

Pink Abalone

Haliotis corrugata

Pink abalone are identified by their highly corrugated shell surface and sharply scalloped edge. Their bodies are black with an intricately mottled, lace-like black and white epipodium.

They sport 2 to 4 highly elevated open respiratory pores. Pink abalone are most common from about 20 to 70 feet deep, on rocky reefs in areas with giant kelp beds.

POPULATION STATUS

Declined

MAXIMUM SIZE

Up to 9.5 inches³

LIFESPAN

Up to 30 years¹

DEPTH RANGE

20 – 180 feet³

GEOGRAPHIC RANGE

Point Conception, CA to
Bahia Tortuga, MX²

SHELL DESCRIPTION

Green to reddish brown.
Highly corrugated texture.²



BODY DESCRIPTION

Body & tentacles black, epipodium black and white, mottled and lace-like.²

PREFERRED HABITAT

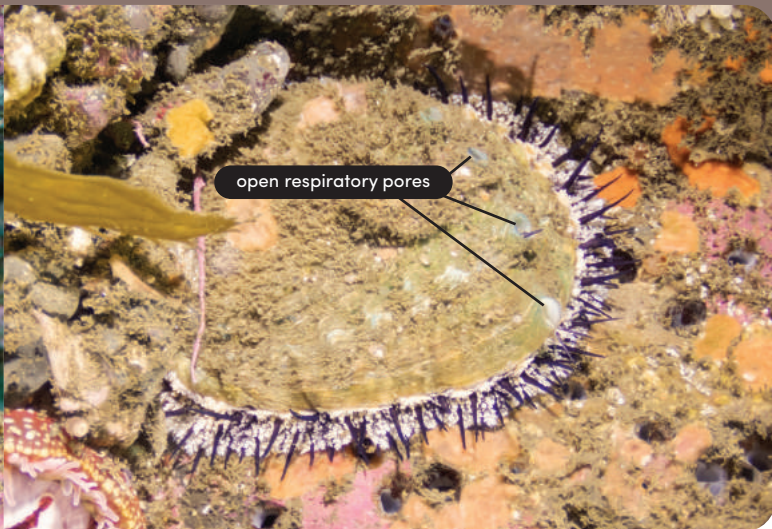
Rocky reefs in areas with giant kelp beds.³

HARVEST INFORMATION

Recreational & commercial wild harvest is prohibited.



An adult pink abalone in a boulder crevice.

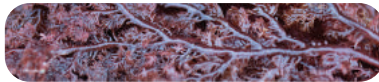


A pink abalone seen from above in 45 feet of water off San Diego, CA.
All Images: Oriana Poindexter

ASSOCIATED ALGAL SPECIES¹



GIANT KELP
Macrocystis pyrifera



SEA COMB
Plocamium pacificum



SOUTHERN SEA PALM
Eisenia arborea

REFERENCES

- 1** CA Dept of Fish & Game, Abalone Recovery & Mgmt Plan, 2005.
2 Cox, 1962. **3** Geiger & Owen, 2012.



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Black Abalone

Haliotis cracherodii

Black abalone are identified by their blackish-blue shell and jet-black epipodium and tentacles. The shells are smooth with a pearly white interior, little to no muscle scar, and sparse algal growth.

There are five to nine open respiratory pores, flush with the shell surface. Black abalone live from the intertidal zone to 20 ft deep, where they shelter in crevices between boulders.

POPULATION STATUS

Endangered ¹

MAXIMUM SIZE

Up to 8 inches ³

LIFESPAN

Up to 30 years ¹

DEPTH RANGE

Intertidal to 20 feet ⁴

GEOGRAPHIC RANGE

Point Arena, CA to
Bahia Tortugas, MX. ⁴

SHELL COLORS

Blackish-blue, sometimes
faded. Smooth texture. ³



BODY COLORS

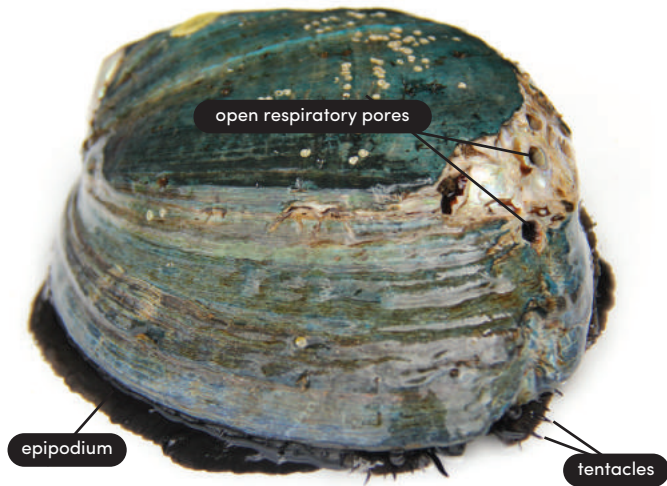
Body, epipodium and tentacles jet black. ³

