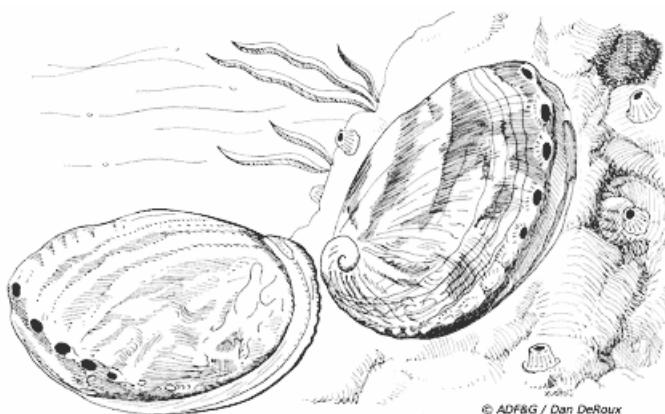


## Abalone

The Alaskan **abalone**, or pinto abalone (*Haliotis kamtschatkana*), is found along the outside coastal waters of southeastern Alaska from Dixon Entrance to Icy Straits. Although there are eight species of abalone along the Pacific west coast, only the pinto abalone is found in Alaska.

The known northern range of pinto abalone extends to Icy Straits, but fishers report that it may also be found west from Cape Spencer to the Yakutat area. Published reports have described the southern range of this species as extending to Point Conception, California.

**General description:** Abalones are marine snails belonging to the genus *Haliotis*, family *Haliotidae*, and are related to clams, oysters, mussels, and squids. The pinto abalone is one of the smallest species of abalone. It can grow to 6 inches in length, but is rarely found longer than 5 1/2 inches. The oval shell contains four to six holes and has an exterior of mottled colors, mostly red, pink or tan, and sea growth which is similar to the surrounding habitat. The shell interior is an iridescent mother-of-pearl which is pure on small abalone, but larger specimens usually have a muscle scar or some discoloration. The shell muscle, or edible portion, is creamy white in the center, mottled orange on the sides, and a deeper orange on the bottom of the foot.



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The epopodium (lateral ridge or fold alongside of the foot), is speckled almost solid brown or black. Tentacles are attached around the entire foot and when the abalone is disturbed, the muscle and foot contract and adhere to the rock with such force that the shell can be broken or torn completely off without releasing the hold of the foot. A small pry, such as a butter knife, works well to dislodge an abalone. The head has, among other organs, two large tentacles, eye stocks, and rasping teeth. The female gonad, when mature, is orange, and the male is brown to black.

**Habitat, food and predators:** Large areas along the outside coast of Southeast Alaska are considered habitat for pinto abalone. It appears that pinto abalone require the influence of the deep ocean swell as they are not found far from the outside coast. They can be found in thick kelp beds and rocky bottoms or among boulders. Abalone can be handpicked during extreme low tides but most are found from low-low water to about minus 30 to 40 feet.

Marine algae, from minute forms to giant bull kelp, are the principle food of abalone. Sea otters are a primary predator of abalone.

**Harvesting as a food fish:** Alaska Natives along the outside coast have long used abalone as a supplemental food, as a trade item, and the shell as decoration on their carvings and ceremonial dress.

From 1964 to 1976, commercial harvest of Alaska abalone was highly variable; in 1977 a more systematic commercial harvest began. Effort increased in 1977, and the peak season for the fishery was 1979-1980, during which nearly 379,000 pounds were harvested. Between 1981 and 1995 commercial harvest steadily declined to about 14,000 pounds in 1995. The commercial abalone fishery in Southeast Alaska was closed in 1996 and has not been opened since. Subsistence and personal use fisheries remain open. Fishers interested in harvesting abalone for subsistence or personal use should consult the regulation books available at Alaska Department of Fish and Game (ADF&G) offices.

Abalone, affectionately called "abs," are considered a gourmet food and are highly esteemed by those who relish their distinct flavor. The pinto abalone, being of small size, is especially tender and has a delicate flavor all its own.

**Research and conservation:** Very little research has been done on the pinto abalone in Alaska. Research on life history, abundance, and distribution is especially needed. In several samples of abalone collected by ADF&G from Sitka Sound and from the islands on the outside of Prince of Wales Island in Southeast Alaska, it was found that:

- 59.4 to 89.7 percent of the abalone above 3 inches in length were between 3 and 5 inches in length.
- Recovery of abalone meat is 42.1 to 44.4 percent live weight.
- There is very little difference between sexes in regard to average size and meat recovery.
- The gonad appears to become sexually mature at 2 to 2 1/2 inches in length.

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