

Forest Plan Amendment Number 30
Custer National Forest
Billings, Montana

The Custer National Forest Land and Resource Management Plan is amended as follows:

The dates and disturbance zones shown for key species on pages 19 and 172, as amended by Amendment Number 12, are further amended to include the following, *which are only applicable to oil and gas activities within the project boundary of the Southern Little Missouri and Cedar River Oil and Gas Leasing FEIS (changes shown in italics)*:

Bighorn Sheep in North Dakota

Yearlong for its range (NSO in oil and gas leases).

Antelope

Winter Range: January 1 through March 31 (TL in oil and gas leases).

No disturbance around isolated clay buttes as mapped in the Southern Little Missouri and Cedar River Oil and Gas Leasing FEIS (NSO in oil and gas leases).

Golden Eagle

Nesting: February 1 through July 31

Disturbance Zones: no disturbance for ½ mile radius around the nest (NSO stipulation on oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review.

Ferruginous Hawk

Nesting: March 1 through July 31

Disturbance Zones: no disturbance for ½ mile radius around the nest (NSO stipulation in oil and gas leases), and no disturbance during nesting for one mile (TL stipulation in oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review.

Prairie Falcon

Nesting: March 1 through July 31

Disturbance Zones: no disturbance for ½ mile radius around the nest (NSO stipulation in oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review.

Prairie Grouse

Dancing Grounds: March 1 through June 15

Disturbance Zones: no disturbance for ¼ mile radius around active leks (line of sight up to this distance)(NSO stipulation in oil and gas leases), and no disturbance within suitable nesting habitat during the above period for a one mile radius from active leks for sharp-tailed grouse and a two mile radius from active leks for sage grouse (TL stipulation in oil and gas leases).

Amendment Number 30

The following definitions are added to the glossary on page 121, and are only applicable to oil and gas activities within the project boundary of the Southern Little Missouri and Cedar River Oil and Gas Leasing FEIS:

Active Lek Displaying grouse present during the spring breeding season at least one year within the previous five consecutive years. Leks are assumed to be active in the absence of five consecutive years of data collected according to scientific methods which shows the lek to be inactive. Scientific data collection assumes qualified observers, survey times and conditions appropriate to detect breeding activity, and subsequent written reports. Results of surveys and a list of active leks are part of the Custer Forest Plan Monitoring and Evaluation Report (Monitoring Item: C2 - sensitive species, C-9 - prairie grouse). Any lek for which five consecutive years of survey data is lacking is assumed to be active.

Active Nest An adult pair present at least one year within the previous five consecutive years. Nests are assumed to be active in the absence of five consecutive years of data collected according to scientific methods which shows the nest to be inactive. Scientific data collection assumes qualified observers, survey times and conditions appropriate to detect nesting activity, and subsequent written reports. The reporting process for results of surveys and a list of active nests are part of the Custer Forest Plan Monitoring and Evaluation Report (Monitoring Item: C2 - Sensitive Species, C8 - Special Interest). Evidence that a pair is present within a nesting territory can be based on evidence that eggs were laid or observations of two breeding-age birds that appear to be paired. In some species, the presence of a nest that has been recently built, repaired, or decorated may constitute evidence for occupancy because nest building behavior is probably elicited by the presence of a mate.

- End Amendment Number 30 -

I. Bald eagle (Federally listed Endangered)

A. General Documentation:

See EIS, Page III-50, for bald eagle, listing 0.5 mile radius (MBEWG, 1991, p. 21) and dates of February 1 through August 31 (MBEWG, 1991, p. 18). Project File, Vol., 9, Document 000091.

B. Existing condition:

1. Forest Plan: See FEIS, P. III-50, "... The Forest Plan (USFS 1986, p. 19 and 172) lists a 1/4 mile radius around inactive nest sites and 1/2 mile radius around nest sites to avoid disturbance during nesting and an 1/4 mile no disturbance NSO stipulation. The period to avoid disturbance to active nests is described as Feb 15 to July 15. ..."

2. Biological: No known active bald eagle nest sites on the Custer National Forest, though one historic nest site (1976) is known from the southern portion of Little Missouri National Grassland and inside of the SLM FEIS project area (SLM FEIS P. III-50). Per contact with USFWS, no special stipulations were assigned to this atypical nest site. Custer N.F. is generally considered marginal nesting habitat for the bald eagle.

C. Monitoring:

1. Of populations: None - no active nest sites. National monitoring by USFWS.
2. Of impacts from land management activities including O&G: None - no detected active nest sites.

D. Literature:

1. Pre-Forest Plan:
2. Post-Forest Plan: (MBEWG, 1991, p. 18)

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See EIS, page III-50 (bald eagle), which identifies the inconsistency of protection of radius from bald eagle nest sites and Forest Plan versus MBEWG, 1991, p. 22. In the event one of these raptors was detected, the USFS/BLM would be required to consult with the USFWS and comply with the Endangered Species Act, and follow the respective species recovery plan. See Project File, Vol. 11, Document 021594 (filed under sage grouse). BLM/USFS coordination on dates and radius for NSO and TL around active raptor nests and grouse leks. See Project File, Vol. 11, Document 021595-7 (filed under sage grouse). Line officer support (Sam Redfern) for NSO radius and dates to avoid disturbance for raptors and grouse.

F. Amendment (change to): Forest Plan changed to conform with MBEWG, 1991, p. 21.

Bald Eagle

Inactive Nests: February 1 through August 31

Active Nests: February 1 through August 31

Disturbance Zones: no disturbance for 1/2 mile radius around the nest (NSO stipulation on oil and gas leases), and no disturbance for 1/2 mile during nesting (TL in oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review and concurrence by the USFWS.

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate less than 1% of NSO area around nest sites would be accessed for exploration.

H. Stipulation as included in SLM FEIS, Vol. II, Appendix D.

None

II. Peregrine falcon (Federally listed as Endangered)

A. General Documentation:

See EIS, Page III-53, for peregrine falcon, listing 1.0 mile radius (USFWS, 1984, p. 34), and dates of February 1 through August 31 (USFWS, 1984, p. 21). Project File, Vol., 9, Document 000084

B. Existing condition:

1. Forest Plan: See FEIS, P. 53, "... The Forest Plan (USFS, Oct. 1986, p. 19 and 172) lists a 1/4 mile radius around nest sites to avoid disturbance during the period March 15 to July 20, ..."

2. Biological: Peregrine falcon - No known active nest sites on the Custer National Forest, though one historic peregrine eyrie is known from the northern portion of Little Missouri National Grassland and outside of the SLM FEIS project area. There are approximately four historic peregrine falcon eyries on the Custer National Forest.

C. Monitoring:

1. Of populations: None - no active nest sites. National monitoring by USFWS.
2. Of impacts from land management activities including O&G: None - no detected active nest sites.

D. Literature:

1. Pre-Forest Plan: (USFWS, 1984, P. 21)
2. Post-Forest Plan: Consultation with USFWS

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See EIS, III-53 (peregrine falcon), which identifies the inconsistency of protection of radius from peregrine falcon nest sites and management/recovery plans. In the event one of these raptors was detected, the USFS/BLM would be required to consult with the USFWS and comply with the Endangered Species Act, and follow the respective species recovery plan. At this time there are no known active nest sites for peregrine falcon on the Custer National Forest. See EIS, Page III-53, for peregrine falcon, listing 1.0 mile radius (USFWS, 1984, p. 34), and dates of February 1 through August 31 (USFWS, 1984, p. 21). Project File, Vol., 9, Document 000084. See Project File, Vol. 11, Document 021594 (filed under sage grouse). BLM/USFS coordination on dates and radius for NSO and TL around active raptor nests and grouse leks. See Project File, Vol. 11, Document 021595-7 (filed under sage grouse). Line support (Sam Redfern) for NSO radius and dates to avoid disturbance for raptors and grouse.