PREFERRED HABITAT

Coastal and offshore island intertidal areas, found
on exposed rocky shores with deep crevices. ²

HARVEST INFORMATION

Recreational & commercial wild harvest is prohibited. ¹



Adult black abalone at the NOAA Southwest Fisheries Science Center.



Black abalone sheltering in a crevice at low tide in Central California.
Images: Oriana Poindexter, unless noted otherwise.

ASSOCIATED ALGAL SPECIES ²



GIANT KELP
Macrocystis pyrifera



FEATHER BOA KELP
Egregia menziesii



BULL KELP
Nereocystis leutkeana
Image: [Sophia McCoy, Florida State Univ.](#)

REFERENCES

- 1 74 FR 1937.
- 2 76 FR 66806.
- 3 Cox, 1962.
- 4 Neuman et al., 2010.



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Green Abalone

Haliotis fulgens

Green abalone are the species most commonly encountered in Southern CA. They are most often found from the low intertidal to 30 ft deep, in or near rocky crevices.

They can be identified by their green tentacles and mottled cream and brown epipodial fringes. The shell exterior has spiral ribbing but is often encrusted, with bright blue-green iridescence inside. The 5 to 7 open respiratory pores are round and slightly raised.

POPULATION STATUS

Declined

MAXIMUM SIZE

Up to 10 inches³

LIFESPAN

30 years or more⁴

DEPTH RANGE

0 to 60 feet³

GEOGRAPHIC RANGE

Point Conception, CA to
Bahia de Magdalena, MX⁴

SHELL DESCRIPTION

Olive green to reddish-
brown. Low spiral ribbing.²

PREFERRED HABITAT

Rock crevices, under rocks, other cryptic spaces⁴

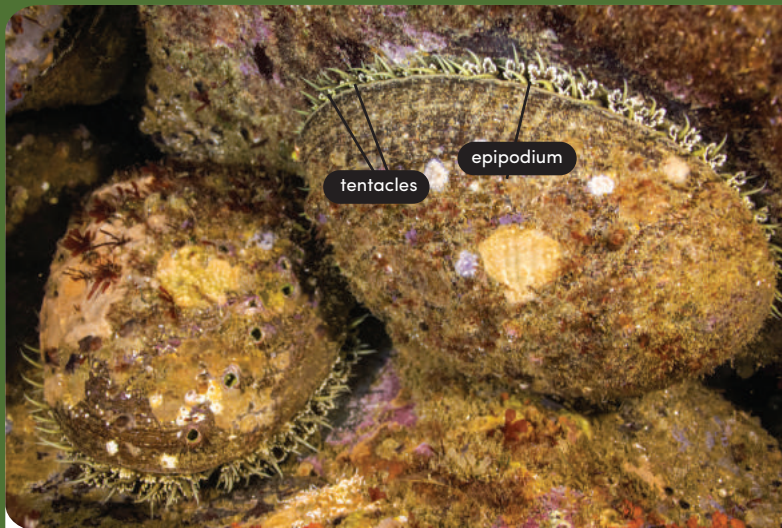


BODY DESCRIPTION

Body, tentacles green. Epipodium mottled cream & brown.³

HARVEST INFORMATION

Recreational & commercial wild harvest is prohibited.



Two adult green abalone shelter in a crevice in 15 feet of water.



A green abalone in the intertidal zone, exposed to air at low tide.
Images: Oriana Poindexter, unless noted otherwise.

ASSOCIATED ALGAL SPECIES ²



GIANT KELP
Macrocystis pyrifera



FEATHER BOA KELP
Egregia menziesii



SURF GRASS*
Phyllospadix spp.
*not an alga

REFERENCES

- 1 CA Dept of Fish & Game, Abalone Recovery & Mgmt Plan, 2005.
2 Cox, 1962. 3 Geiger & Owen, 2012. 4 NOAA Fisheries Species Profile.



