-7 orange brown stripes.

**Size:** To 30 cm

**Occurrence:** Widespread and common

## Family Aulorhynchidae



### *Aulorhynchus flavidus*

Tube-Snout

#### **AUFL**

**Identification:** Elongate body and snout with a forked tail, quick and often aggregated, compared to more solitary, slow moving pipefish which has a rounded caudal fin and body rings.

**Size:** To 18 cm

**Occurrence:** Locally common

## Family Scianidae



### *Cheilotrema saturnum*

Black Croaker

#### **CSAT**

**Identification:** Silvery dark gray, often have brassy or purplish tints, especially on back; can lighten or darken to blend with surroundings, often light and dark scale rows align to form pinstripe pattern; dark fins. May display white spots or patches.

**Size:** 15-30 cm

**Occurrence:** Widespread and common

## Family Embiotocidae



### *Brachyistius frenatus*

Kelp Surfperch

**BFRE**

**Identification:** Thin body, dark areas on scales that form stripes above mid-lateral line, concave head above eyes, and snout pointed upward due to prominent lower jaw.

**Size:** To 22 cm, 8-15 cm common locally

**Occurrence:** Widespread and common in kelp canopy



### *Cymatogaster aggregata*

Shiner Surfperch

**CAGG**

**Identification:** Black spots on scales form thin stripes on sides. Usually two or three yellow to yellowish bars on sides.

**Size:** To 15 cm, 8-10 cm common locally

**Occurrence:** Locally uncommon



### *Phanerodon furcatus*

White Surfperch

**PFUR**

**Identification:** Thin, football-shaped silverish white body with deeply forked tail, and black line at base of dorsal fin.

**Size:** To 32 cm, 10-20 cm common locally

**Occurrence:** Widespread and common

## Family Embiotocidae



### *Embiotoca jacksoni*

Black Surfperch

#### **EJAC**

**Identification:** Large lips, mustache, blue stripe on anal fin. Compressed body with numerous dusky vertical bars.

**Size:** To 40 cm, 10-30 cm common locally

**Occurrence:** Widespread and abundant



### *Embiotoca lateralis*

Striped Surfperch

#### **ELAT**

**Identification:** Thin, football-shaped body and several narrow, iridescent blue lateral stripes separated by wider orange to copper colored stripes.

**Size:** To 38 cm

**Occurrence:** Widespread and common



### *Hypsurus caryi*

Rainbow Surfperch

#### **HCAR**

**Identification:** Compressed body with a flat belly and vertical bars shaded orange. Black spot on upper corner of mouth.

**Size:** To 30 cm, 10-20 cm common locally

**Occurrence:** Widespread and common

## Family Embiotocidae



### *Rhacochilus vacca*

formerly *Damalichthys vacca*

Pile Surfperch

**DVAC**

**Identification:** Compressed silver green body, deeply forked tail,, dark vertical bar below anterior portion of soft dorsal fin, and a black spot behind corner of mouth.

**Size:** To 44 cm, 15-25 cm common locally

**Occurrence:** Widespread and common



### *Rhacochilus toxotes*

Rubberlip Surfperch

**RTOX**

**Identification:** Large, fat lips with white to pink tint. Deep compressed body with dark vertical bar posterior of mid section. Spiny posterior dorsal fin shorter than anterior soft dorsal fin.

**Size:** To 47 cm, 25-35 cm common locally

**Occurrence:** Widespread and common



### *Hyperprosopon argenteum*

Walleye Surfperch

**HARG**

**Identification:** Large eyes on a deep compressed body with a black edged ventral fin. Occasionally displays dusky barring.

**Size:** To 25 cm, 10-16 cm common locally

**Habitat:** Locally uncommon to rare

## Family Pomacentridae



### *Chromis punctipinnis*

Blacksmith

**CPUN**

**Identification:** Damsel fish with blue bordered caudal, anal and dorsal fins. Black spots on scales scattered from mid-body to tail.

**Size:** To 30 cm, 8-20 cm common locally

**Occurrence:** Widespread and abundant



### *Hypsypops rubicundus*

Garibaldi

**HRUB**

**Identification:** Compressed oval-shaped damsel fish with deeply notched tail between two rounded lobes. Body, bright orange. Juveniles with blue spots.

**Size:** To 36 cm

**Occurrence:** Widespread and common

## Family Labridae



### *Halichoeres semicinctus*

Rock Wrasse

**HSEM**

**Identification:** Red eye distinguishes this species from *Oxyjulis*. Males with dark bar behind pectoral fin. Females with dark areas on scales. Juveniles with longitudinal white stripes and black spots, orange/gold in color.

