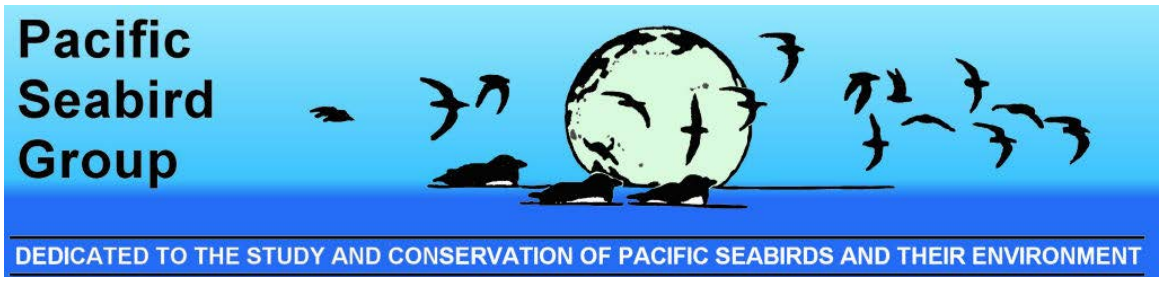

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Memorandum

Date: 26 August 2013

To: **See distribution list at the end**

From: Doug Forsell, Chair, Pacific Seabird Group
Dave Huber, Co-chair, Marbled Murrelet Technical Committee
Kim Nelson, Co-chair, Marbled Murrelet Technical Committee

Re: Using Tree Climbing to Identify Marbled Murrelet Nests and Introduction of PSG's Marbled Murrelet Nest Identification Training and Certification Protocol for Tree Climbers

The purpose of this memorandum is to address several important issues about using tree climbing to locate Marbled Murrelet nests. The Pacific Seabird Group (PSG) originally addressed this issue in a letter in 2002 (Harfenist et al. 2002). Since the issuance of that letter, PSG has identified the need for further guidance and clarification.

Tree climbing has successfully been used as a technique for finding old, recent, and active Marbled Murrelet nests in the Pacific Northwest (Nelson et al. 1994, Manley 1999, Meekins and Hamer 1999, Nelson and Wilson 2002), but **there is no evidence that tree climbing is an effective tool for determining the absence of nests given their cryptic nature**. The success rate of using tree climbing to find murrelet nests can vary with tree species, quantity and type of limb substrate (e.g., vascular and non-vascular epiphytes, leaf/needle litter and humus, bare bark on limb depressions, etc.), time of year, age of the nest, duration of the nesting attempt, exposure of the nest platform, and experience of the climber. Though old nests on substrates composed predominantly of bryophytes ("moss") can sometimes be found many years after use (e.g., Burger et al. 2009), such nests can become difficult to detect in a relatively short period of time due to weathering or epiphyte growth.

Attempts to use tree climbing to locate nests can have adverse impacts on Marbled Murrelets and their habitat. Direct impacts to active nests may occur if tree climbing is

undertaken during the breeding season. These impacts can result from disturbance associated with the presence of tree climbers in the canopy, as well as with the tree-rigging process itself. Adverse impacts on murrelet nesting habitat can also result from disturbance to epiphyte communities and other canopy substrates during the tree rigging and searching processes during the non-nesting season.

Because of potential impacts to murrelets and their breeding habitat, and to minimize the risk of false negatives, PSG recommends that tree climbing only be used as a management tool in very limited cases. Such cases include highway widening projects or proposed activities in younger aged stands that have very few, widely dispersed or isolated remnant mature trees with suitable nest platforms. Because it is difficult, if not impossible, to locate old or failed nests in trees without moss cover on the limbs, managers should limit climbing to trees with suitable platforms that have an abundance of moss. To avoid disturbance during the nesting season and to maximize the discovery of recently used nests, we recommend that climbing occur immediately following the end of the breeding season (after 15 September).

Tree climbing should not be used as a management tool (i.e., to determine a lack of occupancy in conjunction with timber sales) in areas of contiguous nesting habitat, where there are more than a few trees, or when the trees occur in areas that are adjacent to other suitable murrelet habitat. PSG continues to recommend that the inland survey protocol (Evans Mack et al. 2003) be implemented in all suitable or potential murrelet habitat. Permission for the use of tree climbing in these limited cases should be granted only on a case-by-case basis involving consultation with the U.S. Fish and Wildlife Service and state wildlife agencies.

The PSG Marbled Murrelet Technical Committee (MMTC) is offering a standardized course and certification protocol that will ensure that tree climbers certified by the MMTC can identify and document murrelet nests while utilizing soft tree climbing techniques. For details, see the attached PSG "Marbled Murrelet Nest Identification Training and Certification Protocol for Tree Climbers," dated August 2013.

If you have questions or comments concerning our recommendations, please contact the MMTC Co-Coordinators Dave Huber at dhuber@q.com or Kim Nelson at nelsonsk@onid.orst.edu, or murrelet researchers Brett Lovelace at brett@jblovelace.com and Sean McAllister at sean@madriverbio.com.

Literature Cited

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Distribution List

U.S. Fish and Wildlife Service, Regions 1 and 8;
U.S. Forest Service, Regions 5 and 6;
Bureau of Land Management, OR/WA and CA state offices;
Oregon Department of Fish and Wildlife;
Oregon Department of Forestry;
Oregon Parks and Recreation Department;
Oregon Department of Transportation;
Washington Department of Fish and Wildlife;
Washington Department of Natural Resources;
Washington State Parks and Recreation Commission;
Washington Department of Transportation;
Olympic National Park;
Mt. Rainier National Park;
Redwood National Park;
California Department of Fish and Wildlife;
California Department of Forestry;
California Department of Transportation;
California Department of Parks and Recreation