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Pinto Abalone

Haliotis kamtschatkana

Formerly considered two separate species, the pinto abalone is now accepted as one species with two visually distinctive morphological types.¹

Northern type has a lumpy shell surface, with colors including red, green, orange, white. Apex is elevated and shell is elongated in shape, with three to six open respiratory pores.

Southern type has spiral ribbing on the shell and is more spherical in shape, with colors including brown, pink and blue and four to seven open respiratory pores.

POPULATION STATUS

Declined⁴

MAXIMUM SIZE

Up to 7 inches³

LIFESPAN

15 to 20 years⁵

DEPTH RANGE

Intertidal to 120 feet⁵

GEOGRAPHIC RANGE

Salisbury Sound, Alaska to Bahia Tortugas, Baja CA, MX. Types mix in Central CA.⁵

SHELL DESCRIPTION

Highly variable in color, texture. Red, orange, green, pink, blue, white. No scar.³

PREFERRED HABITAT

Intertidal and cryptic in the northern part of their range. More exposed and to depths of 100 feet in southerly areas.⁶



BODY DESCRIPTION

Southern type mottled beige-brown body, yellowish tentacles. Northern type mottled greenish-brown body and tentacles. Bright yellow visible through respiratory pores.³

HARVEST INFORMATION

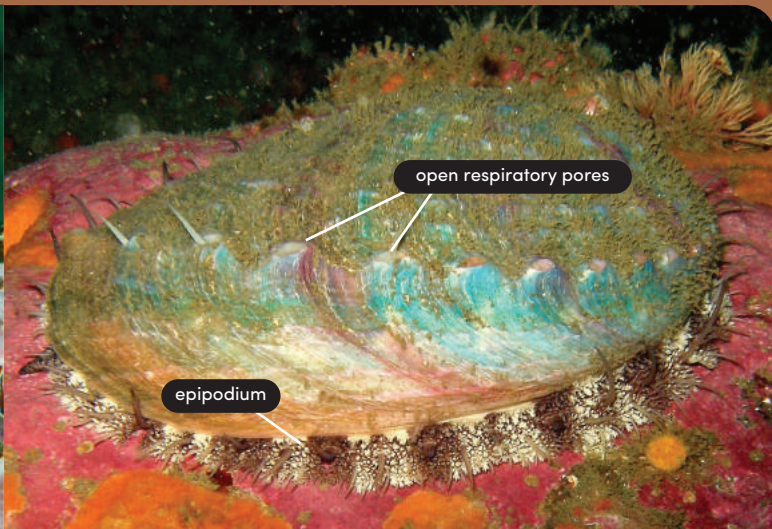
Recreational & commercial wild harvest is prohibited.⁶



Northern type in 35–40 feet of water off of Northern California.

Image: Jonathon Centoni.

Other Images: Oriana Poindexter.



Southern type in approximately 60 feet of water off of San Diego, CA.

Image: Dave Rudie

ASSOCIATED ALGAL SPECIES



Laminaria spp.

Image: UC Berkeley Herbarium



GIANT KELP

Macrocystis pyrifera



BULL KELP³

Nereocystis leutkeana



Agarum spp.

Image: centralcoastbiodiversity.org



'CCA'

Corallina spp.



Lithothamnion spp.

Image: NOAA/SWFSC

REFERENCES

- 1 Owen & Rafferty, 2017.
- 2 Cox, 1962.
- 3 Geiger & Owen, 2012.
- 4 Rogers-Bennett, 2007.
- 5 NOAA Species Directory: Pinto Abalone.
- 6 CA Dept of Fish & Game, Abalone Recovery & Mgmt Plan, 2005.



White Abalone

Haliotis sorenseni

White abalone can be identified by their beige, lace-like tentacles and epipodium, and 3 to 5 open respiratory pores. The shells are reddish, lightweight with pearly interiors and no muscle scar.

In the wild, white abalone are very well camouflaged by encrusting organisms and algae, making their tentacles, epipodium, and open pores the most reliable characteristics for identification.

