



File Code: 2670

Date: April 6, 2005

Route To:

Subject: Bear Knoll Wildlife BE/BA

To: Daina Bambe

The status of threatened, endangered, and proposed species; USFS Region 6 sensitive species that may occur within the Hood River RD:

Table 1

WILDLIFE SURVEY RESULTS			
Species	Habitat	Surveys	Presence
Threatened, Endangered or Proposed			
Bald eagle (<i>Haliaeetus leucocephalus</i>)	N ¹	-	-
Northern spotted owl (<i>Strix occidentalis caurina</i>)	Y ¹	N ²	N ¹
Canada lynx (<i>Lynx canadensis</i>)	N ¹	Y ¹	N ¹
R6 Sensitive Species			
Oregon Slender salamander (<i>Batrachoseps wrighti</i>)	Y	Y	N
Larch Mountain salamander (<i>Plethodon larselii</i>)	Y	Y	N
Cope's giant salamander (<i>Dicamptodon copei</i>)	N	-	-
Cascade torrent salamander (<i>Rhyacotriton cascadae</i>)	N	-	-
Oregon spotted frog (<i>Rana pretiosa</i>)	N	-	-
Painted turtle (<i>Chrysemys picta</i>)	N	-	-
Northwestern pond turtle (<i>Clemmys marmorata marmorata</i>)	N	-	-
Baird's shrew (<i>Sorex bairdii permiliensis</i>)	N	-	-
Pacific fringe-tailed bat (<i>Myotis thysanodes vespertinus</i>)	N	-	-
Wolverine (<i>Gulo gulo luteus</i>)	Y ¹	Y ¹	-
Pacific fisher (<i>Martes pennanti</i>)	Y ¹	Y	N
Horned grebe (<i>Podiceps auritus</i>)	N	-	-
Bufflehead (<i>Bucephala albeola</i>)	N	-	-
Harlequin duck (<i>Histrionicus histrionicus</i>)	N	-	-
Peregrine falcon (<i>Falco peregrinus anatum</i>)	N	-	-
Gray flycatcher (<i>Empidonax righti</i>)	N	-	-
Puget oregonium (<i>Cryptomastix devia</i>)	Y	Y	N
Columbia oregonium (<i>Cryptomastix hendersoni</i>)	Y	Y	Y
Dalles sideband (<i>Monadenia fidelis minor</i>)	Y	Y	N
Crater Lake tightcoil (<i>Pristiloma arcticum crateris</i>)	Y	Y	N
Evening fieldslug (<i>Deroceras hesperium</i>)	Y	Y	N

1. See narrative.

2. The last surveys were conducted in 1993. In accordance with the NWFPlan, additional surveys are not needed in this area.



Table 2 -- Effects for T,E and S Wildlife Species			
Species	Alt. I	Alt. II	Alt. III
<i>Threatened and Endangered Species</i>			
Bald Eagle	No Effect	No Effect	No Effect
Northern Spotted Owl	MA-NLTAA	MA-NLTAA	MA-NLTAA
Canada Lynx	No Effect	No Effect	No Effect
<i>R6 Sensitive Species</i>			
Larch Mountain Salamander	No Impact	No Impact	No Impact
Oregon Slender Salamander	No impact	No Impact	No Impact
Pacific Fringe-tailed Bat	No Impact	No impact	No impact
Wolverine	No Impact	MII	MII
Pacific fisher	No Impact	No Impact	No Impact
Crater Lake tightcoil	No Impact	No Impact	No Impact
Puget oregonium	No Impact	No Impact	No Impact
Columbia oregonium	No Impact	No Impact	No Impact
Dalles sideband	No Impact	No Impact	No impact
Evening fieldslug	No Impact	No impact	No impact

MEILTAA—May Affect and Is Likely To Adversely Affect

ME-NLTAA—May Affect-Not Likely To Adversely Affect

MII- May Impact Individuals, but are not likely to impact populations, nor contribute to a potential loss of viability of the species

Threatened, Endangered, Sensitive, and Proposed Species

The following threatened, endangered, proposed, or sensitive species are known or suspected to occur on the Hood River Ranger District.

Existing Condition

Bald eagle

There is no potential habitat within or adjacent to the planning area, nor have bald eagles been observed in the area. The closest known eagle nest site is south of Clear Lake. There would be **no effect** to bald eagles with any of the alternatives as habitat is not present.

Northern spotted owl

There are two 100 ac LSRs within the planning area. Neither one is proposed to have any treatment within them. Both 100 ac LSRs are associated with owl pairs. Surveys in the Bear Paw section of the planning area were last conducted in 1990. In 1998, two owls (*Strix* sp.) were seen and heard. Indications were that these were barred owls. Verification as to exact species was not obtained. Surveys in the Little Knoll portion of the planning area were last conducted in

1994. Suitable nesting, roosting, and foraging habitat is present within all of the late-seral/cathedral stands. None of the stands proposed for commercial thinning are considered nesting, roosting and foraging habitat. These stands are dispersal habitat.

