

APPENDIX A

BIOLOGICAL ASSESSMENT

**TCEF Research Project
for
LEWIS AND CLARK NATIONAL FOREST**

PREPARED BY

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Updated November 1, 1998 to reflect status of lynx**

I. INTRODUCTION

An environmental analysis has been prepared which describes and evaluates the management alternatives for the timber harvest and burning within the Tenderfoot Creek Experimental Forest (TCEF) project area. The project area lies within the headwaters of the Tenderfoot drainage of the Lewis and Clark National Forest (Map I-1 of EA).

The purpose of this biological assessment is to review the possible effects of the preferred alternative on endangered, threatened, proposed and candidate species and their habitats in order to determine whether or not a "may adversely affect" situation exists.

The preferred alternative (Alternative 2) will test an array of management treatments for re-generating and restoring healthy lodgepole pine forests through emulation of natural disturbance processes, but avoiding catastrophic scale disturbances. This research project will harvest timber in two treatment sub-watersheds, Spring Park Creek and Sun Creek. These drainages have hydrologically matched sub-watersheds located to the west of each which will be used as control areas for treatment sub-watershed effects. An additional control area will be the headwaters of Tenderfoot Creek which is a Research Natural Area (Onion Park RNA). The silvicultural system used will be shelterwood with reserves using even distribution of single or small groups and uneven distribution and shape of large residual groups. Two site preparation methods are scheduled to be used, burn and no-burn. In addition to site preparation burning, prescribed fire treatments will be applied in each treatment sub-watershed. Two kinds of prescribed fire treatments will be applied, low-intensity broadcast underburn and mixed severity broadcast underburn. Spring Park Creek sub-watershed is approximately 1032 acres and Sun Creek is approximately 859 acres in size. Research will treat approximately 376 acres and 389 acres, respectively. In order to evaluate hydrologic response to ecosystem-based treatments it is necessary to treat a large percentage of each sub-watershed. Silt fences will be installed within each treatment type to evaluate within-treatment sediment productions.

The Jefferson Division of the Lewis and Clark National Forest includes habitat for three species listed by the USFWS (U.S. Fish and Wildlife Service) as endangered or threatened (wolf, peregrine falcon and the bald eagle). The Forest Plan Standard C-2 instructs the Forest to comply with the Endangered Species Act of 1973, as amended, which obligates the Forest Service to conduct activities and programs which assist in identification and recovery of threatened and endangered plant and wildlife species.

The USFWS published an updated Notice of Review of plant and animal taxa that are candidates for listing as threatened or endangered in the February 28, 1996, Federal Register (61 FR 7596). Beginning with that notice, the Service will recognize as candidates only those plant and animal species for which the Service has sufficient information on biological status and potential threats to propose listing them as endangered or threatened under the Act. Formerly such species were considered Category 1 candidate species. The status of these species will be discussed in this evaluation.

The Lewis and Clark National Forest submitted a letter to the USFWS on March 31, 1997 stating that for any project that is completed on the Forest effects of the project will address the following species :

Jefferson Division

Listed Species

Peregrine Falcon	<u>Falco peregrinus anatum</u>	Endangered
Gray Wolf	<u>Canis lupus irremotus</u>	Nonessential Experimental
Northern Bald Eagle	<u>Haliaeetus leucopcephalus</u>	Threatened

Candidate Species

Mountain Plover	<u>Charadrius montanus</u>
Swift Fox	<u>Vulpes velox</u>

Rocky Mountain Division

Listed Species

Peregrine Falcon	<u>Falco peregrinus anatum</u>	Endangered
Gray Wolf	<u>Canis lupus irremotus</u>	Endangered
Northern Bald Eagle	<u>Haliaeetus leucopcephalus</u>	Threatened
Grizzly Bear	<u>Ursus arctos horribillis</u>	Threatened