F. Amendment (change to): Forest Plan changed to conform with recovery plan (USFWS, 1984, p. 21).

Peregrine Falcon

Nesting: February 1 through August 31

Disturbance Zones: no disturbance for a one mile radius around the nest (NSO stipulation in oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review and concurrence by the USFWS.

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate less than 5% (topographic screening) of NSO area around active nest sites would be accessed for exploration.

H. Stipulation as Included in SLM FEIS, Vol. II, Appendix D.

None

II. Ferruginous Hawk (USFS Sensitive)

A. General Documentation on Ferruginous hawks

See discussion on ROD pages 4, 5, 6, 12, 18, and Appendix Page 4; EIS pages II-24 to 39; III-54, 55, 63, 98, 153; IV-38, 42; Appendix D-8; and Project Files, Vol. 10, (entire volume). See Project File, Vol. 11, Documents 021594 and 021595-7 (filed under sage grouse).

B. Existing condition:

1. Forest Plan:

Pre-forest plan considered in combination with sharp-tailed grouse.

Post-Forest Plan the ferruginous hawk was added as a Northern Region Sensitive species in North Dakota; Reel, S., L. Schassberger, and B. Ruediger. 1989. Caring for our natural community: Region 1 - Threatened, Endangered, and Sensitive Species program. USDA, Forest Service Northern Region. 310 pp. (See P. 22-23 on ferruginous hawk).

2. Biological:

See EIS, page III-55 (Number of Nests). There are 28 known nests present estimated to represent nine territories all of which are within the project area; no other known nests within the cumulative effects boundary which was defined as the Little Missouri National Grasslands. The Grand River National Grasslands contains approximately 19 nests 11 (58%) of which are on NFS surface land ownership. All known nests on the Custer National Forest are on the Little Missouri National Grasslands (ND) and Grand River National Grasslands (SD); no known nest sites are present on the remainder of the Custer National Forest.

C. Monitoring:

1. Of populations:

No local population data available. ND State populations of nests are unknown; 28 nest sites are known within LMNG all within the SLM EIS project area. See EIS, III-55, (Landtypes -); 18 nests (64%) of 28 nests are in upland landtype associations. The proportion of uplands decreases and badlands increase from south to north on the Little Missouri National Grasslands.

2. Of impacts from land management activities including O&G: No local data available.

D. Literature:

1. Pre-Forest Plan: No known records to show what literature was considered.

2. Post-Forest Plan:

Added as a Northern Region Sensitive species in North Dakota; Reel, S., L. Schassberger, and B. Ruediger. 1989. Caring for our natural community: Region 1 - Threatened, Endangered, and Sensitive Species program. USDA, Forest Service Northern Region. 310 pp. (See P. 22-23 on ferruginous hawk.)

The EIS considered scientific literature cited in the EIS as well as information contained in the Project File (Project Files, Vol. 10, Ferruginous hawk). Especially see literature review in Olendorff, 1993.

Two documents (Call, 1994; White and Thurow, 1985) were not included in the SLM FEIS project file. However, published literature was considered indirectly in (Project Files Vol. 10, Document 000093) Olendorff, 1993 who cites White and Thurow, 1985 (Project Files Vol. 10, Document 000093-page 44).

(Project File, Vol. 10, Document 000093, Ferruginous hawks. See Olendorff, 1993, Page ii, Acknowledgments, and specifically paragraph 2, which included at least one review by M. W. Call, and C. W. White of Dr. Olendorff's publication. Publication by Olendorff, 1993 post-dates published document cited by commentator. Publication by Dr. Olendorff, 1993, P.54, references an earlier paper by M. W. Call on the Shamrock hills, "Call, M. W. 1989. Raptor monitoring in the Shamrock Hills: a 1989 monitoring study. Prepared for Energy International, Inc., Pittsburg, Pa 111 pp. See EIS, "Literature Cited Page-9" which further shows that Olendorff, 1993, was considered and utilized.

See ROD, ROD Appendix, page 4, heading Ferruginous Hawk, "Nesting March 1 through August 1" and consistency with (Project File, Vol. 10, Document 000093) Olendorff, 1993, page 44, Management Recommendations No. 22, column 2, paragraph 3, regarding dates of about 1 March through 1 August.

See Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. Regarding BLM/USFS wildlife biologist meeting and see discussion on variation of distances and dates used in BLM and USFS plans and consensus reached under heading "Ferruginous hawk" and under headings of "No Surface Occupancy (NSO)", Timing Limitation (TL) Radius, and TL Dates.

See Project File, Vol. 10, Document 070893 (filed under Ferruginous Hawk) which shows consideration of stipulations used in other areas (Table 2 in Document 070893).

See, Project File, Vol. 10, Document 000093 (Ferruginous Hawk). (Olendorff, 1993, page 44, Col. 2, last paragraph, "... Buffer zones for prolonged activities (one-half hour to several days) should be evaluated on an individual basis; other (generally more restrictive) recommendations may be equally valid. ..."

Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. Regarding BLM/USFS wildlife biologist meeting. BLM/USFS Wildlife Biologist met and arrived at a consensus on distances and dates. The 1 km (0.62 miles) NSO radius was not used to provide consistency with the 0.5 mile radius around other raptor (e.g., golden eagle, prairie falcon) nests. It was felt that the timing limitation (TL) from 0.5 to 1.0 would cover this requirement as well as provide for the potential for longer line of sight distances found around several ferruginous hawk nests.

See Custer Forest Plan FEIS, 297, USDI Comment on FS Draft Mgmt Plan. The close working relationship between the USFWS and USFS has been a key in determining stipulations. Post-Custer Forest plan coordination with the USFWS has continued and a need for a greater level of protection identified (see SLM FEIS, Page V-60, 7/2800 comment and response).

The EIS, page III-55, (**Nest Productivity -**), and III-88 (**Nest Success and Productivity -**) recognized that changes in raptor population numbers may be in response to human disturbance, but could also reflect response to other factors such as weather or prey abundance, which could temporarily mask impacts of human disturbance.

The EIS, page III-55 describes "... **Nest Productivity -** Ferruginous hawk nest productivity has not been monitored, though in theory nests sites located in the vicinity of prairie dog towns and relatively free from human disturbance should be more productive than those located outside the home range of breeding and nesting adults. Breeding density and fledging success of ferruginous hawk were consistently correlated with squirrel abundance in southeastern Alberta (Schumtz and Hungle 1989, p. 2596). ..."

The EIS, P. III-88, describes "... **Nest Success and Productivity -** Weather, prey abundance, and human disturbance are factors that can affect golden eagle nest success and productivity. Phillips et al. (1990, p. 10), attributed weather and prey abundance as the primary factors that affected golden eagle nesting success and productivity on a study area in southern Montana and northern Wyoming between 1975 and 1985. Strong winds, wet snow, and cold rain depressed nesting success regardless of prey abundance. The number of young produced per territory was correlated with rabbit abundance in Utah (Bates and Moretti, 1994, p. 248). ..."

See, Project File, Vol. 10, Document 000093 (Ferruginous Hawk). (Olendorff, 1993, page 44, Management Recommendation No. 21, Prolonged activity -) * ... Prolonged activity - 800 meters (880 yards) line of sight to nest. -- 400 meters (440 yards) to 800 meters (880 yards) from the nest with an intervening visual buffer. Buffer zones for prolonged activity (one-half hour to several days) should be evaluated on an individual basis; other (generally more restrictive) recommendations may be equally valid. ...*

Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. Regarding BLM/USFS wildlife biologist meeting. Note that 800 meters is equal to 0.5 miles. Oil and gas related activity was considered a prolonged activity and was evaluated on an individual basis by a group of BLM/USFS wildlife biologists.