POPULATION STATUS

Endangered ⁵

MAXIMUM SIZE

Up to 9 inches ⁷

LIFESPAN

30 to 40 years ^{1,10}

DEPTH RANGE

15 to 200 feet ⁹

GEOGRAPHIC RANGE

Point Conception, CA
to Punta Abreojos,
Baja California, MX. ⁶

SHELL COLORS

Variable when encrusted.
Reddish brown with spiral
ribbing if cleaned. ⁴

PREFERRED HABITAT

Require rocky substrate. Live on rocky reefs, solitary outcrops in kelp forests, near sand-rock interface where drift algae accumulates. ^{3,8}

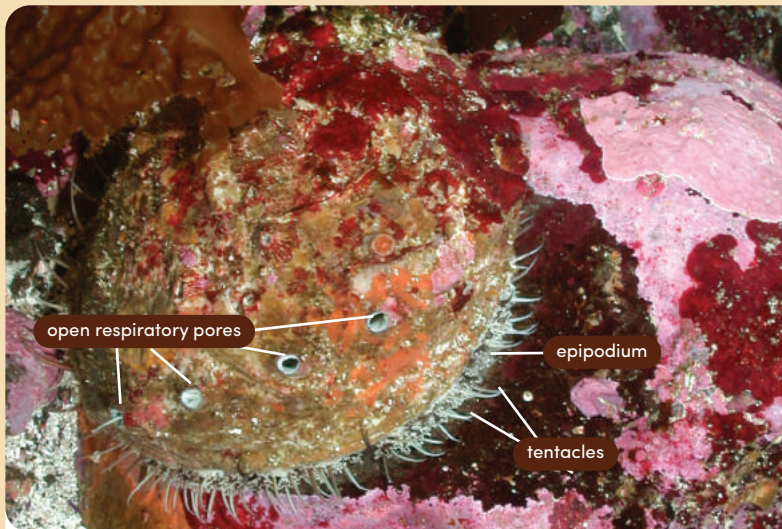


BODY COLORS

Body yellow, orange traces.
Tentacles & epipodium beige, lace-like. ⁴

HARVEST INFORMATION

Recreational & commercial wild harvest is prohibited. ⁵



Adult white abalone in the wild. Image: NOAA/SWFSC.



Adult white abalone in 60 feet of water off San Diego, CA. Images: Oriana Poindexter, unless noted otherwise.

ASSOCIATED ALGAL SPECIES^{2,3}



GIANT KELP

Macrocystis pyrifera



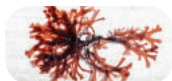
OAR WEED

Laminaria farlowii
Image: UC Berkeley Herbarium



FRINGED SIEVE

Agarum fimbriatum
Image: centralcoastbiodiversity.org



DULSE

Palmaria spp.



Rhodymenia spp.



'CCA'

Corallina spp.



Lithothamnion spp.
Image: NOAA/SWFSC

REFERENCES

- 1 Andrews et al., 2013.
- 2 Burton et al., 2008.
- 3 Butler et al., 2006.
- 4 Cox, 1962.
- 5 66 FR 29046.
- 6 Hobday & Tegner, 2001.
- 7 Howarth, 1987.
- 8 Lafferty et al., 2004.
- 9 Stierhoff et al., 2012.
- 10 Tutschulte, 1976.



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Red Abalone

Haliotis rufescens

This is the world's largest abalone species. Red abalone are identified by their red-rimmed shells and black bodies. The shell surface is lumpy and generally encrusted, while the interior has colorful iridescence and a prominent muscle scar.

The three to five open respiratory pores are oval and slightly raised above the shell surface. They can be found from the intertidal zone down to rocky reefs 100 feet deep.

POPULATION STATUS

Declined¹

MAXIMUM SIZE

Up to 12 inches³

LIFESPAN

Up to 30 years¹

DEPTH RANGE

Intertidal to 100 feet¹

GEOGRAPHIC RANGE

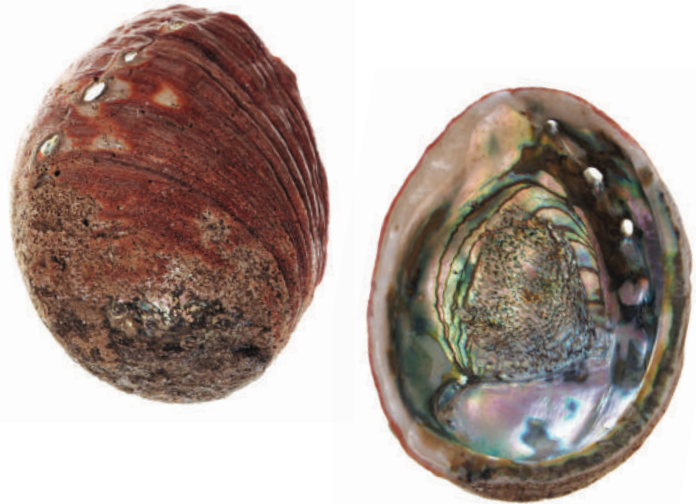
Sunset Bay, OR to Bahia Tortugas, MX including offshore islands.³

