

FERRUGINOUS HAWK MANAGEMENT GUIDELINES

- Human land-use practices can have a variety of types of impacts to nesting Ferruginous Hawks and their habitats, including:
 1. Direct, Indirect, and Cumulative Impacts to nesting success and adult survival;
 2. Direct, Indirect, Cumulative Impacts to nesting and foraging habitat and prey densities.
- The purpose of these Management Guidelines is to conserve breeding Ferruginous Hawks on the Navajo Nation by protecting their nests from human activities that may cause temporary or permanent disturbance. Conservation of nesting Ferruginous Hawks is important to the Navajo Nation because it is:
 1. A species of cultural importance to the Navajo People;
 2. An important part of the ecosystem as a predator on small mammals;
 3. A native breeding species of the Navajo Nation, but occurs in low numbers as to be considered ‘threatened’ on the Navajo Endangered Species List (Group 3);
 4. Of concern to other land managers throughout much of its range, and therefore listed on numerous ‘Species of Concern’ lists for the western U.S. and Canada;
 5. A species that was once considered for Federal listing under the Endangered Species Act, and may be petitioned for listing again in the near future.
- Protection of both occupied and unoccupied nests is important because:
 1. Not all adult raptor pairs breed every year;
 2. Not all nesting territories are used for breeding each year;
 3. Each intact nest within a nesting territory may be used in any given year;
 4. Nesting territories may be reoccupied, and nests may be re-built and used, even if left unattended for a number of years.
- These Management Guidelines are designed to:
 1. Avoid disturbance to occupied nests during the breeding season;
 2. Avoid or minimize impacts to known or potential nesting habitats, especially in consideration of nesting substrate quality and quantity;
 3. Avoid or minimize impacts to foraging habitats around occupied nesting habitat; especially in consideration of prey diversity and densities;
 4. Minimize impacts over broad areas of the hawk’s range on the Navajo Nation;
 5. Mitigate for unavoidable losses of nesting sites or habitat quality.

Definitions

'BRIEF ACTIVITIES' are those that occur for up to one (1) hour and involve only personnel and passenger or maintenance vehicles.

Examples include: soil surveys, biological surveys, infrequent maintenance of structures.

'LIGHT ACTIVITIES' are those that occur for up to one (1) day in the same general area (i.e. within 1,000 ft of the previous day's action), and involve up to five (5) vehicles (including up to three (3) construction-type vehicles or equipment), and up to ten (10) personnel.

Examples include: residential utilities (power, water and sewer lines), fence building.

'HEAVY ACTIVITIES' are those that exceed at least one of the criteria for Light Construction, or include permanent structures that involve human activity of up to one (1) visit per week.

Examples include: road construction, oil and gas well construction.

'LOUD ACTIVITIES' are those that exceed the normal base level of construction noise, either for brief or extended periods.

Examples include: blasting, jackhammer, rock crusher.

'PERMANENT STRUCTURES' are above-ground facilities resulting that persist for more than two (2) years in the same location.

'DAILY-USE' involves human activity that occurs daily or more than three (3) days a week. Examples include: home sites, sheep camps, subdivisions, coal mines, new roads, some road improvements, gas plants, large-scale farming, borrow pits.

'INFREQUENT-USE' involves human activity that occurs three (3) or less days a week.

Examples include: maintenance of oil and gas wells or utilities.

'NEST(S)' is a stick structure verified to, or likely to, have been built by Ferruginous Hawks, based on its characteristics of composition and placement on the substrate.

'OCCUPIED NESTS' are those nests which are repaired, tended, or used for nesting, in the current year by a pair of Ferruginous Hawks. The presence of Ferruginous Hawks (adults, eggs, or young), evidence of nest repair or nest marking, freshly molted feathers, or current years' mute suggest an Occupied Nesting

Territory. All nests within an Occupied Nesting Territory are considered as an “Occupied Nest” during pair-bonding and prior to egg-laying. If a nest is selected and eggs are laid, then only this nest will be considered as “occupied,” while the others will then be considered ‘unoccupied.’ An Occupied Nest retains this status from pair bonding, through egg-laying, incubation of eggs, brooding and fledging of young, and post-fledging dependency of the young.