See EIS, P. IV-38 -39, NSO-, TL-: No Surface Occupancy (NSO) would provide protection for nesting ferruginous hawks during the exploration, development, and production phase of oil and gas activities. Timing Limitation (TL) stipulations for nesting ferruginous hawks would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See USFWS letter supporting changes in stipulations, SLM FEIS P. V-58, parag. 5 and V-60.

It is beyond the scope of this document to standardize stipulations within, or assess effectiveness of stipulations over a gradient of environmental conditions within the western United States. Stipulations were based on scientific literature, consensus of wildlife biologists, approval of line officers, and minimizing impacts to industry while providing adequate protection to wildlife resources. Further, it is outside the scope of this document (EIS) to assess whether a cause and effect relationship does in fact exist between changes in the number of breeding pairs of ferruginous hawks and oil and gas leasing stipulations in Wyoming.

The EIS has identified that several factors can influence prey abundance and breeding raptor populations within the cumulative impact area (See EIS, Page III-55, Col 1., para. 1) which include: changes in Land Use (See EIS, Page III-55, Col. 2, Land Use) such as changes in Cropland Reserve Program (CRP) lands (See EIS, Page III-69, CRP Lands); changes in acreage of prairie dog towns (See EIS, Page III-50 - 53, CRP Lands); or because the ferruginous hawk is currently being considered by the USFWS for federal listing pursuant to the endangered species act (Project File, Vol. 10, Document 000092, Page 000092-2) has increased Federal agency emphasis in identifying and documenting new ferruginous hawks nest territories; as well as the portion of known nest sites actually potentially impacted by oil and gas exploration, development and production and non-oil and gas land uses (IV-41, Col. 1, para. 2).

The EIS, Page IV-41 (ferruginous hawk), describes the potential time frame of oil and gas exploration, development and production, i.e., oil and gas activities. * ... Oil and gas related activities are estimated to extend 25 years, but could potentially extend up to 50 years. ...* Leasing may not produce immediate impacts as lease activities could potentially occur in the 0-10 year period and development and production in the 0-50 year period. Potential adverse impacts of leasing and associated oil and gas activities may not be detected in population changes of raptors until after disturbing activities occur and adult recruitment to the population is reduced.

The EIS considered stipulations in use in North Dakota (ND Resource Management Plan for EIS, BLM, 04/88) and adjacent areas including eastern Montana (Project File, Vol. 10, Document 051293 and 0700893).

(Regarding ferruginous hawks - Gaines, 1985) Contention that "Id. First, other researchers such as White and Thurow discussed supra have tested this relationship and reached a contrary conclusion. ..."

As previously stated, (Project File, Vol. 10, Document 000093, Ferruginous hawks. See Olendorff, 1993, Page ii, Acknowledgments, and specifically paragraph 2, which included at least one review by C. W. White of Dr. Olendorff's publication. Publication by Olendorff, 1993 post-dates published document (White and Thurow, 1985) cited by commentor.

(Regarding ferruginous hawks - Gaines, 1985) Contention that "Id. Second, "human habitation" with is associated high level of activity can not validly be compared to an oil and gas well which is often visited only once a day and generally presents much lower levels of sustained activity. ..."

Oil and gas activities can represent a relatively high level of potential disturbance beyond that associated with a human residence.

See Project File, Vol. 10, Document 000093, Ferruginous hawk. Olendorff, 1993, Document Page 44, Management Recommendation No. 21, Column 2, for Construction and extended activities.

See, Project File, Vol. 13, Document 090085 (filed under Mule Deer), which contains publication by Bromley, 1985, pages 1-42, and additional description of the types vehicle, construction, and human activity associated with oil and gas related activities. See EIS, P. Appendix L-9, for citation of Bromley, 1985.

See FEIS, P. III-19 through 30. The potential impacts of leasing and subsequent oil and gas exploration, development, and production constitute a prolonged activity (FEIS Table III-12 Oil and Gas Traffic Distribution, P. III-29 - 30). The uncertainties of timing of workover rig operations, pipeline installation and maintenance, etc. can occur during nesting season. An absence of stipulations precludes administratively limiting activities during raptor breeding, nesting, and fledging periods. Timing limitation (TL) stipulations only apply to exploration, not the development and production phase of oil and gas activities. Additional recreation traffic can occur on roads; the effectiveness of enforcement of travel restrictions on oil and gas roads in the absence of physical barriers (gates) is uncertain.

(Regarding ferruginous hawks - Gaines, 1985) Contention that "Id. Third, the Gaines study was not designed to measure the appropriate buffer distance and consequently, is not a reliable source. Id."

See Project Files, Vol. 10, 050085. Gaines, 1995, P. 2, paragraph 3, states: "Data were collected during the spring and summer months of 1983 and 1984 in central North Dakota to evaluate the impact of human activity on ferruginous hawk breeding habits. The objectives of the study were to: 1) evaluate land-use within 1.0 km of occupied nests, ..." For the purposes of comparing alternatives in this EIS it is assumed that human habitation constitutes a land use.

Gaines, 1985, P. 21, paragraph 2, states: "There were significantly fewer occupied ferruginous hawk nests than expected from random points at a distance of 0.7 km or less from human habitation. This suggests that ferruginous hawks are intolerant of this form of disturbance at distances less than 0.7 km." (0.7 km = 0.43 miles) The EIS interprets this statement to suggest that distances of at least 0.43 miles are required to avoid impacts from this or similar forms of disturbance.

See EIS, P. III-54, Col. 1, para. 1, which states: "... The regional Forester has been directed to identify a list of sensitive species (See Glossary for definition of sensitive species) occurring within National Forest boundaries and develop management strategies that avoid actions which may cause a species to become threatened or endangered (FSM 2670.22). ..." See EIS, P. 54, Table III-22, which shows the ferruginous hawk is a USFS Northern Region sensitive species on the Custer National Forest. One of the strategies utilized on the Custer National Forest is to minimize human disturbance, including oil and gas related activities, around active ferruginous hawk sites.

See, Project File, Vol. 10, Document 000093 (Ferruginous Hawk). (Olendorff, 1993, page 44, Management Recommendation No. 21, Prolonged activity -) "... Prolonged activity -- 800 meters 880 yards) line of sight to nest -- 400 meters (440 yards) to 800 meters (880 yards) from the nest with an intervening visual buffer. Buffer zones for prolonged activity (one-half hour to several days) should be evaluated on an individual basis; other (generally more restrictive) recommendations may be equally valid. ..."

Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. Regarding BLM/USFS wildlife biologist meeting

The 5-year period for survey data was negotiated in a joint BLM/USFS lineofficer meeting which included discussion on up to a 7-year period.

Olendorff, 1993, P. 49-50, reviews the literature and identifies that the ferruginous hawk may take advantage of prey cycles.

Weather - Nesting seasons can be influenced by drought and cold wet springs. Weather patterns vary by year. See, Project File, Vol. 4, Document 000091 (filed under Climate); Jensen, W. F. 1991. Historic frequency of drought in western North Dakota (1406 to 1990). USFS Memo, Medora Ranger District, Custer National Forest, 15 pp. Document is cited on EIS, Page, Appendix L-9.

Landtypes - A number of nests are within badlands or butte landtypes where there is a higher likelihood that topographic screening may be present as compared to the rolling uplands, see: EIS Page III-55, "Landtypes" (Ferruginous hawks); EIS Appendix M-1 through M-5, and especially Table M-2 (ferruginous hawk, golden eagle, prairie falcon).