SHELL COLORS

Brick red, sometimes banded green or pink. Lumpy texture.²

PREFERRED HABITAT

Intertidal in the northern part of their range, or rocky reefs, boulders, and kelp beds in southerly areas.¹



BODY COLORS

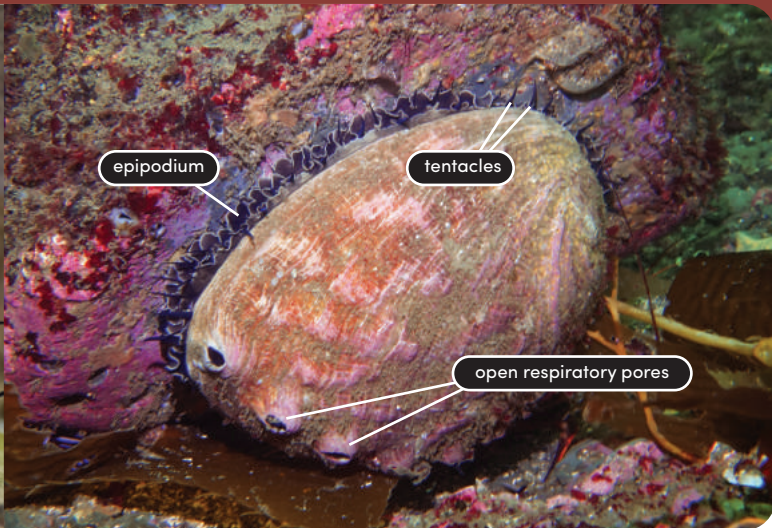
Body, epipodium and tentacles are black, occasionally with white marble-like streaks.³

HARVEST INFORMATION

Wild harvest is prohibited. Recreational fishing is closed through April 2026. Commercial fishing was closed in 1997.⁴ Red abalone are sustainably farmed in California.



An adult red abalone at The Cultured Abalone Farm in Goleta, CA.



An adult red abalone clings to a boulder in 60 ft of water off San Diego, CA.
 Images: Oriana Poindexter, unless noted otherwise.

ASSOCIATED ALGAL SPECIES ¹



GIANT KELP
Macrocystis pyrifera



FEATHER BOA KELP
Laminaria farlowii



BULL KELP
Nereocystis leutkeana
 Image: Dwayne Meadows, NOAA/NMFS/OPR



ELK KELP
Pelagophycus porra
 Image: U.S. National Park Service.



SEA LETTUCE
Ulva spp.
 Image: NOAA Tech Memo NMFS-AFSC-389

REFERENCES

- 1 CA Dept of Fish & Game, Abalone Recovery & Mgmt Plan, 2005.
 2 Cox, 1962. 3 Geiger & Owen, 2012. 4 CDFW, Red Abalone Draft FMP.



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Flat Abalone

Haliotis walallensis

The flat abalone is one of the least-seen abalone on the Pacific West Coast. Aptly named, this species uses its uniquely flattened profile to hide deep in crevices or underneath boulders.

The shell exterior is variable, red with patterning in blue, green and white. The interior has light pink iridescence and lacks a muscle scar. The four to eight open respiratory pores are oval and slightly raised above the shell surface. Their epipodium has distinctly raised papillae, which are bumpy to the touch.

POPULATION STATUS

Declined ^{1,4}

MAXIMUM SIZE

Up to 7 inches ^{2,3}

LIFESPAN

Unknown

DEPTH RANGE

Subtidal to 70 feet ²

GEOGRAPHIC RANGE

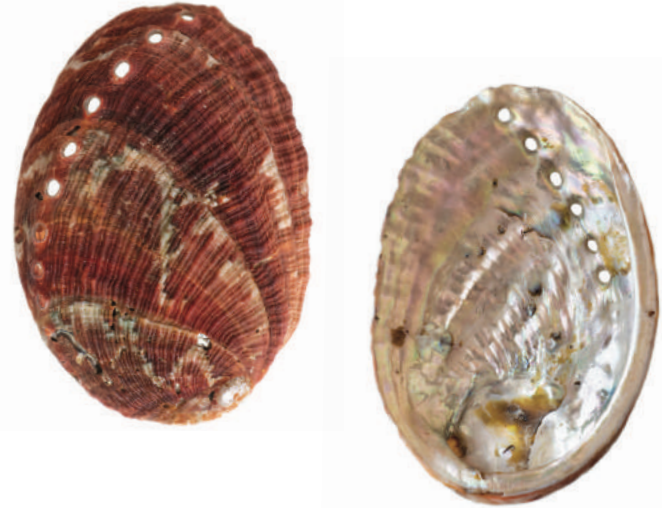
Newport, OR to San Benito Island, Baja California, MX. ³