Candidate Species

Swift Fox	<u>Vulpes velox</u>
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The USFWS concurred with the list of species in a letter to the Forest Supervisor dated April 8, 1997 (filed in 2670 FY 97 Forest Supervisor Files, Great Falls, Montana), and also stated that no Proposed Species existed on the Forest. In a May 27, 1997 letter from the USFWS to the Forest Supervisor, the Service stated that the status of the **Canada lynx** (*Lynx canadensis*) had been reassessed and it was warranted but precluded from listing. This finding automatically elevated the lynx to candidate species status. Therefore, lynx has been added to the list of candidate species for both Divisions. However, a letter from the Regional Forester (September 4, 1998) to the Forest Supervisor, stated that on July 8, 1998, the USDI Fish and Wildlife Service (FWS) published a proposal to list the lynx (*Lynx canadensis*) within the lower 48 states (Federal Register, Volume 63, Number 130, 7/8/98). For National Forests and Bureau of Land Management (BLM) Districts with occupied lynx habitat, it is important to meet our Section 7 responsibilities under the Endangered Species Act for "proposed species." For proposed species, each federal agency is required to confer with the FWS on any actions which are "likely to jeopardize the continued existence of any species that is proposed to be listed... or which results in the destruction or adverse modification of critical habitat proposed to be designated for such species" (50 CFR 402.10).

II. AFFECTED ENVIRONMENT

A. Threatened and Endangered Species

Northern Bald Eagle: Bald eagles are occasionally seen hunting for carrion and other food sources during the spring and fall migrations. Bald eagles are also known to winter along the Smith River drainage bordering the Little Belt Mountains.

Bald eagle nest sites typically require large overstory trees with an average bole size of 43 inches dbh (Issacs and Anthony 1987). Nest sites tend to be near bodies of water with relatively little human disturbance. Nesting takes place in January or February, with incubation occurring by early March. Fledging occurs from late June to early July. Food items are variable. Scavenging occurs on whatever is available (e.g. roadkills) during the winter months with a general transition to fish and small mammals during the spring. Bald eagles seem to be expanding their nest sites throughout Montana. Maintenance of roosting, foraging, and nesting habitats is important when possible. Typical foraging habitat, rivers or lakes are not found within the project area. Lack of a preybase and preferred habitats are the limiting factors for bald eagles in the TCEF. No known nest sites, nesting territories, or winter roost sites have been found on National Forest System Lands in the TCEF.

No bald eagles nest territories have been located during general field reconnaissance, since 1991, which were associated with timber sales, livestock grazing, road access, and northern goshawk nest territory monitoring. Bald eagles are one of several large raptors that do not need specialized equipment for their detection. No bald eagle nest territories were recorded for the Little Belt Mountains during extensive raptor surveys completed by Elenowitz in 1978 and Vandehey in 1986. The Little Belt Mountains are not historically known or considered to be bald eagle habitat.

Peregrine Falcon: Peregrine falcons have relatively strict nesting requirements: vertical cliff habitat with large potholes or ledges that are inaccessible to land predators and are preferably located near habitat with a high avian prey population (Hunter et al. 1988). Peregrines nest on cliffs and forage over broad, open areas especially associated with riparian and wetland areas. Suitable nesting habitat for peregrines exists on most of the major drainages in the Little Belt Mountains, however none exist in the TCEF project area.

Even though the Little Belt Mountains support suitable peregrine falcon habitat, peregrine falcons are not known to inhabit them. No peregrine falcons or nest territories were identified during the Elenowitz and Vandehey surveys. No peregrine falcons were detected during a general field reconnaissance since 1991. Field surveys of the Smith River in 1995 did not reveal any nesting peregrine falcons, even though there were reports of two nesting territories. Both territories turned out to be prairie falcons.

Gray Wolf: The Little Belt Mountains are part of the Yellowstone National Park (YNP) experimental population area for released gray wolves. Although wolves are not being released in or near the Little Belt Mountains, they may expand out from YNP release sites eventually reaching areas like the project area. These wolves would be classified as "nonessential experimental wolves" according to section 10(j) of the Endangered Species Act (ESA) of 1973. Section 10(j) of ESA states that "nonessential experimental animals are not subject to formal consultation of the Act unless they occur on land designated as a national wildlife refuge or

national park" (50 CFR Part 17, Fed. Reg. Vol 59, No 224). According to section 7 of ESA, nonessential experimental wolves found outside of national wildlife refuges and national park lands will be treated as if they were only proposed for listing (50 CFR Part 17, Fed. Reg. Vol. 59, No 224). Under section 7, Federal agencies are required to establish conservation programs for the particular species and to informally confer with USFWS on actions that will likely jeopardize the continued existence of the proposed species to be listed as threatened or endangered (50 CFR Part 17, Fed. Reg. Vol 59, No 224).

