

Snag Sign Study

Snags (i.e., standing dead trees) are valuable to wildlife. In the Pacific Northwest, between 25 and 30 percent of terrestrial wildlife (>100 species) use snags, including Federally listed and Washington State sensitive species such as Northern Spotted Owl (*Strix occidentalis*) and White-headed Woodpecker (*Dryobates albolarvatus*). Research indicates that road access and snag felling for home and recreational firewood gathering can limit habitat for deadwood dependent species and should be a major concern where management of these species is a priority. The Snag Conservation Working Group and Yakima Valley Audubon Society initiated a study in the Wenas area northwest of Yakima, an area that has a lot of recreational use, to determine if putting signs on snags will reduce or eliminate the cutting of snags; an activity that is illegal on State owned lands.

Full Description:

Along the east slope of the Cascades, the Washington Department of Natural Resources (WDNR) and Washington Department of Fish and Wildlife (WDFW) prohibit snag felling by the public. Despite this restriction, snags are routinely and illegally felled for firewood on state owned lands. One area in particular where illegally cutting snags for firewood is an ongoing problem is in the Wenas. The Wenas area has a high road density, gentle topography, a long history of timber management, and is heavily utilized for outdoor recreation (camping, hunting, horseback riding, riding ATVs, birdwatching, etc.). The combination of these factors has resulted in this area having a high occurrence of snags being cut for firewood. Illegal snag cutting, in combination with a long history of timber management, has resulted in many areas of the Wenas being snag deficient, or if snags are present, many are small [≤ 12 -inch diameter at breast height (DBH)] or extremely old and heavily decayed; making them less suitable for use as nesting substrates by cavity-excavators (e.g., woodpeckers).

An important tool to use in the conservation of snags are signs. Signs have been used to mark wildlife habitat trees by numerous land management agencies such as WDNR, WDFW, and U.S. Forest Service. However, because of the time and staff required to put up signs, along with liability issues of putting signs on snags during timber management activities, signs are rarely used. This is unfortunate as signs convey that snags are valuable habitat components that should be left on the landscape, especially in areas where falling them is illegal. Unfortunately, there is no consensus agreement that signs actually work in preventing snags from being cut. To address this, we began a 3-year study in the fall of 2021 on WDNR owned land within the Wenas area to assess the effectiveness of signs at protecting snags from illegal firewood cutting. We marked the location of 151 snags within 250 ft. of a green dot road and randomly selected 83 of them to put signs on (see picture above for an example). We will monitor these snags from 2022-2024 in order to determine the cutting rates of snags with signs compared to those without.