# FORESTPRACTICE NOTES

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# PREFACE

The purpose of this publication is to assist landowners, resource professionals, and the public in understanding of the Oregon Forest Practices Act (FPA) rules for protecting bald eagle nesting sites. The FPA rules apply to commercial forest operations on non-federal forest lands in Oregon. Administrative rules adopted by the Board of Forestry identify the bald eagle as a bird that uses "sensitive bird nesting sites." The site-specific rules are intended to protect nesting bald eagles and their nest trees during forest operations.

# **ABOUT BALD EAGLES**

#### **History of FPA Bald Eagle Protections**

Bald eagles are best known as our national symbol. Bald eagle populations suffered declines prior to the (1970s), primarily due to effects of the pesticide DDT which caused eggshell thinning and nest failure. Habitat loss and direct killing of eagles was also a cause for their decline. Following protection of bald eagles under the Eagle Act, Endangered Species Act, FPA, as well as the ban on use of DDT, eagle populations rebounded. In some areas of Oregon such as the Willamette Valley, populations increased exponentially, and it is now common to see a bald eagle soring across much of Oregon.

The bald eagle was one of the earliest protected species in the nation under federal law. Steep population declines prompted the need to protect the species. Bald eagles were protected under the Bald and Golden Eagle Protection Act (Eagle Act) in 1940 and were one of the first species to be listed under the federal Endangered Species Act (ESA) in 1967. Populations rebounded after the chemical DDT was banned, and the bald eagle was able to be removed from federal endangered species list in 2007. The bald eagle was also listed on Oregon's Endangered Species Act list, but was delisted in 2012.



Moore Northwest Images

# **BALD EAGLES**

Prior to 2017, bald eagle nesting sites, winter roosting sites, and foraging perches were protected under the FPA in the section that addressed threatened and endangered species. The FPA rules were revisited by the Board due to the delisting of the bald eagle from both the state and federal endangered species lists. In 2017, the Board determined the bald eagle still warranted protection under the FPA as a "sensitive bird, nesting, roosting, and watering site". Protection standards were modified to reflect the current science and status of the species. Protection for winter roosting sites and perch sites was omitted and protection of nest sites was modified.

The bald eagle is still federally protected under the Eagle Act. Compliance with the FPA rules does not ensure compliance with the federal Eagle Act and landowners and operators are encouraged to contact the USFWS for any questions about the Eagle Act and its requirements.

# Bald eagle biology and habitat

Bald eagles are raptors, or birds of prey. They are opportunistic foragers and will eat a variety of readily available items, but tend to feed mostly on fish, ducks, and carrion. Bald eagles are not considered adults until their fifth year of life. Young eagles are black when they leave the nest. Although they molt annually and obtain white feathers across their body,



Tom Koerner, USFWS

Gary Kramer, USFWS

their characteristic white heads and tails do not begin to appear until their fourth year and are not fully white until their fifth year. Most nesting eagles are adults, but occasionally a nesting sub-adult will be found.

Bald eagles build very large nests out of sticks. They need tall, large-diameter trees with stout branches to support their heavy nests. Bald eagles nest within two miles of large bodies of water. Nest trees are typically located mid-slope rather than

right on the water's edge. They build their nests in live trees, primarily in Douglas-fir in western Oregon and ponderosa pine in eastern Oregon. They will also nest in cottonwood, especially near large rivers such as the Columbia and Willamette. Sometimes bald eagles use the same nest for long periods of time. However, in many situations bald eagles build nests in multiple trees and move around over their lifetime. In a 30-year study of bald eagles in Oregon, the average number of nest trees per pair was 2.5 (Isaacs and Anthony 2011).

# **PROTECTED SITES**

Under the FPA, all active bald eagle nest trees are protected. An active site is any site used for nesting by a bald eagle within the past five years. Because bald eagles may alternate nesting attempts between multiple nest trees and may rebuild a new nest in the same or a nearby tree, protection is extended for a five-year duration even if the nest or nest tree has fallen down.

