

Marbled Murrelet Fact Sheet

Marbled Murrelet – Brachyramphus marmoratus

Listing status: Federally listed threatened species in Washington, Oregon, and California

Marbled murrelets are pigeon-sized seabirds that live along the Pacific coast of North America from California to Alaska. The marbled murrelet is a secretive seabird that nests in older forests and forages in nearby marine waters. They are adapted for both underwater (to pursue prey) and aerial flights. In Washington, they have been seen up to 50 miles from marine waters but primarily use suitable habitat within 40 miles of the coast.

Washington's populations occur mainly in the northern Puget Sound, the Strait of Juan de Fuca, and along the northern Pacific Coast. While at-sea distribution varies over time and location, there is a general shift in



Marbled murrelet with winter plumage. Photo: Rich MacIntosh

winter abundance eastward from the Strait of Juan de Fuca to the Puget Sound and the San Juan Islands. In fall and winter, British Columbia's populations move south to the Puget Sound.



Breeding plumage. Photo: Aaron Barna



Juvenile (hatch-year) marbled murrelet just before fledging from nest.

Marbled Murrelet Plumage and Breeding Season

Males and females have identical plumage that varies seasonally. When breeding, they have a dark upper body with rust-color tips on the back feathers, and are heavily mottled on the lower body. This "marbled" pattern is thought to protect breeding birds from detection by predators in forested habitats. In winter, adults have a brown-grey upper body, and white lower body. Juvenile and adult birds only can be distinguished from each other for a brief period in late summer and early fall.

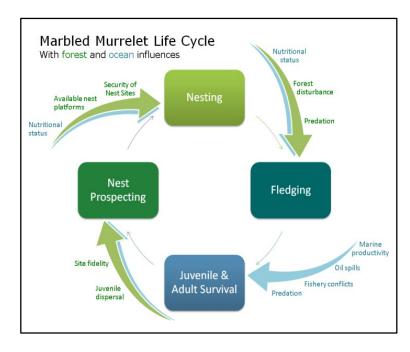
Life Cycle

Marbled murrelets nest inland, mainly on broad mossy 'platform' limbs of large conifer trees. Each female lays a single egg, cared for by both parents. Parents take turns incubating the egg, exchanging places in the pre-dawn darkness. Egg incubation lasts for about 30 days. After hatching, the chick is left largely unattended. For about 30 days, the parents provide the nestling with fish, mainly at dawn and dusk. There is no evidence of parental care during or after fledging. On their first flight, fledgling murrelets must fly from the forest to marine waters and then fend for themselves.

Habitat Use

Marbled murrelets have the unique behavior of foraging in marine waters and flying inland to nest in large conifer trees — on large, broad, mossy horizontal branches or other suitable nesting platforms, with a preference for mature and old forest in Washington, Oregon, and California.

DNR's 1997 State Trust Lands Habitat Conservation Plan (1997 HCP) defines a suitable nesting platform as a horizontal limb or tree structure at least 7 inches in diameter and a minimum of 50 feet above the ground. Nesting sites are usually found in old forests of 175 to 600 years of age. While nesting habitat is generally in older forests, nests have been found in younger



forest stands that have remnant old trees, and also in trees as young as 80 years that have developed platforms from damage by mistletoe, storms, or other causes.

Marbled murrelets prey primarily on near-shore forage such as Pacific herring, northern anchovy, Pacific sand lance, and capelin. Fish comprise 60 to 100 percent of their diet. During the breeding season, marbled murrelets have been observed feeding on juvenile salmon in freshwater lakes, although typically they are found offshore of areas with abundant nesting habitat. Other physical and biological marine processes may affect prey concentrations, which can affect murrelet at-sea distribution—including water upwelling, outflow of large rivers, shelves at mouths of inlets, shallow banks, rip currents, tidal eddies, and kelp beds. Fewer birds are found further from the shoreline, and juvenile birds tend to remain closer to shore.

Marbled Murrelet Long-term Conservation Strategy

The Department of Natural Resources and US Fish and Wildlife Service (USFWS) are jointly developing a marbled murrelet long-term conservation strategy to amend the 1997 HCP. When the plan was adopted in 1997, managers had insufficient information to create a long-term conservation strategy. Marbled murrelet ecology and habitat use were not well understood, particularly in relation to nesting habitat in DNR-managed forests. The 1997 HCP specified an interim strategy to be implemented while we conducted extensive surveys and research to support development of a long-term conservation strategy.

Eight alternative strategies have been analyzed in the Revised Draft Environmental Impact Statement for the six Western Washington HCP Planning Units: Straits, Olympic Experimental State Forest, South Coast, Columbia, South Puget and North Puget. The final strategy will help conserve marbled murrelet habitat on state trust lands in western Washington, while allowing for timber harvest and other activities – activities that earn revenue for public schools, counties and other trust beneficiaries. With the strategy, DNR is committed to meeting the fiduciary responsibilities to trust beneficiaries, and working with USFWS to support marbled murrelet conservation.

For more information about the marbled murrelet and the long-term conservation strategy for DNR-managed lands visit:

http://www.dnr.wa.gov/marbledmurrelet