The Little Belt Mountains support adequate habitat and a wild ungulate preybase to sustain wolves part of the year. When coupled with the surrounding mountain ranges, year-round occupation by wolves is possible. The Little Belt Mountains may serve as occupied wolf habitat or as a habitat linkage to the adjacent mountain ranges.

Sporadic wolf sitings have been reported to area MDFWP game wardens, MDFWP area biologists, and Forest Service personnel for the past few years in the Little Belt Mountains, especially in 1997. No sitings have been undeniably confirmed. However, a snow track survey completed in February 1995 revealed possible tracks of a single wolf, based on track dimensions, in the Little Belt Mountains. These tracks were recorded 20-25 miles south and east of the project area. In 1996, a single wolf from the YNP reintroduction was located in the Crazy and Castle Mountains, south of the Little Belt Mountains. Snow track surveys completed in the TCEF vicinity during the winter of 1997 did not detect any wolf sign.

B. Proposed Species

Canada Lynx: The lynx was considered as a species that was part of the wildlife issue in the EA. For a discussion on lynx refer to the EA in chapter III.

C. Candidate Species

Swift Fox: Swift fox occupy short-grass prairie habitats. Potential habitat can be found outside of National Forest System Lands surrounding the Little Belt Mountains and other island mountain ranges of the Jefferson Division. No suitable habitat is present in the Little Belt Mountains or project area.

Mountain Plover: Mountain plover occupy short-grass prairie habitats. Favored areas included those which have been heavily grazed by livestock. Mountain plover are known to occupy short-grass benchlands near the southern borders of the Little Belt and Snowy Mountains from Haymaker to Cameron Creeks (Knowles and Knowles 1993). No suitable habitat is present in the Little Belt Mountains or the project area.

III. EFFECTS OF IMPLEMENTATION OF THE PREFERRED ALTERNATIVE

A. Threatened and Endangered Species

Direct, Indirect, and Cumulative Effects

No active nest sites or nesting territories for bald eagles or peregrine falcons have been identified in the project area. There is no suitable habitat within the project area; therefore, the proposed action would have no impacts on these avian species or their habitats.

No resident gray wolves have been documented in the Little Belt Mountains. However, individual wolves are believed to periodically "pass through" the mountain range. The project area is part of the experimental population area for wolves released in Yellowstone National Park. Wolves from the experimental population or from natural populations may eventually reside in the Little Belt Mountains.

Potential wolf populations will be managed under the provisions of the Endangered Species Act, "The Reintroduction of Gray Wolves to Yellowstone National Park and Central Idaho EIS", and other applicable laws. The proposed land management activities would not negatively impact wolves or potential habitat. Ungulate populations would not be negatively affected by the proposed action therefore maintaining the potential preybase for wolves.

B. Proposed Species

Canada Lynx: The lynx was considered as a species that was part of the wildlife issue in the EA. For a discussion on lynx refer to the EA in chapter III.

C. Candidate Species

Direct, Indirect, and Cumulative Effects

No habitat for **swift fox and mountain plover** exists in the project area. Therefore, the proposed action would have no impact on these species.

The effects of the proposed action on the **lynx** was documented in the EA, see chapter III for this discussion.

IV. DETERMINATION OF EFFECTS

A. Threatened and Endangered Species

There are no anticipated effects on **bald eagles or peregrine falcons**, therefore, the implementation of the proposed action would result in a determination of "**no effect**" for these listed species.

There are no known den or rendezvous sites for the **gray wolf** in the project area. There has been no documentation of wolf activity in the TCEF. There are no major impacts predicted to the prey base (elk or deer) in the EA. Therefore, the implementation of the proposed action would result in a determination of "**no effect**" for the gray wolf. This determination of effect was concurred by Ann Vandehey of the USFWS during a phone conversation on December 22, 1997.

B. Proposed Species

Implementation of the preferred alternative would result in **"not likely to jeopardize the continued existence of the species or result in destruction or adverse modification of proposed critical habitat"** for the lynx. This determination is based on the maintenance of old growth stands within the project area, yearlong road closures, and the development of younger age classes of lodgepole within a predominate landscape of mature to oldgrowth lodgepole pine forest.

V. CONSULTATION/COORDINATION

A. USF&WS

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VI. LITERATURE CITED

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- Knowles, C. and P.R. Knowles. 1993. Mountain plover numbers, reproduction, and habitat use in three areas of Montana. BLM Report. February 9, 1993 (Faunawest Wildlife Consultants). 48pp.
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