A nest site that has not been used for five or more years would be considered an abandoned resource site, and the FPA rules would not apply. Non-use status must be supported by annual surveys. Documentation of the nest site and a formal review by ODF is needed to determine if a site qualifies for abandoned status. Landowners and operators who wish to determine the status of a nest tree should consult with the ODF stewardship forester first. ODF maintains a database of bald eagle nests and may be able to determine the current status of the site by reviewing available data. If the site is not currently being surveyed (e.g., Oregon Department of Fish & Wildlife or volunteer surveyors), the landowner may hire a wildlife consultant or to do their own surveys. A separate document with recommended survey methods and a reporting form is available from your stewardship forester or on the ODF website.

#### **ODF** Inventory of bald eagle nest sites

ODF maintains an inventory of protected resource sites, including bald eagle nest sites. ODF does not conduct its own surveys but instead relies on readily available information to build and maintain the inventory. The original inventory of nest trees was comprehensive and included all known nesting sites in the state through 2007. The data originated from a state-wide research project and inventory of bald eagles. The study ended in 2007, so the inventory is no longer considered comprehensive. New nest sites are added to the inventory as ODF receives information regarding them from its foresters and from other collaborators (e.g., Oregon Department of Fish and Wildlife and federal partner agencies).

When a landowner or operator notifies for an operation, they will be alerted if there is a known bald eagle site within ½ mile of the operation. The stewardship forester will research the site and attempt to determine if it is an active site. If a landowner is not alerted to the presence of a bald eagle nest, but is aware one exists or finds one during their operation, they are still required to protect the site. The operator should immediately notify the stewardship forester of the presence of the nest and halt all operations near the site so that the forester has an opportunity to assess the situation.



Bald eagle nest--USFWS

Bald eagles and osprey both build very large nests in old, large trees. Osprey nests are almost always in the top of a tall snag or dead-topped conifer with no vegetation overhead and a clear view of the surrounding area. Bald eagles prefer to place their nest only in live trees and usually about  $\frac{1}{2}$  of the way up the tree with ample vegetation above and around the nest. Bald eagles tend to nest mid-slope rather than right on the water's edge whereas osprey nests are often right on the edge or in plain view of water.



Osprey nest on top of snag--Robbins, ODF

# **PROTECTION STANDARDS**



- 330 feet = habitat buffer around the nest
- 660 feet = normal logging activities are restricted (chain saw use, heavy equipment, tree falling, etc.)
- 1000 feet = aircraft use is restricted

Bald eagle nest trees receive both structural and temporal protection under the FPA. Structural protection means protection of the nest tree and key components from destruction or damage during operations. Temporal protection means protection of nesting bald eagles from disturbance so that nesting activities will not be disrupted.

#### **Structural protection**

Nest trees are the focus of protection under the FPA rules, however the rule also specifies that key components are to be retained and protected during forest operations. These include a 330' buffer around the nest tree, replacement trees, and perch trees. In many cases, the replacement trees and perch trees will be located within the 330' buffer area.

<u>Replacement trees</u>: Replacement trees are trees with adequate structure to be used for nesting. Replacement trees include tall, large diameter trees with adequate branch structure to support a nest structure. Branches must be stout and oriented horizontally (or upward); sometimes clumps of branches or a couple of key support branches are adequate to support a nest.

<u>Perch trees</u>: Perch trees are used by adults and recently fledged young as resting places for perching near the nest. For young eagles, perch trees are used for short flights as they are learning to fly. Perch trees are often trees with dead tops or dead branches that occur near the nest. Perch trees with branches above the nest structure are often used by adults whereas branches at heights similar to the nest structure may be important for young eagles.

<u>Buffer zone</u>: A buffer is required around the nest tree. The buffer must be at least 330' in radius around the tree. The buffer does not necessarily have to be circular, and in some cases it may make sense to modify the shape of the buffer in order to incorporate replacement or perch trees within the buffer zone. The purpose of the buffer is to provide visual screening around the nest, to protect perch and replacement trees, and to provide protection to the nest tree from wind. The buffer is intended to be a zone within which harvest will not occur.

#### **Temporal protection**

Nesting bald eagles are protected from disturbance during their "critical use period," which is from January 1 through August 31. This date range is intended to incorporate the time period during which nesting activities occur throughout the state. In general, resident bald eagle populations in lowlands and coastal areas will nest earlier than populations in eastern Oregon or in high elevation areas.