Existing Impacts - A number of existing nests have potentially been impacted by human activities associated with roads open to motor vehicle travel, see: EIS Page III-55 through 57 (Ferruginous hawks); EIS Page III-88 through 89 (Golden eagles); EIS Page III-89 through 90 (Prairie falcon).

F. Amendment (change to): See ROD, ROD appendix P. 4.

Ferruginous Hawk

Nesting: March 1 through August 1

Disturbance Zones: no disturbance for ½ mile radius around the nest (NSO stipulation in oil and gas leases), and no disturbance during nesting for one mile (TL stipulation in oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review.

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate less than 5% (topographic screening) of NSO area around nest sites would be accessed for exploration.

H. Stipulation as Included in SLM FEIS, Vol. II, Appendix D, P. D-8 - 9.

WILDLIFE - NSO

- Resource:** Ferruginous hawks, golden eagles and prairie falcons.
- Stipulation:** No surface occupancy or use is allowed within ½ mile (line of site) of ferruginous hawk, golden eagle and prairie falcon nest sites that have been active within the previous 5 years.
- Objective:** To maintain a ½ mile no disturbance zone for nests which have been active within the previous 5 years in order to maintain the production potential of ferruginous hawks, identified as Category 2 species under the Endangered Species Act, and for the protection of golden eagles and prairie falcons, listed as Key Species in the Custer Forest Plan (Forest Plan, p. 19, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that the nest site has been completely abandoned or destroyed.

- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting these raptors.
- Forest Plan:** All access and other development and production related facilities will be prohibited. Seasonal exceptions may be allowed for the construction of buried pipelines or powerlines from August 1 through March 1 (non breeding season) for Ferruginous hawks and prairie falcons, and from August 1 through February 1 (non breeding season) for golden eagles.

WILDLIFE - Timing

- Resource:** Ferruginous hawks.
- Stipulation:** No surface use is allowed within 1 mile (line of site) of ferruginous hawk nest sites, that have been active within the previous 5 years, during the following time period (this does not apply to the operation and maintenance of production facilities):

March 1 through August 1.
- Objective:** To minimize disturbances to ferruginous hawk nest sites during periods of breeding, incubation and fledgling, for nests that have been active within the previous 5 years, (Forest Plan, p. 19 and 46, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that the nest site has been completely abandoned or destroyed.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting these raptors.
- Forest Plan:** All development related activities, and the construction of all access and other development and production related facilities will be prohibited during this time period. This does not apply to the operation and maintenance of production facilities.

III. Golden Eagle (Custer N.F. Key species)

A. General Documentation:

Golden eagle were discussed on ROD pages 4, 6, 8, 12, 18, and ROD Appendix Page-4; EIS pages II-4, 23-36, 40; III-7, 63, 87, 89, 98, 153; IV-70; Appendix D-8; Project File, Vol. 12, Golden eagle, and Project File, Vol. 11, Sage Grouse, Documents 021594 and 021595-7 (filed under sage grouse).

B. Existing condition:

1. Forest Plan:

2. Biological: See FEIS, P. III-87, Col 2: **Number of Nests** - The golden eagle (*Aquila chrysaetos*) is present and 82 nests have been identified in the project area. It is assumed these 82 nests represent approximately 21 nest territories which represent approximately 23 per cent of the territories in North Dakota. There are approximately 80 to 100 territories comprised of 350 to 380 nests in North Dakota; there have been no complete state wide surveys the USFWS to identify territories. ... Data are not available to identify the nests which comprise specific nest territories in the project area. ...

C. Monitoring:

See FEIS, Vol. 1, III-88: ***Monitoring** - The monitoring of golden eagle nests across the LMNG has been sporadic and data has generally not been collected systematically for undeveloped and developed oil and gas exploration, development, and production areas. Portions of the LMNG and the Southern Little Missouri NG portion of the project area have been systematically sampled, though not within a given year. A review of monitoring efforts of golden eagle nests (Jensen, Dec. 6, 1993) shows major efforts in 1983-1984 and 1992. Data suggests a declining trend in the number of active golden eagle nests in developed areas, though the data are not available to show the difference is statistically significant. Similarly, data is limited to active or inactive nests and is not available on nest production from active nests which could indicate differences between developed and undeveloped areas.*

See FEIS, Vol. 1, III-88 through 89, Tables III-40 and III-41 for discussion of potential impacts from land management activities including oil and gas.

D. Literature:

1. Pre-Forest Plan:
2. Post-Forest Plan:

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See USFWS letter supporting changes in stipulations, SLM FEIS P. V-58, parag. 5 and V-60. See FS comments on TL in NSO P. V-59.

It was beyond the scope of this document to standardize stipulations within a multi-state area of the western United States. Consideration was given to stipulations in use in adjacent areas including eastern Montana.

See EIS, P. IV-70, NSO-, TL-: No Surface Occupancy (NSO) would provide protection for nesting golden eagles during the exploration, development, and production phase of oil and gas activities. Timing Limitation (TL) stipulations for nesting golden eagles would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

See ROD, Page 27; EIS, Page II-15 through 16, Appendix D-2, and Glossary. Waivers, Exceptions, or Modifications (WEM's) were also discussed and apply to all stipulations.

It was beyond the scope of this document to standardize stipulations within a multi-state area of the western United States. Stipulations in use in adjacent areas including eastern Montana were considered.

See EIS, P. IV-74, NSO-, TL-: No Surface Occupancy (NSO) would provide protection for nesting prairie falcons during the exploration, development, and production phase of oil and gas activities. Timing Limitation (TL) stipulations for nesting prairie falcons would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

See ROD, Page 27; EIS, Page II-15 through 16, Appendix D-2, and Glossary. Waivers, Exceptions, or Modifications (WEM's) were also discussed and apply to all stipulations.

ROD Appendix, Page 4: makes the following statement under raptors including ferruginous hawk, golden eagle, and prairie falcon " ... This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review."

Consistency of Stipulations with other Areas - SLM FEIS followed stipulations in the BLM's RMP, Miles City, MT which is located to the west and adjacent to the SLM FEIS project area, ND. Coordination was based on meetings with BLM/USFS biologist (Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. The USFWS response to the SLM DEIS was also supportive of these stipulations (SLM FEIS P. 58, parag. 5, and V-60).

Contention: Suter and Jones, 1981 - golden eagle and prairie falcon. Commentor suggests that median radius listed in Table 1, page 16-17 of document constitute the "maximum" value to be used and cites as "maximum" 1,804 feet (550 meters) for golden eagle and 1,314 feet (400 meters) values listed in table.

Contention that the SLM FEIS has overlooked several other considerations in interpreting the Suter and Jones, 1981, paper.

P. 15, parag. 1. " General suggestions for buffer zone sizes can be made on the basis of survey responses. ... Construction and similar noisy, extended activities should be kept at least 1 km from the nest sites to avoid nest abandonment. At this distance, nesting birds are also out of sight of rifle range and are relatively inconspicuous to users of new roads or other facilities. These suggested distances lie within the range of buffer zone sizes listed in table 2. They are not absolute and should be modified by knowledgeable individuals to fit the circumstances of the project and nest site. ... "

See Project File, Vol. 12, Document 000081. Suter and Jones, 1981. On page 16 and 17, use of the median values is based on the assumption that a 20% disturbance level is acceptable. See Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. Regarding BLM/USFS wildlife biologist meeting which documents agreement by BLM/USFS that a 0.5 mile radius is required to adequately protect active golden eagle and prairie falcon nests from disturbance associated with oil and gas activities. The concept was supported by line officers, See Project File, Vol. 11, Document 021595-7, which is filed under sage grouse, (S. Redfern's memo).