The Bear Knoll planning area is not part of any designated critical habitat.

In the planning area, there appear to be three main corridors of late-seral habitat: Frog Creek, made up of stands immediately adjacent to Frog Creek and its associated riparian reserve; Hwy 26, the stands immediately adjacent to the highway; and White River, those stands leading from upper elevations of the river drainage and down to stands adjacent to it. The Frog Creek corridor is perhaps the most "valuable" one because of the current condition of the stands (larger stand of old growth habitat) and its combination of upland and riparian habitat. Highway 26 corridor is likely the least "valuable" one because of the fact that Hwy 26 is centered through it. It is also narrower (little to no interior habitat conditions), and already receives various treatments by noise disturbance from constant traffic and hazard tree removal as part of highway maintenance. The White River corridor has much fewer acres of old-growth habitat; most of it being made up of mature stem exclusion stands. Regardless of their respective values, the late-seral stands associated with these corridors are valuable to the planning area and the watershed in providing for populations of the species that depend on these habitats. This is especially relevant giving both past harvest and current proposed harvest within this watershed.

The White River LSR Assessment and Landscape Analysis and Design (LAD) identified the late-seral stands in the Little Knoll and Bear Paw Landscape Units (LUs; these are the two that make up the Bear Knoll planning area) as connections to other habitat throughout the watershed. Many of these stands are focused on riparian reserves (with maximum widths of 300 ft on each side) and along roads (not an optimal location for habitat). The Bear Paw LU was identified as important for late-seral dependent species with small home range. As a desired future condition, these late-seral stands are to contribute to the connectivity of the watershed and between LSRs. Little Knoll LU was identified as a landscape barrier to late-seral habitat dependent species (IV-47), and is also within two areas of concern for connectivity as identified by the LAD.

As a standard, at least 15% of a watershed will be considered late-seral or old growth habitat. Current estimates are that the White River watershed, as a whole, has approximately 21 % of its land base in an old-growth/late-seral condition. This planning area currently has 1268 acres of late seral habitat (35% of planning area). These estimates incorporate stands determined to be late seral multistory and those determined to be cathedral.

Direct and Indirect Effects of Alternative 1 - No Action Alternative

The No Action alternative **may affect, but is not likely to adversely affect**. Opportunities for thinning and "grooming" mature stem exclusion stands may be lost. Without thinning, the development of desired stand and tree characteristics could be delayed. Open road densities could continue to contribute to wildlife harassment.

Direct and Indirect Effects of Alternative 2

Under Alternative 2 approximately 531 acres of dispersal habitat would be degraded. The thinning of 531 ac of dispersal habitat in Alternative 2 (roughly 25% of the dispersal habitat in the planning area) would reduce crown closure to approximately 40% but still function as dispersal habitat post harvest. Total dispersal habitat for the planning area would be 2078 acres (59%).

Direct and Indirect Effects of Alternative 3

Alternative 3 would degrade approximately 289 acres of dispersal habitat (see Table xx). Under Alternative 3 the effects are similar to Alternative 2 but would only alter 289 acres of dispersal habitat (approximately 14% of the dispersal habitat in the planning area). A total of 2078 acres (59% of the planning area) of dispersal habitat would remain post harvest.

Actions Common to Both Action Alternatives

For the most part, both 100 ac LSRs will not be entered for harvest. LSR #2077 however will have a road that bisects it reopened to access the harvest units directly to the south of it. Upon completion of the harvest, a commercial thinning, the road would be closed to all vehicular access. Additional mitigation for the LSRs and unsurveyed suitable habitat will be a seasonal restriction (March 1-July 15) on all harvest operations (including mechanical noxious weed control) within 65 yards (chainsaw noise) of the stands (Alternative 2 = 146, 160, 164, 225) (Alternative 3 = 160, 164, 211) associated with these LSRs. None of the proposed harvest stands are within an area of concern.