SHELL DESCRIPTION

Brick red, with blue-green and white mottling or spiral streaks. ³

PREFERRED HABITAT

Subtidal in northern part of range, to 70 feet in southern portion. Found deep in crevices, below boulders. ²

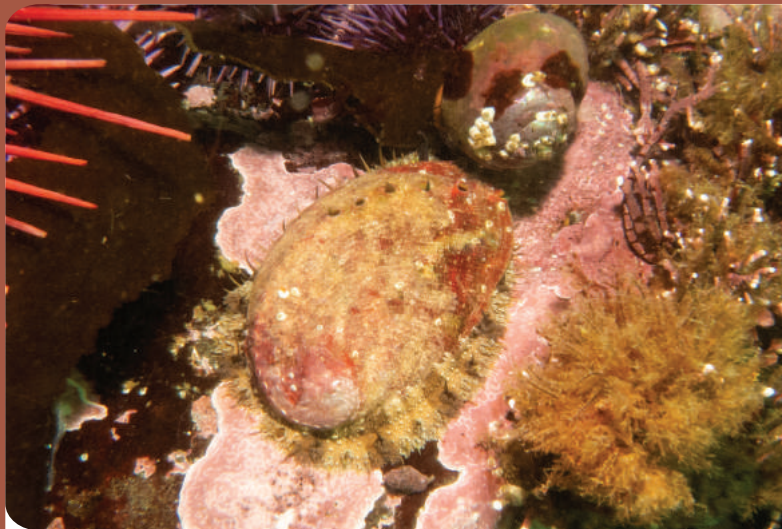


BODY DESCRIPTION

Body mottled yellow & brown. Epipodium alternating yellow & brown, lacelike. Tentacles dark green. To the touch, epipodium is bumpy, covered in raised papillae. ^{2,5}

HARVEST INFORMATION

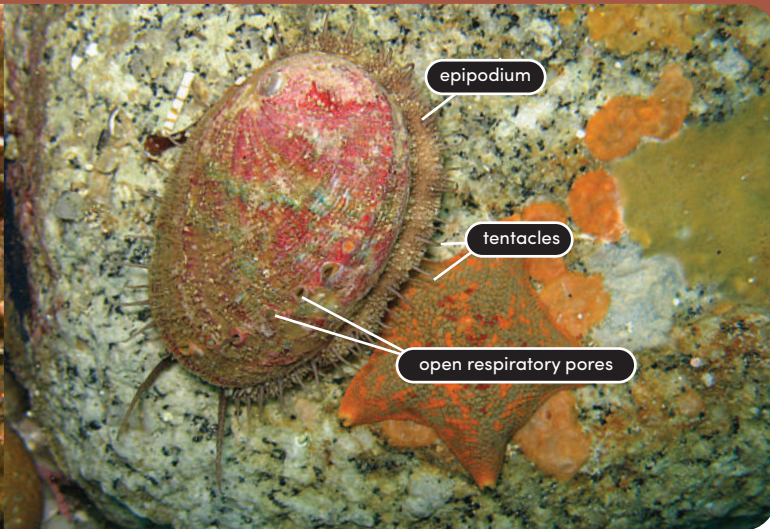
Recreational & commercial wild harvest is prohibited. ¹



A flat abalone on a boulder with crustose coralline algae in Northern CA.

Image: Kevin Joe.

Other Images: Oriana Poindexter, unless noted otherwise.



A flat abalone clings to the underside of a boulder in 40 ft of water. Central California.

Image: Dwayne Dinucci. Originally published in

Abalone: Worldwide Haliotidae (Geiger & Owen, 2012).

ASSOCIATED ALGAL SPECIES



GIANT KELP

Macrocystis pyrifera



BULL KELP

Nereocystis leutkeana



SEA PALM

Postelsia palmaeformis

REFERENCES

- 1 CA Dept of Fish & Game, Abalone Recovery & Mgmt Plan, 2005.
- 2 Cox, 1962. 3 Geiger & Owen, 2012. 4 Rogers-Bennett, 2007.
- 5 Owen et al., 1971.



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