During the critical use period, operations are restricted to protect bald eagles from disturbance. Most operational activities are restricted within 660 feet of the nest tree. This would include felling, bucking, or yarding of trees as well as use of chainsaws or heavy equipment for other purposes. Use of aircraft is restricted within 1,000 feet of the nest tree. Aircraft use usually involves aerial application of pesticides or fertilizer. Because, by federal law, drones are considered aircraft, the use of drones for any purpose is not allowed within 1,000 feet of the nest tree while it is active.

In some cases, the seasonal restrictions can be waived by ODF to allow operations during the critical use period. This is most often done if it is determined bald eagles are not present and/or nesting or that the young have already fledged and are no longer using the site. Site surveys are needed to make these determinations. See the monitoring section for information on survey requirements.

#### **NEST MONITORING**

Landowners are encouraged to annually track the status of bald eagle sites on or near their property. Monitoring is critical to document absence of eagles for purposes of waiving seasonal restrictions and for purposes of determining abandoned status of a site. Monitoring can be fairly easy if there is a good viewpoint of the nest. Two, 2-hour visits during the nesting season are required to document non-use. Monitoring active nests can also be important to waive seasonal restrictions. If a nesting attempt fails or the young fledge early operations may be allowed to proceed prior to August 31.

Monitoring is preferably done by a wildlife biologist, though a landowner or operator can conduct the surveys if they have the appropriate equipment (good quality binoculars or spotting scope) and an appropriate vantage point to monitor the nest. Any observations should be documented, including the date/time of the visits and notes on any adults or young bald eagles observed. The methods for observation and requirements are noted in the ODF bald eagle monitoring form

(https://www.oregon.gov/odf/working/Documents/b ald-eagle-nest-site-monitoring-instructions-anddatasheet.pdf).

# EXCEPTIONS AND ALTERNATE PRACTICES

In some atypical situations, a forest operation cannot be conducted in a manner consistent with the FPA rules for bald eagles. In those situations, the landowner or operator can explore using either a plan for alternate practice or pursuing an exception to the rules in order to meet their goals. Both options are not common and applicable in limited circumstances.

Plans for alternate practices are written documents that can be evaluated and approved by the stewardship forester to meet both wildlife protection goals and landowner goals. The plans are used when the operator proposes to conduct the operation in a manner that still meets the protection goals for the protected resource, but would modify the rules. For bald eagles, plans for alternate practices are rare and are evaluated on a case by case basis. Alternate plans must protect the integrity of the resource site and not result in nest abandonment or reduced productivity. One situation where an alternate plan might be appropriate would be thinning trees within the 330' buffer around a nest tree for purposes of fuels reduction and reducing competition pressure to the nest tree. Another example would be operating within 660' during the nesting season and utilizing a biologist to monitor response of adults to activities to confirm no disturbance is occurring (if disturbance is expected, a take permit and an exception to the rule would be more appropriate than an alternate plan).

Exceptions to the FPA rules for bald eagles are only allowed if a take permit exists under the Eagle Act. These permits are issued by the U.S. Fish & Wildlife Service (USFWS), usually for waivers to allow disturbance of actively nesting eagles. Permits for removal of nest trees are less common. Information about take permits can be found at USFWS - Eagle Permits. If a landowner has a valid take permit from the USFWS, they can proceed with operational activities allowed under the permit without having to meet the equivalent FPA rule requirements. For example, if a landowner has a take permit that allows for disturbance to occur to a nesting pair of bald eagles, the landowner would be allowed to operate within 660' of the nest during the critical use period. If a landowner has a take permit that allows for removal of a nest tree, the bald eagle rules would be waived as long as the removal was conducted according to any parameters specified in the permit.

# TIPS FOR BALD EAGLE HABITAT ENHANCEMENT

Voluntary actions to promote development of habitat for bald eagles are best conducted within two miles of a large body of water (e.g., reservoirs, rivers, estuaries, and the ocean). To promote development of new nesting habitat for bald eagles, consider retaining any existing legacy trees (large-diameter conifers with large branch structure) during harvest operations. These legacy trees are more likely to provide adequate nest trees in the future than smaller-diameter leave trees. Where adequate legacy trees exist, consider retaining additional trees and snags nearby to allow for retention of patches of suitable habitat and to protect the legacy trees from windthrow. In addition, retaining leave trees in clumps or patches and in areas that can remain on the landscape for long periods of time will be most beneficial to eagles.



Bald eagle nesting stand & retained nest tree buffer--Jennifer Weikel, ODF