by Walter Briggs and Carolyn Lackey

Juvenile marbled murrelet at its nest Photo by John and Karen Hollingsworth

Navy Saves Old Growth for Murrelets

hanks to the Navy, a nesting colony of marbled murrelets (*Brachyramphus marmoratus*), a bird listed as threatened in the Pacific Northwest, has been protected at the Jim Creek Naval Radio Station in Snohomish County, Washington. This installation, situated on approximately 4,800 acres (1,950 hectares) of land, provides communication support for the Pacific Naval Fleet and habitat for the rare seabird.

The station's marbled murrelet nesting colony is located in approximately 250 acres (100 ha) of old growth forest on land the Navy purchased in 1950. To reduce acquisition costs at that time, the Navy bought the land but not the timber. In 1992,



through the Department of Defense (DoD) Legacy Resource Management Program, the Navy purchased the remaining timber in this old growth forest to preserve it for the future. In 1995, the U.S. Fish and Wildlife Service recognized the importance of this forest by designating it as critical habitat for the marbled murrelet.

The marbled murrelet, a bird about the size of a robin, is the only seabird to nest in old growth forest. Unusual characteristics, such as its flight process, makes it very unique when compared to other seabirds. The murrelet has small, pointed wings that have little drag underwater and allow the bird to "fly" beneath the surface to catch fish. In the air, however, the small size of the wings reduces their lift, making it necessary for the bird to fly with a very rapid wing beat just to stay aloft. Since the size of its wings does not allow it to create an air cushion to slow itself down like most other birds, the murrelet goes into a dive, turns upside down, and stalls when it wants to land. At the moment it stalls in flight, it must be located next to a tree limb that is at least 7 inches (17 centimeters) in diameter in order to land. Marbled murrelets do not build nests: instead, they make shallow depressions in the moss that grows on large, old limbs, and lay a single egg.

The marbled murrelet was listed as threatened in 1992. The next year, natural resources personnel at the installation began conducting surveys for this elusive bird. Because murrelets are so difficult to detect, the use of radar detection was recently established to complement survey techniques. Survey results currently reveal approximately 12 birds (six pairs) nesting in the old growth forest on the east side of Lower Twin Lake at Jim Creek Naval Radio Station.

Military training occurs in this old growth forest but is limited to navigation/ orientation courses where only foot traffic is allowed. All proposed projects at the station are reviewed and must pass a site approval process to identify potential impacts on the environment. In order to



avoid a conflict with listed species and their habitat, project locations and scopes of work may be adjusted. For example, a planned hiking trail originally had been routed through occupied murrelet habitat. However, to minimize disturbance to the species, the trail was rerouted to a more suitable area.

Marbled murrelets have continuously nested in this old growth forest since they were first detected there in 1993, and the Navy's conservation efforts will allow the rare birds to continue as an integral part of this ecosystem.

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