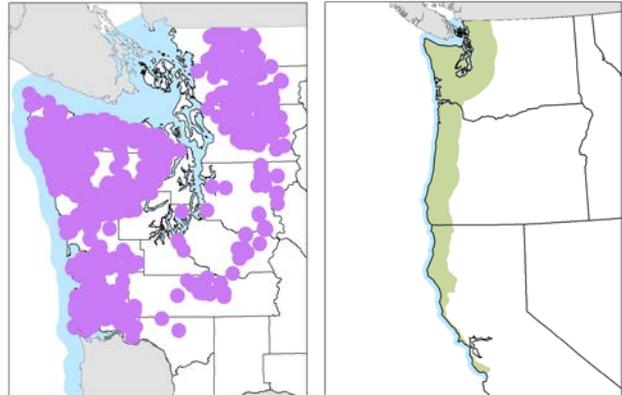




Photo credit: A Barna



Washington

Rangewide

**STATUS: THREATENED**  
**CRITICAL HABITAT: DESIGNATED**

Marbled murrelet potentially occurs in these Washington counties: Clallam, Kitsap, Jefferson, Grays Harbor, and Pacific. Whatcom, Skagit, Snohomish, King, Pierce, Lewis, Thurston, Mason, Wahkiakum, Cowlitz

*(Maps may reflect historical as well as recent sightings)*

The Washington, Oregon, and California population of the marbled murrelet was federally listed as threatened in 1992. Critical habitat was designated in 1996.

## ***Current and Historical Status***

The range of the marbled murrelet, *Brachyramphus marmoratus*, is defined by breeding and wintering areas that extend from the northern terminus of Bristol Bay, Alaska, to the southern terminus of Monterey Bay in central California. Rangewide, 91% of the marbled murrelet population occurs in Alaska, 7% in British Columbia, and 2% in the listed range. Genetic and ecological differences suggest that at least 3 primary populations exist: (1) Aleutian Islands; (2) Alaska Peninsula to Puget Sound; and (3) western Washington to California.

The listed portion of the species' range extends from the Canadian border south to central California. Historical quantitative information is limited, however it is strongly suspected that declines in the listed range, coincide with logging activities (1850-1980). The population is expected to continue to decline over the next 40 years. It is unlikely that population numbers will increase rapidly due to low reproductive rates and the continued loss of nesting habitat.

Currently, the population within the listed range is estimated to be approximately 21,000 marbled murrelets. This estimate is based on at-sea surveys conducted during the breeding season. In Washington, this species occurs in the greatest numbers in the Puget Sound and Strait of Juan de Fuca. In 2007, the Washington population was estimated to be approximately 8,500 birds.

## ***Description and Life History***

The marbled murrelet is a small, robin-sized, diving seabird that spends the majority of its time on the ocean (> 90%), resting and feeding, but flies inland to nest in old growth forest stands. Sexual maturity is reached at age 2 or 3 of an average 15-year lifespan. Marbled murrelets nest from April to mid September. Unlike most seabirds, murrelets are solitary breeders and appear to form strong pair bonds. A female generally lays a single egg on a large limb, then both adults incubate the egg in alternating 24-hour shifts for approximately 30 days. After hatching, the chick is left on its own except when adults bring food (fish), generally near dawn and dusk. Young fledge from the nest in about 28 days and appear to fly directly to the sea. Marbled murrelets have a naturally low reproductive rate; only one egg per nest is laid and nesting may not occur every year.

## ***Habitat***

Marbled murrelets nest inland in forests that are generally characterized by large trees with large branches or deformities for use as nest platforms. Murrelets nest in stands varying in size from several acres to thousands of acres. However, larger, unfragmented stands of old growth appear to be the highest quality habitat. Nesting stands are dominated by mixed conifer in Oregon and Washington and by old-growth redwoods in California.

Marbled murrelets are usually found within 5 miles (8 kilometers) from shore and in water less than 60 meters deep. In general, birds occur closer to shore in exposed coastal areas and farther offshore in protected coastal areas. Throughout their range, murrelets are opportunistic feeders and utilize prey of diverse sizes and species. In general, the main prey items include small schooling fish, such as Pacific sand lance (*Ammodytes hexapterus*), northern anchovy (*Engraulis mordax*), immature Pacific herring (*Clupea harengus*), capelin (*Mallotus villosus*), Pacific sardine (*Sardinops sagax*), juvenile rockfishes (*Sebastes* spp.) and surf smelt (Osmeridae), and large pelagic crustaceans, such as squid (*Loligo* spp.), euphausiids, mysid shrimp, and large pelagic amphipods.

## ***Reasons for Decline***

The primary cause of marbled murrelet population decline is the loss and modification of nesting habitat through commercial timber harvests, human-induced fires, and land conversions, and to a lesser degree, through natural causes such as wild fires and wind storms. Additional causes of decline include oil spills, gill-net fishing, marine pollution, and predation.

## ***Conservation Efforts***

Areas of critical habitat have been designated within the three-state area to protect habitat and promote the recovery of the species. These areas include approximately 3 million acres of federal lands and almost one million acres of state, county, city and private lands. Over the next 50 to 100 years, the protected areas on federal lands should provide for an increase in suitable nesting habitat. In 1997, the Fish and Wildlife Service approved a recovery plan for the marbled murrelet that specified actions necessary to halt the decline of the species. Nine Habitat Conservation Plans (HCPs) have been implemented since the 1992 listing; seven in Washington, one in Oregon, and one in California. The reduced use of gill-nets in Washington's coastal waters is believed to have reduced mortality. In northern California, gill-net fishing has been prohibited or has not occurred for many decades. In central California (Zone 6 and farther south), gill-net fishing was prohibited in 2002.

A 5-year review was completed for this species in 2009.

## ***References and Links***

[12-Month Finding on a Petition to Delist the Marbled Murrelet 2010](#)

[USFWS 1992 Final Listing Rule](#)

[Ecology and Conservation of the Marbled Murrelet 1995](#)

[5-Year Status Review 2009](#)

[5-Year Status Review 2004](#)

[USFWS Recovery Plan 1997](#)

[Northwest Forest Plan's Monitoring and Status Reports](#)

[Methods for Surveying Marbled Murrelets in Forests 2003](#)

[Status of Marbled Murrelet in Alaska and British Columbia 2007](#)

[Pacific Region Endangered Species](#)

[USFWS Threatened and Endangered Species Profile](#)

[NWFP Interagency Monitoring Program](#)

[Pacific Southwest Research Center](#)

[Audubon Society](#)

Critical Habitat:

[Final revised critical habitat 2011](#)

[Comparison and Overlap of Northern Spotted Owl and Marbled Murrelet Critical Habitat](#)

[USFWS Critical Habitat Mapping \(ECOS\)](#)