‘UNOCCUPIED NESTS’ are those nests not selected by Ferruginous Hawks for breeding in the current year. All nests without eggs or nestlings by May 1st of each year shall be considered as Unoccupied Nests. All nests during the non-breeding season (August 1st to February 28th) shall be considered as Unoccupied Nests.

‘OCCUPIED NESTING TERRITORY’ is a single nest or group of nests with at least one resident adult Ferruginous Hawk during the nesting season.

Navajo Nation Department of Fish and Wildlife's

Ferruginous Hawk Management Guidelines for Nest Protection:

1. Protect all nesting Ferruginous Hawks on the Navajo Nation during March 1st to July 31st with the following provisions:
 - a. Allow no BRIEF ACTIVITIES within 0.8 km (0.5 mi) of an OCCUPIED NEST.
 - b. Allow no LIGHT ACTIVITIES within 1.0 km (5/8 mi) of an OCCUPIED NEST
 - c. Allow no HEAVY ACTIVITIES within 1.2 km (3/4 mi) of an OCCUPIED NEST.
 - d. Allow no LOUD ACTIVITIES within 1.6 km (1 mi) of an OCCUPIED NEST.
2. Protect all NESTS from human disturbances associated with PERMANENT STRUCTURES on a year-round basis.
 - a. Allow no DAILY-USE PERMANENT STRUCTURES within 1.6 km (1 mi) of a known NEST.
 - b. Allow no INFREQUENT-USE PERMANENT STRUCTURES within 1.0 km (5/8 mi) of a known NEST.
3. Follow additional measures during project planning if proposed activity is near known Ferruginous Hawk nesting territories or potential habitat to further minimize impacts.
 - a. Place new constructions and human disturbances near previously-disturbed areas whenever possible.
 - b. Limit the size of construction to smallest area needed to meet project needs.
 - c. Reclaim disturbed areas and obliterate roads post-construction.
 - d. Consider alternative construction sites and/or methods.

4. Mitigate for unavoidable losses of NESTS or occupied or potential habitat, and for potential disturbances to nesting Ferruginous Hawks with measures approved by the Navajo Nation Department of Fish and Wildlife. Installation of artificial nesting structures is usually recommended for losses of NESTS or habitat, while monitoring of nesting success for up to five (5) years at the affected NEST(S) is usually recommended for disturbances to nesting Hawks.
5. At the discretion of a qualified biologist of the Navajo Nation Department of Fish and Wildlife, these regulations may be revised or altered as new information becomes available; and deviations (esp. in distances and dates) will be allowed on a case-by-case basis and for warranted circumstances, especially for emergency situations.
6. All Ferruginous Hawks NESTS found in the future will be protected under these Protection Measures following verification and documentation by the Navajo Nation Department of Fish and Wildlife.
7. Very old and dilapidated Ferruginous Hawk NESTS may be deleted from these Protection Measures by a qualified biologist of the Navajo Nation Department of Fish and Wildlife Nest if the NEST appears to no longer represent a suitable breeding location for the hawk. Only NESTS known, or suspected, to be unused for at least ten (10) years, composed of unconsolidated sticks with no vertical cohesiveness may be considered for deletion.
8. All NEST locations are to be considered confidential information of The Navajo Nation Department of Fish and Wildlife, and may be divulged only for protection of the NEST and proper land-use planning.
9. Because of BHP Billiton's commitment to monitor raptor nests each year, Ferruginous Hawk NESTS on active sections of Navajo Mine are excluded from these Protection Measures; however, these Measures apply for NESTS occurring on Mine lease-lands after mining operations and land reclamation are completed.