**Size:** To 38 cm

**Occurrence:** Widespread and common at island reefs uncommon along mainland reefs

## Family Labridae



### *Semicossyphus pulcher*

California Sheephead

#### SPUL

**Identification:** Juvenile: Red orange body with white lateral stripe. Black spots on posterior dorsal, anal and caudal fins. Adult: Wide compressed body with white chin and protruding teeth. Females smaller than males with more uniform reddish pink coloration. Males with dark head and rear, Bulbous lump on nape with blunt head.

**Size:** To 90 cm, 20-40 cm common locally

**Occurrence:** Widespread and abundant



### *Oxyjulis californica*

Senorita

#### OCAL

**Identification:** White belly, sharp canine teeth that typically protrude from mouth, yellow to orange in color, and large black spot on tail base.

**Size:** To 25 cm, 10-20 cm common locally

**Occurrence:** Widespread and abundant

## Family Clinidae



### *Heterostichus rostratus*

Giant Kelpfish

#### **HROS**

**Identification:** Forked tail and an elongated head with a upturned, pointed snout. Varies color to match habitat.

**Size:** To 61 cm, 15-30 cm common locally

**Occurrence:** Widespread and common



### *Neoclinus blanchardi*

Sarcastic Fringehead

#### **NBLA**

**Identification:** Large mouth with jaws extending almost to gill openings, two blue spines with yellow spots on anterior dorsal fin, and cirri above eyes.

**Size:** To 30 cm

**Occurrence:** Widespread but uncommon



### *Alloclinus holderi*

Island Kelpfish

#### **AHOL**

**Identification:** Pale spot extending from cheek lower rear quarter of eye, raised rear dorsal fin, pale spots cover body, a row of dark blotches on upper body, and long pectoral fins.

**Size:** To 10 cm

**Occurrence:** Widespread and common at island reefs, rare at the mainland reefs

## Family Clinidae



### *Gibbonsia* spp.

Crevice Kelpfish

#### CLIN

**Identification:** Rounded tail fin, short pectoral fins, soft rays of rear dorsal fin are spaced more widely towards rear, and a single row of spots along upper side. Local species include: *G. metzi*, *G. elegans*, *G. montereyensis*, and *G. erythra*. They are difficult to distinguish.

**Size:** To 15 cm

**Occurrence:** Widespread and common

## Family Gobiidae



### *Rhinogobiops nicholsii*

Formerly: *Coryphopterus nicholsii*

Blackeye Goby

#### CNIC

**Identification:** Dark to pale tan, black eye, and black edge on anterior dorsal fin.

**Size:** To 15 cm

**Occurrence:** Widespread and abundant



### *Lythrypnus dalli*

Bluebanded Goby

#### LDAL

**Identification:** Bright red with four to nine bright vertical blue bars and a tall anterior dorsal fin.

**Size:** To 6 cm

**Occurrence:** Common at island reefs, rare at mainland reefs

# Phylum Chordata



## *Enhydra lutris*

Sea Otter

**Identification:** Thick fur, dark brown, with head and back of neck a yellow to grayish color, fairly short tail, webbed feet, flipper-like hind feet.

**Size:** To 1.5 m

**Occurrence:** Seasonally common at Northern sites



## *Zalophus californianus*

Sea Lion

**Identification:** External ear flaps, large flippers, males develop sagittal crest on top of skull.

**Size:** To 2.1 m

**Occurrence:** Abundant and widespread



## *Phoca vitulina*

Harbor Seal

**Identification:** Spotted coats from silver-gray to dark brown or black, no external ear flaps, small flippers.

**Size:** To 1.9 m

**Occurrence:** Abundant and widespread

# Phylum Chordata



## *Tursiops truncatus*

Bottlenose Dolphin

**Identification:** Dark cape often on head and back, well defined and short beak, transverse groove between forehead and snout, broad-based and falcate dorsal fin near center of back.

**Size:** To 3.7 m

**Occurrence:** Common and widespread



## *Delphinus delphis*

Common Dolphin

**Identification:** Fusiform and slender, sides marked with hourglass or crisscross pattern, well defined long beak with white tip, 1+ dark stripes from center of lower jaw to flipper, dorsal fin nearly triangular to falcate.

**Size:** To 2.6 m

**Occurrence:** Common offshore of the kelp beds



## *Eschrichtius robustus*

Gray Whale

**Identification:** Mottled gray, short baleen plates, narrowly triangular head, paired blowholes, 2-5 deep lengthwise throat grooves, low hump 2/3 way down the back followed by serrated ridge, no ventral grooves.

**Size:** To 14 m

**Occurrence:** Common seasonally

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