See EIS, Page III-95, Column 2, line 2, "... The canyonland complex included woody draws, scattered junipers, raptor nest sites, sensitive plants, etc., ..." See EIS, P. V-79, 7/1346A, ND Governors Letter. Comment: " ... Protection of an appropriate number and acreage of this land form from intrusion and destruction is vital to any sound planning for badlands management and is at the heart of the State's ongoing 2020 analysis. ..." Response: "... Because of the controversy over identifying these complexes, the FEIS identified these resources separately for a more efficient approach to analysis.

F. Amendment (change to): See ROD, ROD appendix P. 4.

Golden Eagle

Nesting: February 1 through July 31

Disturbance Zones: no disturbance for 1/2 mile radius around the nest (NSO stipulation on oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review.

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate no access within the 0.25 mile radius from active nests. Estimate approximately 15% (topographic screening) of NSO area in the range of 0.25 to 0.5 miles around nest sites would be accessed (pad) for exploration to some degree based on topographic screening. Nest sites tend to be on cliffs or trees on steep slopes.

H. Stipulation as Included In SLM FEIS, Vol. II, Appendix D, P. D-8.

WILDLIFE - NSO

- Resource:** Ferruginous hawks, golden eagles and prairie falcons.
- Stipulation:** No surface occupancy or use is allowed within 1/2 mile (line of site) of ferruginous hawk, golden eagle and prairie falcon nest sites that have been active within the previous 5 years.
- Objective:** To maintain a 1/2 mile no disturbance zone for nests which have been active within the previous 5 years in order to maintain the production potential of ferruginous hawks, identified as Category 2 species under the Endangered Species Act, and for the protection of golden eagles and prairie falcons, listed as Key Species in the Custer Forest Plan (Forest Plan, p. 19, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that the nest site has been completely abandoned or destroyed.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting these raptors.
- Forest Plan:** All access and other development and production related facilities will be prohibited. Seasonal exceptions may be allowed for the construction of buried pipelines or powerlines from August 1 through March 1 (non breeding season) for Ferruginous hawks and prairie falcons, and from August 1 through February 1 (non breeding season) for golden eagles.

IV. Prairie Falcon (Custer N.F. Key species)

A. General Documentation:

Prairie falcon were discussed on ROD pages 4, 6, 8, 12, 18, and ROD Appendix Page-4; EIS pages II-25-39; III-63, 89, 153; IV-73; Appendix D-8; and Project File, Vol. 12, Prairie falcon. See Project File, Vol. 11, Documents 021594 and 021595-7 (filed under sage grouse).

B. Existing condition:

1. Forest Plan:

2. Biological: Most nests associated with isolated buttes and the badlands.

Of populations: See III-89: **Number of Nests** - The prairie falcon (*Falco mexicanus*) nesting population in North Dakota is estimated at 125 pairs (Allen and Kohn, 1986, p.3). The prairie falcon is present and 38 nests have been identified within the project area; data are not available to project the number of nest territories represented by the 38 nests. (See Table III-41)

C. Monitoring:

See above description on **Number of Nests** -

See FEIS, Vol. 1, III-89 through 90, Tables III-42 and III-43 for discussion on potential impacts from land management activities including O&G.

D. Literature:

1. Pre-Forest Plan:

2. Post-Forest Plan:

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See USFWS letter supporting changes in stipulations, SLM FEIS P. V-58, parag. 5 and V-60. See FS comments on TL in NSO P. V-59.

It was beyond the scope of this document to standardize stipulations within a multi-state area of the western United States. Stipulations in use in adjacent areas including eastern Montana were considered.

See EIS, P. IV-74, **NSO-, TL-: No Surface Occupancy (NSO)** would provide protection for nesting prairie falcons during the exploration, development, and production phase of oil and gas activities. **Timing Limitation (TL)** stipulations for nesting prairie falcons would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

See ROD, Page 27; EIS, Page II-15 through 16, Appendix D-2, and Glossary. **Wavers, Exceptions, or Modifications (WEM's)** were also discussed and apply to all stipulations.

It was beyond the scope of this document to standardize stipulations within a multi-state area of the western United States. Stipulations in use in adjacent areas including eastern Montana were considered. See Project File Vol. 11, Sage Grouse, 0211594 (Sasse, D., February 15, 1994, Internal USFS memo to: Greg Visconti, SLM ID team leader, Custer N.F. Subject: BLM/FS coordination on stipulations for ferruginous hawk and sage and sharp-tailed grouse. From: D. Sasse, SO Planning. File: 2670/2620. 6 pp.)

See EIS, P. IV-74, **NSO-, TL-: No Surface Occupancy (NSO)** would provide protection for nesting prairie falcons during the exploration, development, and production phase of oil and gas activities. **Timing Limitation (TL)**

stipulations for nesting prairie falcons would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

See ROD, Page 27; EIS, Page II-15 through 16, Appendix D-2, and Glossary. Waivers, Exceptions, or Modifications (WEM's) were also discussed and apply to all stipulations.

ROD Appendix, Page 4: makes the following statement under raptors including ferruginous hawk, golden eagle, and prairie falcon " ... This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review."

Consistency of Stipulations with other Areas - SLM FEIS followed stipulations in the BLM's RMP, Miles City, MT which is located to the west and adjacent to the SLM FEIS project area, ND. Coordination was based on meetings with BLM/USFS biologist (Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. The USFWS response to the SLM DEIS was also supportive of these stipulations (SLM FEIS P. V-58, parag. 5.)

Contention: Suter and Jones, 1981 - golden eagle and prairie falcon. Commentor suggests that median radius listed in Table 1, page 16-17 of document constitute the "maximum" value to be used and cites as "maximum" 1,804 feet (550 meters) for golden eagle and 1,314 feet (400 meters) values listed in table.

The commentor has overlooked several other considerations in interpreting the Suter and Jones, 1981, paper.

P. 15, parag. 1. "General suggestions for buffer zone sizes can be made on the basis of survey responses. ... Construction and similar noisy, extended activities should be kept at least 1 km from the nest sites to avoid nest abandonment. At this distance, nesting birds are also out of sight of rifle range and are relatively inconspicuous to users of new roads or other facilities. These suggested distances lie within the range of buffer zone sizes listed in table 2. They are not absolute and should be modified by knowledgeable individuals to fit the circumstances of the project and nest site. ..."

See Project File, Vol. 12, Document 000081. Suter and Jones, 1981. On page 16 and 17, use of the median values is based on the assumption that a 20% disturbance level is acceptable. See Project File, Vol. 11, Document 021594 (Reply to: 2670/2610, Date Feb. 15, 1994) which is filed under sage grouse. Regarding BLM/USFS wildlife biologist meeting which documents agreement by BLM/USFS that a 0.5 mile radius is required to adequately protect active golden eagle and prairie falcon nests from disturbance associated with oil and gas activities. The concept was supported by line officers, See Project File, Vol. 11, Document 021595-7, which is filed under sage grouse, (S. Redfern's memo).

See EIS, Page III-95, Column 2, line 2, "... The canyonland complex included woody draws, scattered junipers, raptor nest sites, sensitive plants, etc., ..." See EIS, P. V-79, 7/1346A, ND Governors Letter. Comment: "... Protection of an appropriate number and acreage of this land form from intrusion and destruction is vital to any sound planning for badlands management and is at the heart of the State's ongoing 2020 analysis. ..." Response: "... Because of the controversy over identifying these complexes, the FEIS identified these resources separately for a more efficient approach to analysis.