Both action alternatives **may affect, but is not likely to adversely affect** spotted owls. The dispersal habitat would be degraded but still function as dispersal habitat post harvest. The openings created could provide opportunities for competitors or predators (e.g. barred owl) to spotted owls. There would be **no effect** on critical spotted owl habitat because this planning area is not located in a critical habitat unit (CHU). These effects and the associated take of the owl pairs was consulted on with the US Fish and Wildlife Service (USFWS) under the FY 2003-2004 Habitat Modification Biological Assessment in the Willamette Province (USFWS reference: 1-7-03-F-0008). This project was reconsulted on in the FY 2005-2006 Habitat Modification Biological Assessment in the Willamette Province (USFWS reference: 1-7-05-F-0228) because the decision memo was not signed by December 31, 2004. The USFWS concurred with the determination and as a part of the prudent measures, terms and conditions, the earlier mentioned seasonal restriction for spotted owls and design of harvest units to maintain an average of 40% canopy cover (light to moderate thinning) was specified. The conclusion by USF&WS is that light to moderate thinning would **may affect, but is not likely to adversely affect** spotted owls. The competition with barred owl as a greater threat to spotted owls than previously anticipated was also addressed in this BO. The causes of this barred owl competition are being researched.

The *Status and trends in Demography of Northern Spotted Owls* (Foresman et.al., 2004) states that the spotted owl numbers have fallen by roughly half over the past decade in parts of

Washington and Oregon’s Warm Springs Reservation (WSR), and they have dwindled by nearly a quarter in sections of Oregon’s Coast and cascade ranges. In only a few areas are owls holding their own. This report does not conclude the specific reasons why the owls are declining except in a few instances. The reason for the decline on the WSR study area is probably loss of habitat, as there has been continued logging of owl territories. This report would not change the effects determination for the Bear Knoll Planning Area. The dispersal habitat would be degraded but not lost. Spotted owls would still be able to disperse to NRF habitat and no NRF habitat would be lost with this proposed action.

Table 7 Changes in Levels of Spotted Owl (STOC) Habitat in Acres

STOC Habitat	Existing Conditions	Alternative 1 No Action	Alternative 2	Alternative 3
Nesting, Roosting, Foraging (NRF)	1416	1416	1416	1416
Removed				
Degraded				
Downgraded				
Dispersal	662	662	662	662
Removed				
Degrade			531	289

** No entry in a particular field indicates that no acres will be affected by that description (e.g., no acres of NRF habitat will be removed as a result of the No Action Alternative).

Lynx

Existing Condition Canada lynx: Canada lynx and its habitat are not considered present on the Mt. Hood National Forest. The Canada lynx was listed as a threatened species in January 2000. Higher elevation areas of the Mt. Hood National Forest and the Cascade Mt. Range of Oregon with the best potential of being occupied by lynx have been surveyed for lynx using a hair gathering and DNA analysis technique since 1998. There have been no confirmed samples of lynx hair found in Oregon. Sampling did not contain lynx hair except for samples collected in known lynx habitat, in northern Washington. The confirmed lynx samples collected from lynx habitat in Washington support the suitability of the sampling techniques.

Dense thickets associated with snowshoe hare habitat are absent or very limited. Lynx habitat as described in the Lynx Conservation Assessment and Strategy (LCAS) and subsequent

interpretation is not expected to occur on the Mt. Hood National Forest. The Mt. Hood National Forest (Forest) received new habitat mapping directions from the Lynx Steering Committee and the Lynx Biology Team addressing Lynx Habitat Mapping Direction in Regions 1, 2, 4, 6, and 9. The new direction identified subalpine fir plant associations as the primary vegetation component from which lynx habitat and lynx analysis units would be delineated. The Mt. Hood National Forest ran this analysis based on existing plant association groups and identified approximately 1270 acres of subalpine fir plant associations primarily on the east side of the Forest. The LCAS identified a need for at least 10 square miles (6400 acres) of primary vegetation to warrant delineation of a lynx analysis unit (LAU). *“Based on studies at the southern part of the lynx range in western U.S., it appears that at least 10 square miles of primary vegetation should be present within each LAU to support survival and reproduction”* (page 7-4). Based on the analysis above, the minimum criteria to develop a lynx analysis unit are not met. Therefore, no lynx habitat is mapped on the Forest and there are no lynx analysis units within which to apply the LCAS habitat objectives.

Occasional transient lynx are the most likely occurrence in the Oregon Cascades, and even that is unlikely because of the relationship to the Columbia River and the major highways that would inhibit dispersal to the south out of Washington. The vast agricultural lands to the east would likely retard much dispersal from potential habitat in the Blue Mountain area and Idaho.

There is **no effect** to lynx or their habitat because they are not expected to occur on the Mt. Hood NF. There is no evidence of Canada lynx or their habitat on the Mt. Hood National Forest (Lynx Effects Determination letter to Wildlife Biologists, Mt. Hood National Forest, December 3, 2003). This project is in compliance with the standard and guideline presented in the “Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, Attachment 1(pages 35 and 36), January 2001”. Without the presence of lynx and without lynx habitat, consultation under section 7(a) (2) of the Endangered Species Act would properly be concluded with a determination of no effect. There will be continued efforts to determine if lynx are present on the Mt. Hood National Forest. If lynx are confirmed on the Forest, they will receive full protection under the Endangered Species Act and consultation with the USFWS will commence if necessary.

