

Nebraska Bald Eagle Survey Protocol

Nebraska Game and Parks Commission U.S. Fish and Wildlife Service

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Purpose

The purpose of this document is to provide guidance for completing Bald Eagle (*Haliaeetus leucocephalus*) nest and winter roost surveys to determine the presence or absence of the species. Bald Eagles are protected by the Bald and Golden Eagle Protection Act. This information is applicable to most projects with the exception of wind energy, which utilizes a separate approach for assessing risk. Because human activities can disrupt Bald Eagles, this information is used to help a project developer avoid negative impacts to the species. Both types of surveys are recommended when a disturbance from a proposed project will occur within 0.5-mile of areas containing suitable nesting and wintering habitats for Bald Eagles.

Nest Surveys

Nest surveys should include an inspection of potentially suitable habitat that Bald Eagles may use for nesting within 0.5-mile of the project. Suitable habitat includes forested corridors along water features, including rivers and lakes. Nest surveys should be done when leaves are absent. Nests are usually large and distinctive, but can be difficult to locate, particularly when trees have leaves. Potential nests should be observed from a location that does not disturb the eagles. Nest surveys should be conducted by a qualified person and should be done before construction begins. If construction will begin between February 1 and April 15, a nest survey should be completed at least one, but not more than 14 days, prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year.

A survey report should be prepared that includes the following:

- Survey methods (date, methods).
- Bald Eagle nest locations, including GPS points. Nest locations should be reported to Nebraska Game and Parks Commission (NGPC) and U.S. Fish and Wildlife Service (USFWS) immediately.
- Bald Eagles observed, including their behavior.

The survey report should be sent to the NGPC and USFWS.

Winter Roost Surveys

Winter roost surveys should include an inspection of potentially suitable habitat that Bald Eagles may use for roosting within 0.5-mile of the project. Suitable wintering habitat includes forested corridors near open water, especially thickly forested stands of large cottonwoods, which block the wind and often have a south facing aspect. There are two types of winter roosts:

- *Transitory roosts* are defined as being occupied by three or more eagles, within 100 meters of each other, for at least two nights in an area with no previous knowledge of winter communal roosting.
- *Communal roosts* are defined as six or more eagles in a small area for extended periods of time or used for multiple years. Winter roost surveys should be conducted by a qualified person and should be done before construction begins. If construction will occur between October 1 and January 31, winter roost surveys should be completed if the project area includes suitable wintering habitat (near open water with large trees present).

Winter roost surveys should be conducted daily at dawn as the eagles are likely to leave the roost to forage within the first hour of daylight.

A survey report should be prepared that includes the following:

- Survey methods (date, methods).
- Bald Eagle winter roost locations, including GPS points. Wintering roosts should be reported to NGPC and USFWS immediately. There is no need to provide notification or stop construction if Bald Eagles are observed soaring over a project site.
- Bald Eagles observed, including their behavior.

The survey report should be sent to the NGPC and USFWS.

Background

Bald Eagles are year-round residents in Nebraska. The highest densities of nesting Bald Eagles occur along the major river systems in the northern and eastern parts of the state. However, as nesting numbers have increased and prime nesting habitat has become occupied, eagles are increasingly found nesting in a variety of habitats, including along small streams, near ponds, and adjacent to isolated hedgerows. Wintering eagle numbers fluctuate from year to year, but birds typically concentrate in areas with open water where food is available.

Adults begin courting and nest-building as early as December. In Nebraska, nests are almost always in a large cottonwood tree and are often located in areas that offer adult eagles a good vantage point. Nests are constructed with large sticks and lined with leaves, grasses, and cornstalks. A breeding pair will often return to the same nest and add new material each year. As a result, nests can become quite large over time. Nesting activities begin with egg-laying, which occurs as early as February. Fledging takes place when the young are approximately 10 – 11 weeks old, however the young remain near the nest and are dependent on the parents for food for at least another 6 weeks, through August.

Large winter roost sites may contain as many as 100 Bald Eagles and are limited to areas with abundant food resources in dense, forested corridors. Eagles may establish winter roosts miles from their foraging areas. These congregations are beneficial to the species because it improves their ability to find food and encourages pair bond formation. Human disturbances and loss of wintering habitat can cause undue stress, leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These effects can reduce the carrying capacity of preferred wintering habitat and ultimately reproductive success for the species.