F. Amendment (change to): See ROD, ROD appendix P. 4.

Prairie Falcon

Nesting: March 1 through July 31

Disturbance Zones: no disturbance for 1/2 mile radius around the nest (NSO stipulation in oil and gas leases). This distance could be reduced in the presence of a physical barrier between the nest and the proposed activity that would limit visibility from the nest. The actual disturbance zone determination would require an on-the-ground biological review.

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate no access within the 0.25 mile radius from active nests. Estimate approximately 15% (topographic screening) of NSO area in the range of 0.25 to 0.5 miles around nest sites would be accessed (pad) for exploration to some degree based on topographic screening. Nest sites tend to be on cliffs; road access tends to be limited by topography.

H. Stipulation as Included in SLM FEIS, Vol. II, Appendix D, P. D-8.

WILDLIFE - NSO

- Resource:** Ferruginous hawks, golden eagles and prairie falcons.
- Stipulation:** No surface occupancy or use is allowed within ½ mile (line of site) of ferruginous hawk, golden eagle and prairie falcon nest sites that have been active within the previous 5 years.
- Objective:** To maintain a ½ mile no disturbance zone for nests which have been active within the previous 5 years in order to maintain the production potential of ferruginous hawks, identified as Category 2 species under the Endangered Species Act, and for the protection of golden eagles and prairie falcons, listed as Key Species in the Custer Forest Plan (Forest Plan, p. 19, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that the nest site has been completely abandoned or destroyed.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting these raptors.
- Forest Plan:** All access and other development and production related facilities will be prohibited. Seasonal exceptions may be allowed for the construction of buried pipelines or powerlines from August 1 through March 1 (non breeding season) for Ferruginous hawks and prairie falcons, and from August 1 through February 1 (non breeding season) for golden eagles.

IV. Sage Grouse (USFS sensitive species)

A. General Documentation:

Sage grouse were discussed on ROD pages 4, 6, 8, 12, 18, and ROD Appendix Page-4; FEIS pages II-24 to 39; III-56, 63, 153; IV-42, 52; Appendix D-9, 10; and Project File, Vol. 11.

B. Existing condition:

1. Forest Plan: See FEIS, P. III-65, **Forest Plan** - ...

Post-Forest Plan the sage grouse was added to Northern Region USFS sensitive species list.

2. Biological:

There are 31 known sage grouse leks in the SLM EIS project area; no other known leks on Little Missouri National Grassland based on NDGFD aerial survey of suitable habitat. P. III-68, Table III-30 - 16 of 31 lek centers on NFS lands (surface); Table III-31, 54,890 (37%) of 149,210 on NFS lands (surface). It is estimated that the remainder of the Forest consists of limited nest habitat and no known sage grouse leks.

C. Monitoring:

1. Of populations:
2. Of impacts from land management activities including O&G.

Four leks potentially impacted by oil and gas activities in southwestern North Dakota, See SLM FEIS Project File, Vol. 8, Sage Grouse, 12-09-93, P. 120993 and 081193-3.

D. Literature:

1. Pre-Forest Plan: Wallestad, R. and D. Pyrah, 1974 (Especially P. 632), SLM FEIS Project File, Vol. 8, Sage Grouse, 000074.
2. Post-Forest Plan: Added as a Northern Region Sensitive species in North Dakota; Reel, S., L. Schassberger, and B. Ruediger. 1989. Caring for our natural community: Region 1 - Threatened, Endangered, and Sensitive Species program. USDA, Forest Service Northern Region. 310 pp. (See P. 24-25 on Sage Grouse.)

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See EIS, P. IV-52, NSO-, TL-: No Surface Occupancy (NSO) would provide protection for sage grouse during the exploration, development, and production phase of oil and gas activities. Timing Limitation (TL) stipulations for sage grouse would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

See EIS, Page III-45, Col. 1, parag. 3, "Actual stands of sagebrush grassland are not mapped for all ownerships in the Marmarth area, but are assumed to be proportionate to mapped NFS lands for the purpose of this analysis.

...
See Project File, Vol. 11, Documents 000074 (filed under sage grouse), which contains: Wallestad and Pyrah, 1974. P. 632 "... A buffer zone of at least 2 miles around a strutting ground should be protected from all sagebrush eradication if the land manager has not located these complexes. ..."

There was no vegetation map on which to base stipulations for habitat in the SLM FEIS. In general, the badlands have more dissected habitat due to slope and aspect than do the rolling uplands. Identified sage grouse leks are located in badland and upland landtypes.

F. Amendment (change to):

See ROD, ROD appendix P. 4.

Prairie Grouse

Dancing Grounds: March 1 through **June 15**

Disturbance Zones: no disturbance for ¼ mile radius around active leks (line of sight up to this distance)(NSO stipulation in oil and gas leases), **and no disturbance within suitable nesting habitat during the above period for a one mile radius for sharp-tailed grouse and a two mile radius for sage grouse (TL stipulation in oil and gas leases).**

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate suitable nest habitat comprises approximately 25 per cent of the TL area in the range of 0.25 to 2.0 miles around active leks (pers. comm., J. Kobridger, NDGFD to D.Sasse, USFS, Feb. 13, 1996); these areas would potentially accessed (well pad) for exploration. Lek sites tend on relatively flat topography; vegetation tends to be a mosaic. No vegetation map available to map out suitable habitat at the leasing stage, but identifiable in the field at the APD level.

H. Stipulation as Included in SLM FEIS, Vol. II, Appendix D, P. D-9 - 10.

WILDLIFE - NSO

- Resource:** Sage and Sharptail grouse
- Stipulation:** No surface occupancy or use is allowed within ¼ mile of sage and sharptail grouse leks.
- Objective:** To prohibit disturbance within ¼ mile of grouse leks for the protection of sage grouse, listed as sensitive species, and sharptail grouse, listed as Management Indicator Species in the Custer Forest Plan (Forest Plan, p. 46 and 55, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that all leks within ¼ mile of the leasehold have not been used for 5 consecutive years.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting these leks.
- Forest Plan:** All access and other development and production related facilities will be prohibited.

WILDLIFE - Timing

- Resource:** Sage grouse
- Stipulation:** No surface use is allowed within 2 miles of sage grouse leks during the following time period (this does not apply to the operation and maintenance of production facilities):

March 1 through June 15.

- Objective:** To minimize ground disturbances within sage grouse nesting habitat during spring and early summer in order to maximize annual production of young, and to protect nesting activities adjacent to nesting sites for the long-term maintenance of sage grouse populations in the area (Forest Plan, p. 19, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that the entire lease-hold no longer contains sage grouse nesting habitat.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that the proposed action avoids nest habitat.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting nesting habitat.
- Forest Plan:** All development related activities, and the construction of all access and other development and production related facilities will be prohibited during this time period.

VI. Sharp-tailed Grouse (Custer N.F. - Habitat Indicator Species)

A. General Documentation:

Sharp-tailed grouse were discussed on ROD pages 4, 6, 8, 12, 18, and ROD Appendix Page-4; II-25 to 36; III-15, 63, 68, 153; IV-66, Appendix D-9, 10; and Project File, Vol. 11A, Management Indicator Species, Sharp-tailed grouse. Also see Project File, Vol. 11, Documents 021594 and 021595-7 (filed under sage grouse).

B. Existing condition:

1. Forest Plan: See FEIS, P. III-82, **Forest Plan** - ...
2. Biological: See FEIS, P. III-82 - "Sharp-tailed grouse ... are present with 100 known leks in the project area of which 97 are located on the Southern Little Missouri (Table III-37) and three leks on the Cedar River portion of the project area. ..."

C. Monitoring:

1. Of populations: See FEIS, P. III-84 - population down (drought) and habitat trend deteriorating.
2. Of impacts from land management activities including O&G. No local data available.