Wolverine

Wolverine may move through the area while foraging or dispersing, but no denning habitat is present within or adjacent to the planning area.

Wolverines mainly prey upon deer and elk, and often take advantage of carrion. They do not seem to be limited as much by foraging opportunities as by human disturbance. Wolverines tend to avoid places of high human disturbance (Verts, 1998). The area adjacent to Hwy 26 is not suitable wolverine habitat because of the noise from traffic. It is possible that wolverine will try to cross the highway, but they would not stay in the immediate area. Wolverines are not likely to utilize the area because of recreational traffic through the year. The presence of wolverines on the Mt. Hood National Forest has not been confirmed through these surveys. Winter snow track

surveys, camera bait stations and smoke track plates have been utilized in the past decade to determine carnivore and mustelid presence. No wolverines were found using these survey techniques. A confirmed (ODFW Biologist, 1990) wolverine track in the snow along Oregon State Highway 35 is the only confirmed/documented occurrence on the Mt. Hood N.F. Wolverine presence is suspected because of this documented track sighting.

Effects to Wolverines

Direct and Indirect Effects of Alternative 1 – No action

The no action alternative would not close or obliterate roads. Because of this, this alternative **may impact individuals but would not likely cause a trend towards federal listing of the species.**

Direct and Indirect Effects of Action Alternatives

Similarly the action alternatives would have some impact on an individual's foraging capability or movement through the area as a result of timber harvest. However with provisions to close and obliterate some of the roads, thereby reducing disturbance, then these alternatives **may impact individuals but would not likely cause a trend towards federal listing of the species.**

Wolverines seem to avoid crossing large openings. Maintenance of the corridors, especially the White River and Frog Creek corridors, would provide for movement and dispersal of wolverines in an east/ west and north/south direction.

Pacific fisher

Fisher habitat from a variety of localities within its geographical range commonly is described as widespread, continuous-canopy forests at relatively low elevations (Powell, 1981). Only three specimens of fishers from Oregon have been collected, two from Lane County and one from Douglas County. Fishers are primarily carnivorous. Small and medium-sized forest mammals are the primary prey; porcupines, snowshoe hares, tree squirrels, mice and voles are among the most common preyed upon.

The presence of fisher on the Mt. Hood National Forest has not been confirmed. Winter snow track surveys, camera bait stations and smoke track plates have been utilized in the past decade to determine carnivore and mustelid presence. No fishers were found using these survey techniques.

There would be **no impact** to fishers with any of the alternatives since presence has not been confirmed.

Columbia oregonium

All of the area has been surveyed for the presence of terrestrial mollusks (see sensitive species list). The areas that have been surveyed have documented one individual Columbia oregonium (*Cryptomastix hendersoni*). This site is not located within any of the action alternatives.

There would be **no impact** to Columbia oregonium with any of the alternatives as this site is not located within any of the stands to be harvested.

Larch Mountain salamander

The Larch Mountain salamander is listed as a R6 sensitive species in 2000. Until recently, Larch Mountain salamander habitat has been considered to be shaded talus, usually with a litter and duff covering which is not present in the planning area, therefore no surveys had been conducted in the planning area before the fall of 2000. However, surveys north of the Columbia River have found this species within conifer habitat where litter, duff, and moisture conditions are sufficient. The surveyors indicated that even in those conditions, the substrate beneath the litter/duff tended to be an open, porous rocky material with talus like characteristics. These conditions do not occur within any of the areas proposed for treatment in the planning area. Soil conditions are relatively tight with virtually no interstitial spaces suitable for salamanders to descend into as the summer heats and dries. Suitable moisture conditions in late summer for any salamander species will most likely be associated with large, decayed, down woody material.

Surveys were conducted in the fall of 2000 in accordance with the October 1999 protocol. No Larch Mountain salamanders were found.

There would be **no impact** to this species as no salamanders were located during the surveys.

Oregon slender salamander

The Oregon slender salamander was listed as a R6 sensitive species in 2000. Oregon slender salamander habitat has variously been described as evergreen forests, older second-growth, and old growth Douglas fir with large numbers of large logs and stumps. It is also characterized as a species mostly associated with the west side of the Cascade Mountains of Oregon, (Amphibians of Washington and Oregon, Leonard, et al 1993 and Amphibians of Oregon, Washington and British Columbia, Corkran and Thoms 1996).

There would be **no impact** to this species as no salamanders were located during the surveys.

/s/ Richard Thurman
Richard Thurman
District Wildlife Biologist
Barlow/Hood River Ranger Districts
Mt. Hood NF