

Threats, limiting factors, and vulnerabilities

Goshawks are sensitive to disturbance at nest sites. Development of an understory in a previously open forest (like ponderosa pine) reduces foraging habitat. Loss of stands of mature/old trees with interlocking crowns reduces nesting habitat. Loss of old aspen also reduces nesting habitats. Alternatives A through E emphasize regeneration of aspen- not necessarily the oldest aspen- to create a age class distribution more like that created by natural processes.

References. Von Ahlefeldt and Speas (Von Ahlefeldt and Speas 1996), Squires and Reynolds (1997), Welp et al. (2000), Cerovski et al (2001).

Environmental Consequences

Direct effects of activities under the Forest Plan include loss of foraging and nesting habitat by clearcutting of lodgepole forests and reduction of breeding success due to disturbance at nest sites. Forest Plan standards provide protection for three nest stands per territory and limit vegetation treatment in post-fledgling foraging habitat. However, during the life of the Plan, some stands that contain potential nest habitat or nests that were not discovered in surveys will probably be cut.

Human disturbance may occur near nests and reduce breeding success or lead to displacement to other (perhaps less suitable) habitat. For newly planned activities that undergo NEPA analysis, Plan standards provide a 1/4 mile buffer during nesting and rearing of the young. However, other on-going activities like recreation do not receive site-specific review and may occur near nests with a frequency or intensity that interferes with breeding.

Cumulative effects include the spatial pattern and age class distribution of mature forest in lodgepole pine created by past logging on the MBNF and the effects of similar past, present and future activities on adjacent National Forest land. Potential habitat was lost in the development of the Snowy Range ski area. Past, present and future vegetation management and disturbance on private inholdings may also contribute to effects on the Northern Goshawk.

Plan standards for the Northern Goshawk were based on the management direction proposed for the Southwest Region. The nest stand size and territory size for goshawks on the MBNF are similar to those recommended for the Southwest, so use of this document is biologically appropriate.

Protection in plan

Alternative A lacks the standards limiting treatment in nest stands and post-fledgling foraging areas.

Alternatives B, C, D DEIS, D FEIS, and E contain the following standards specific to protection of nesting birds, nest sites, and other goshawk habitat.

BIOLOGICAL EVALUATION

TES Standard 4: Within each occupied Northern Goshawk territory, select three nests in each occupied territory and protect 30 acres of dense vegetation surrounding each, defining the boundaries of each area based on habitat quality. If fewer than 3 nests are found within an occupied territory, substitute 30-acre areas with characteristics of nesting habitat.

TES Standard 5: Within each occupied Northern Goshawk territory, designate a Northern Goshawk post-fledging area (PFA) of at least 200 acres that includes the three 30-acre nest sites selected. The PFA may exceed 200 acres to encompass the identified nest sites. The large tree component within the PFA should include snags, down dead wood, and clumps of trees with interlocking crowns. Within the PFA, prohibit management activities that may degrade goshawk foraging habitat.

TES Standard 6: To help reduce disturbance to nesting goshawks, prohibit construction, drilling, timber harvest and fuel treatments, and other intensive management activities within proximity of active northern goshawk nests from April 1 to August 30. Set buffer at 1/4 mile from active nest unless site-specific conditions are such that a lesser distance can be shown to provide the same degree of protection.

Evaluation criteria for the Northern Goshawk are protection from disturbance at nests and retention of nesting and foraging habitat in current territories.

Table I-30 Viability and outcome conclusions for the Northern Goshawk

	Alt A	Alts B, C, D DEIS, D FEIS	Alt E	Alt F
Abundance and distribution	Lacks standards for protection of nest and post-fledgling habitat.	Include protection of existing nest sites. Many acres affected (either the alt has high ASQ or much MA 5.15)	Cluster of timber harvest and reduction of area affected will retain more old lodgepole than Alts A, B, C, D DEIS and D FEIS.	Retains all most old growth aspen and lodgepole.
Likelihood of persistence-15 yr.	Very likely	Very likely	Very likely	Very likely
Likelihood of persistence-long-term	Likely	Likely	More likely	More Likely
Effect on individuals and populations	MAII (likely reduction in distribution)	MAII	MAII	MAII
Certainty	Moderate	Moderate	Moderate/High	Moderate/High

MAII, may adversely impact individuals but not lead to trend toward federal listing.

The Northern Goshawk is proposed as a Management Indicator Species for mature/old components of aspen/lodgepole and structure in lodgepole pine.