D. Literature:

1. Pre-Forest Plan:
2. Post-Forest Plan: (Prose, B. 1987)

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

See EIS, P. IV-66 - 67, **NSO-, TL-:** No Surface Occupancy (NSO) would provide protection for sharp-tailed grouse during the exploration, development, and production phase of oil and gas activities. Timing Limitation (TL) stipulations for sharp-tailed grouse would provide protection from the oil and gas exploration, but not the development and production phase of oil and gas activities.

See EIS, Page III-83, See descriptions under headings of "Habitat - , percent Woody Draws/Cropland - , Robel Pole - " which describe considerations in defining habitat, which for leasing purposes would be on potential height of grass species.

There was no vegetation map on which to base stipulations for habitat in the SLM FEIS. In general, the badlands have more dissected habitat due to slope and aspect than do the rolling uplands. Identified grouse leks are primarily located in a mix of landtypes,

F. Amendment (change to):

See ROD, ROD appendix P. 4.

Prairie Grouse

Dancing Grounds: March 1 through June 15

Disturbance Zones: no disturbance for ¼ mile radius around active leks (line of sight up to this distance)(NSO stipulation in oil and gas leases), and no disturbance within suitable nesting habitat during the above period for a one mile radius for sharp-tailed grouse and a two mile radius for sage grouse (TL stipulation in oil and gas leases).

G. Estimated access (pad) for oil and gas exploration at APD level.

Estimate suitable nest habitat comprises approximately 35 per cent of the TL area in the range of 0.25 to 1.0 miles around active leks (pers. comm., J. Kobridger, NDGFD to D.Sasse, USFS, Feb. 13, 1996); these areas would potentially be accessed (well pad) for exploration. Lek sites tend on relatively flat topography; vegetation tends to be a mosaic. No vegetation map available to map out suitable habitat at the leasing stage, but identifiable in the field at the APD level.

H. Stipulation as Included in SLM FEIS, Vol. II, Appendix D, P. D-9 - 10.**WILDLIFE - NSO**

- Resource:** Sage and Sharptail grouse
- Stipulation:** No surface occupancy or use is allowed within ¼ mile of sage and sharptail grouse leks.
- Objective:** To prohibit disturbance within ¼ mile of grouse leks for the protection of sage grouse, listed as sensitive species, and sharptail grouse, listed as Management Indicator Species in the Custer Forest Plan (Forest Plan, p. 46 and 55, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that all leks within ¼ mile of the leasehold have not been used for 5 consecutive years.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that impacts from the proposed action can be adequately mitigated.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting these leks.
- Forest Plan:** All access and other development and production related facilities will be prohibited.

WILDLIFE - Timing

- Resource:** Sharptail grouse
- Stipulation:** No surface use is allowed within 1 mile of sharptail grouse leks during the following time period (this does not apply to the operation and maintenance of production facilities):
March 1 through June 15.
- Objective:** To minimize ground disturbances within sharptail grouse nesting habitat during spring and early summer in order to maximize annual production of young, and to protect nesting activities adjacent to nesting sites for the long-term maintenance of sharptail grouse populations in the area. (Forest Plan, p. 19, Forest Plan Amendment #xxx).
- Waiver:** This stipulation may be waived if the authorized officer determines that the entire leasehold no longer contains sharptail grouse nesting habitat.
- Exception:** An exception to this stipulation may be granted by the authorized officer if the operator submits a plan which demonstrates that the proposed action avoids nest habitat.
- Modification:** The boundaries of the stipulated area may be modified if the authorized officer determines that portions of the area can be occupied without adversely affecting nesting habitat.

Forest Plan: All development related activities, and the construction of all access and other development and production related facilities will be prohibited during this time period.

VII. Active lek (Definition)

A. General Documentation:

Active Lek was discussed on ROD, ROD Appendix Page 4; EIS pages III-65 (sage grouse), IV-2 (sharp-tailed grouse); IV-52 (sage grouse), IV- 66 (sharp-tailed grouse); Glossary.

B. Existing condition:

1. Forest Plan: Not defined in glossary.
2. Biological: N/A for definition

C. Monitoring:

1. Of populations: Indirectly by NDGF through population index.
2. Of impacts from land management activities including O&G:

Four sage grouse leks potentially impacted by oil and gas activities in southwestern North Dakota, See SLM FEIS Projec File, Vol. 8, Sage Grouse, 12-09-93, P. 120993 and 081193-3.

D. Literature:

1. Pre-Forest Plan:
2. Post-Forest Plan:

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

Habitat Description - The SLM EIS describes habitat in terms of slope, vegetation types and structure which may include only a portion of the area within a radius from active leks.

See, EIS, Page. III-65, - Sage Grouse. " ... In the project area, their habitat is defined as big sagebrush (Artemesia tridentata wyomingensis) dominated grasslands types (Wyoming big sage/western wheatgrass or silver sage/western wheatgrass) on 0-15 per cent slope within 2.0 miles of known leks (Wallenstad and Pyrah, 1974, p. 632). Silver sagebrush and fringed sagewort are utilized at a low level and considered to be of low value to sage grouse. ..."

See EIS, Page II-15 through 16, Appendix D-2, and Glossary. Wavers, Exceptions, or Modifications (WEM's) were also discussed and apply to all stipulations.

See EIS P. III-83, - Sharp-tailed grouse. See discussion of various habitat components

The objective is long-term habitat protection as oil and gas exploration, development, and production is potentially a long-term impact (SLM FEIS, Vol. 1, P. III-76: **Reasonably Foreseeable Actions** - Oil and gas related activities are estimated to extend 25 years, but could potentially extend up to 50 years.).

Versus active lek being increasingly identified as inactive. In the absence of information, stipulations were designed to error (consider lek active) on the side of the species.

See EIS, Page II-15 through 16, Appendix D-2, and Glossary. Wavers, Exceptions, or Modifications (WEM's) were also discussed and apply to all stipulations.

F. Amendment (change to):

See ROD, ROD appendix P. 5 which includes the following definition to be added to Forest Plan Glossary.

The following definitions are **added** to the glossary on page 121:

Active Lek Displaying grouse present during the spring breeding season at least one year within a period of five consecutive years. Leks are assumed to be active in the absence of five consecutive years of data collected according to scientific methods which shows the lek to be inactive. Scientific data collection assumes qualified observers, survey times and conditions appropriate to detect breeding activity, and subsequent written reports. Results of surveys and a list of active leks are part of the Custer Forest Plan Monitoring and Evaluation Report (Monitoring Item: C2 - sensitive species, C-9 - prairie grouse). Any lek for which five consecutive years of survey data is lacking is assumed to be active.

G. Estimated access (pad) for oil and gas exploration at APD level.

See previous discussion for sage grouse and sharp-tailed grouse.

H. Stipulation as included in SLM FEIS, Vol. II, Appendix D.

None - included indirectly in stipulations dealing with grouse.

VIII. Active Nest (Definition)

A. General Documentation:

Active nest was described on ROD, page ROD Appendix 5: FEIS pages III-50 (bald eagle), 55 (ferruginous hawk), 87 (golden eagle), 89 (prairie falcon), 90 (merlin); IV-38 (ferruginous hawk), 70 (golden eagle), 73 (prairie falcon), 77 (merlin); Glossary.

B. Existing condition:

1. Forest Plan: Not defined.
2. Biological: N/A for definition

C. Monitoring:

1. Of populations:

N/A

2. Of impacts from land management activities including O&G:

Absence of survey data.

