

SECTION 7 GUIDELINES - Snake River Basin Office
Bald eagle (threatened)
(*Haliaeetus leucocephalus*)

I. BACKGROUND

Legal Status

In the late 1960's and early 1970's, it was determined that dichlorophenyl-dichloroethylene (DDE), the principal breakdown product of DDT, an agricultural pesticide, accumulated in the fatty tissues of adult female eagles. It impaired calcium release necessary for egg shell formation, thus inducing thin-shelled eggs that are not viable, leading to reproductive failure. The bald eagle was listed as endangered under the Endangered Species Preservation Act of 1966 (U. S. Fish and Wildlife Service (USFWS 1995). On December 31, 1972, DDT was banned from use in the United States. In 1973, the Endangered Species Act (Act) was passed and the bald eagle was originally listed as endangered in the lower 48 states on February 14, 1978. Their status was upgraded to threatened in Idaho and most of the lower 48 States on August 12, 1995, because of progress in recovery. (50 FR 36000). The species is also subject to the Bald Eagle Protection Act of 1940.

Species Description

The bald eagle is a large, long-lived, diurnal raptor. Body length ranges from 78 to 93 centimeters (cm) [31 to 37 inches (in)]. The bald eagle is the only North American representative of the fish eagle or sea eagle family (USFWS 1986) and it is endemic to North America.

Adult bald eagles have a bright yellow bill, feet and lower legs; white head and tail; and very dark brown to charcoal black wings. Immature bald eagles (eagles less than 4 years old) have three to four immature plumage classes. Immature birds 6 months to 2 years old have mottled brown and white head, breast, under-wings, and tail [Northern Rockies Conservation Cooperative (NRCC), 1989].

Life History

Bald eagles first breed at 5 to 6 years of age. Egg laying can start as early as February and continue until April. Both sexes incubate 1 to 3 eggs for 31 to 35 days. Eggs hatch from March to May, and the nestling period lasts 11 to 14 weeks. Some breeding birds remain near nesting territories throughout the winter months. Important prey species include fishes, birds, mammals, and carrion (Chuck Harris, pers. comm., 1995; NRCC, 1989).

Population Description/Abundance/Recovery Goals

The bald eagle historically ranged throughout North America except extreme northern Alaska and Canada and central and southern Mexico. Current range in the lower 48 states includes five

recovery populations: Chesapeake Bay, Pacific, Southeastern, Northern States, and Southwestern. In 1963, a National Audubon Society survey reported only 417 active nests in the lower 48 States. In 1994, about 4,450 occupied breeding areas were reported. There has been a 47 percent increase since 1990 in the number of occupied breeding territories (USFWS 1995).

The Pacific Recovery Region includes Idaho and has the following delisting goals: A minimum of 800 nesting pairs with an average reproductive rate of 1 fledged young per pair and an average success rate per occupied site of not less than 65 % over a 5-year period. Attainment of breeding population goals should be met in at least 80 % of the management zones. Wintering populations should be stable or increasing.

Surveys during 1994 and 1995 in Idaho indicate that of 77 occupied nesting territories, 61 nests were active, and 75% were successful. Productivity is 1.09 young produced per occupied territory. Sixty-eight percent of the nest failures occurred along the Snake River in eastern Idaho (IDFG 1995).

Habitat

Nesting Territories. In general, bald eagles need an adequate prey base in close proximity to large suitable nest trees. Nest sites in forested areas show a strong preference to multi-layered, mature forest stands, and eagles show strong fidelity to a nest site (Montana Bald Eagle Working Group 1991). Eagles nesting around Cascade Reservoir, Idaho, for example, nest in mature conifers with gnarled limbs that provide ideal platforms for nests. The size and shape of a defended breeding territory varies widely depending upon the terrain, vegetation, food availability, and population density of an area. Around Cascade Reservoir nesting territory size varies between 3.2 square kilometers (km²) to 5 km² [1.6 and 13 square miles (mi²)]. The location of breeding habitat in Idaho is displayed in Figure 1 - BE.

Nesting/Human disturbance. During the critical incubation (March) and brooding (late April/early May) phases, human disturbance can result in nest failure with the risk reduced as the nesting cycle progresses towards fledging at the end of July. Some habituation of eagles to human activity has been observed, varying according to type and proximity to the bald eagle (USFS, USFWS, USBR 1990). Individual birds vary widely in their response to human disturbance.

Wintering Habitat. Specific wintering habitat needs vary by site; however, the following components appear important for wintering populations: an abundant food supply, suitable foraging habitat with adequate perch trees, and protected areas where the birds can roost at night (Ada Planning Association, Ada County Bald Eagle Task Force 1994). Fish and carrion are the most common dietary constituent of wintering bald eagles. In Idaho, wintering bald eagles are concentrated along the Snake, Clearwater, and Salmon river systems and lakes and reservoirs such as C. J. Strike, Lake Pend Oreille, and Lake Coeur d'Alene.

Threats

Threats to the bald eagle throughout its range are primarily direct by shooting or poisoning; however, these threats have reduced significantly since the 1970's. Habitat loss and disturbance are moderate threats (FR 43. No. 31 6230-623).

Land Ownership

Bald eagle wintering habitat in Idaho is both on public and private land in lower elevations. Nesting habitat is found primarily on publicly owned land (Wayne Melquist, Biologist, Idaho Department of Fish and Game, pers comm., 1996).

References

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Contacts

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II. GUIDELINES - Protocol for Evaluating Project Effects

A Biological Assessment should be prepared if a proposed project is within 5 km (3.1 mi) of a nest territory, or adjacent to wintering habitat. Wintering areas are defined as sites where five or more eagles have been documented present during winter.

Consider the following general points when evaluating project impacts:

- C Level and type of use of the project area by bald eagles;
- C Direct impacts on habitat;
- C Effects on prey abundance and/or availability;
- C Potential impacts from increased or changed human activity.

If nesting has been documented in the vicinity of the project, a survey should be conducted during the nesting season to determine presence or absence of nesting bald eagles, or the local agency personnel monitoring the territory should be contacted for current information. To determine documented nesting territory, please contact Idaho Department of Fish and Game for a current report (208) 334-3700.

If a nest management plan has been prepared for the site, refer to it for specific habitat information and management recommendations. A list of completed nest management plans in Idaho is provided at the end of these guidelines.

III. BALD EAGLE MANAGEMENT/RECOVERY DOCUMENTS

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- Krol, W., et. al. 1990. Hurd Creek/Poison Creek bald eagle territory management plan, Cascade Reservoir, Idaho. Raptor Research Series No. 6. Raptor Research Center, Dept. of Biology, Boise State University, Boise, Idaho. 93 pp. plus appendices.
- Robinson, S. 1992. Eagle viewing plan -- Wolf Lodge Bay. U.S. Bureau of Land Management, Coeur D'Alene, Idaho. 5 pp.
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- U.S. Forest Service. 1989. North Idaho bald eagle and peregrine falcon management program. Region One: Idaho Panhandle, Clearwater, and Nez Perce National Forests. 9 pp.
- U.S. Forest Service, U.S. Fish and Wildlife Service, and U.S. Bureau of Reclamation. 1990. Cascade Reservoir bald eagle management plan. Unpubl. Rep. Boise, Idaho. 67 pp.