D. Literature:

1. Pre-Forest Plan: Not defined in Custer Forest Plan
2. Post-Forest Plan:

E. Rational for Change from Existing Forest Plan Standard/Stipulation:

The EIS, Page IV-41 (ferruginous hawk), IV-72 (golden eagle), IV-76 (prairie falcon), IV-54 (sage grouse), and IV-69 (sharp-tailed grouse), describes the potential time frame of oil and gas exploration, development and production, i.e., oil and gas activities. "... Oil and gas related activities are estimated to extend 25 years, but could potentially extend up to 50 years. ..." Leasing may not produce immediate impacts as lease activities could potentially occur in the 0-10 year period and development and production in the 0-50 year period.

Requiring the lease holder to conduct a minimum of five years of data would put an unwarranted burden on the lease holder by extending processing of Application of Permit to Drill (APD) to over five years. If adverse weather conditions occurred, and precluded collection of data due to wet soil conditions for ground based surveys, or high wind or overcast weather for aerial surveys, the period could be extended for six or more years.

Similarly, if a lease was limited to a CSU stipulation for raptors, and active nest sites of several species were located in the parcel in such a manner that included the entire area, the lease would require the USFS to permit the disturbance of nesting raptors to facilitate access. Stipulations other than NSO imply some type of access to the lease area at some time period. Stipulations other than NSO also only to the exploration phase, and not the development and production phase of oil and gas activities.

Second, the definition needs to clarify the meaning of "an adult pair present."

F. Amendment (change to):

See ROD, ROD appendix P. 5 which includes the following definition to be added to Forest Plan Glossary.

The following definitions are added to the glossary on page 121:

Active Nest An adult pair present at least one year within a period of five consecutive years. Nests are assumed to be active in the absence of five consecutive years of data collected according to scientific methods which shows the nest to be inactive. Scientific data collection assumes qualified observers, survey times and conditions appropriate to detect nesting activity, and subsequent written reports. The reporting process for results of surveys and a list of active nests are part of the Custer Forest Plan Monitoring and Evaluation Report (Monitoring Item: C2 - Sensitive Species, C8 - Special Interest). Evidence that a pair is present within a nesting territory can be based on evidence that eggs were laid or observations of two breeding-age birds that appear to be paired. In some species, the presence of a nest that has been recently built, repaired, or decorated may constitute evidence for occupancy because nest building behavior is probably elicited by the presence of a mate.

G. Estimated access (pad) for oil and gas exploration at APD level.

See previous description under individual raptor species.

H. Stipulation as Included in SLM FEIS, Vol. II, Appendix D.

None - included indirectly in stipulations dealing with raptors.

Errata Sheet for SLM FEIS

FEIS P. III-55, Col. 2; At end of paragraph on **Land Use** - Add the following sentence: "For the purposes of comparing alternatives in this EIS it is assumed that human habitation constitutes a land use."

FEIS P. III-56, after **Road Impacts within 1/2 mile Radius** - ... (Table III-24). Add sentence: "The 1/2 mile radius (800 meters) around nests is based on current management recommendations (Olendorf, 1993, P. 44, Management Recommendation No. 21, Prolonged Activity)." Note this citation is already listed in the Literature Cited of the SLM FEIS.

FEIS P. III-56, after **Road Impacts within 1/2 mile radius** - ... Table III-24). Insert the following: "March 1 through August 1 are the recommended dates to avoid disturbance to active nest sites for ferruginous hawks (Olendorf, 1993, page 44, Management Recommendations No. 22, column 2, paragraph 3)." The 0.5 mile radius from active nest was validated for the local area by BLM/USFS biologists (Sasse, D., February 15 1994). The 0.6 mile (1 km) radius NSO (Sutter and Jones, 1981, P. 14-15) was reduced to 0.5 miles for consistency of NSO stipulations between other raptors such as golden eagle, prairie falcon (Sasse, D. January 6, 1994)."

FEIS P. III-56, after **Timing Restriction within 1.0 miles** - *
Insert the following: "The BLM/USFS biologist recommended that a TL stipulation of 0.5 to 1.0 mile radius be used to provide protection in the absence of visual barriers between active nests and human activities. These recommended TL conform with published recommendations (Olendorf, 1993 P. 44) that buffer zones for prolonged activity (one-half hour to several days) should be evaluated on an individual basis; other (generally more restrictive) recommendations may be equally valid. Stipulations for CSU or TL apply only to exploration and development, and not to the production phase of oil and gas activities."

FEIS P. III-65, Col 1, Para I, Number of sage grouse leks change "53" known leks to "31" known leks.

FEIS, P. III-67, After the sentences: **Habitat Model** - ... assumed to be 2.0 miles around active nests." Change and add to read and insert the following sentence: "assumed to be 2.0 miles around active leks. The 0.25 mile radius from active leks and 2.0 mile radius TL was validated for the local area by BLM/USFS biologists (Sasse, D., February 15 1994)." FEIS P. III-86, left column, para 1; add golden eagle and prairie falcon to Table III-39A, with statement for both species that "Known existing habitat, species is present in project area. Addressed under **Key Species**."

See FEIS, P. III-84, After the sentences: **Habitat Model** - ... , but excluding forest, short grass, baresoil, and cropland." Add the following sentence: "The 0.25 mile radius from active leks and 1.0 mile radius TL was validated for the local area by BLM/USFS biologists (Sasse, D., February 15 1994)."

*FEIS, LITERATURE CITED, P. 10, add the following:
The following citations were previously included in the SLM FEIS project files.

Sasse, D. January 6, 1994. Internal USFS memo, Basis for mitigation actions around ferruginous hawk nests.
1 pp.

Sasse, D., February 15, 1994, Internal USFS memo to: Greg Visconty, SLM ID team leader, Custer N.F.
Subject: BLM/FS coordination on stipulations for ferruginous hawk and sage and sharp-tailed grouse.
From: D. Sasse, SO Planning. File: 2670/2620. 6 pp.

FEIS, Appendix D, P. D-10, after statement "WILDLIFE - Timing, Resource: Sage Grouse ... Objective: ... sage grouse populations in the area (Forest Plan, p. 19, Forest Plan Amendment # xxx)." Add the following paragraph: "The intent of this TL stipulation is to minimize impacts of oil and gas activities in high quality nesting habitat on each lease. TL would apply only to high quality nesting habitat in situations where activities could not be located in low quality or unsuitable nest habitat. TL would not apply to low quality or unsuitable nest habitat. Mid-grass species include green needle, western wheatgrass, prairie sandreed and little bluestem, and short grass species include blue grama which would be located at the APD stage. Sage grouse nesting habitat is defined as Wyoming big sagebrush dominated mid-grass vegetation types including big sage/ western wheatgrass generally located on 0-15 per cent slopes. Sage grouse nesting habitat excludes excluded forest, short-grass, fringed sage, baresoil, and cropland. Current year stubble height of mid-grass species is not intended to be a measure of nest habitat over the relatively long time period of an oil and gas lease."

FEIS, Appendix D, P. D-10, after statement "WILDLIFE - Timing, Resource: Sharp-tailed Grouse ... Objective: ... of sharp-tailed grouse populations in the area (Forest Plan, p. 19, Forest Plan Amendment # xxx)." Add the following paragraph: "The intent of this TL stipulation is to minimize impacts of oil and gas activities in high quality nesting habitat on each lease. TL would apply only to high quality nesting habitat in situations where activities could not be located in low quality or unsuitable nest habitat. TL would not apply to low quality or unsuitable nest habitat. Mid-grass species include green needle, western wheatgrass, prairie sandreed and little bluestem, and short grass species include blue grama which would be located at the APD stage. Sharp-tailed grouse nesting habitat is defined as including mid-grass species, generally on 0-15 per cent slopes, and woody draws, but excluded forest, short-grass species, baresoil, and cropland. Current year stubble height of mid-grass species is not intended to be a measure of nest habitat over the relatively long time period of an oil and gas lease."

END