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Cliff-Nesting Raptor Survey of the Sioux District, Custer National Forest: 1994

A Report to:

USDA Forest Service

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ABSTRACT

Field surveys of potential cliff nesting-sites for diurnal raptors were conducted in June and early July 1994 in the Chalk Buttes, the Ekalaka Hills and the southern half of the Long Pines of the Sioux District, Custer National Forest, Montana. All surveys were conducted on foot. About 300 separate sites were surveyed, falling into roughly 42 concentrations of cliffs and/or outcrops. Only three active Prairie Falcon nest sites and one probable Merlin nest site were identified. Because of time limitations of the 1994 field survey, it is anticipated that a comprehensive survey of greater duration of both the Montana and South Dakota portions of the Sioux District will identify additional nests not discovered in this preliminary effort. Nevertheless, the few nesting pairs detected are cause for concern, especially when contrasted with historical nesting data, and indicate the need for a more thorough field effort. Published literature and unpublished nest records indicate that significant numbers of Prairie Falcons, Merlins, and Golden Eagles have nested on and near Custer National Forest lands in recent decades. Ferruginous and Swainson's Hawks nest mostly off of the Custer National Forest. The Northern Goshawk is also a potential breeding species in low densities in mature pine stands, and future raptor inventory efforts should include surveys of its potential nesting habitat; one adult was seen in the Long Pines in June during the survey.

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INTRODUCTION

Interest in raptors became widespread in the 1970s when it was realized that many species were exhibiting dramatic population declines. At the time, reproduction of some species was reduced due to eggshell-thinning. Thinning of eggshells was a response to the accumulation of pesticides in the body tissues, originally acquired through contaminated prey. Along with corrective management to enhance reproduction came the realization that raptors, being at the top of the food web, could act as barometers of environmental health (Call 1978). Since then, raptor populations have continued to receive special attention.

Populations of several raptor species are still in decline, including some species breeding on or near the Sioux District, Custer National Forest, in Montana and South Dakota (Dobkin 1994, White 1994). The data on which population trends are based, however, are spotty and sometimes give conflicting results, depending on the scale in space and time to which they are extrapolated. For example, using a survey of the historical literature, White (1994) concluded that Swainson's Hawk (*Buteo swainsonii*) is in significant decline in some western regions (especially California and Oregon), whereas Dobkin (1994) used Breeding Bird Survey data to conclude that the species is increasing in Montana and western North Dakota.

To understand factors affecting populations of raptors on the local (Forest or District) scale and to establish a baseline from which future monitoring and management efforts can be implemented, it is necessary to first identify historical use of the area by raptors and then to conduct thorough surveys of the populations currently present. This report presents previous documentation and current evidence of habitat use and breeding activity on or near the Sioux District, Custer National Forest, by five species of diurnal raptors: Swainson's Hawk, Ferruginous Hawk (*Buteo regalis*) (C2 Federal Status, USFS Sensitive Status), Golden Eagle (*Aquila chrysaetos*), Merlin (*Falco columbarius*), and Prairie Falcon (*Falco mexicanus*). Two additional raptor species of special interest, Northern Goshawk (*Accipter gentilis*)(C2 Federal Status) and Peregrine Falcon (*Falco peregrinus*) (Endangered Federal Status), have nested previously on the Sioux District. The 1994 field survey focussed on cliff-associated species (Golden Eagle, Prairie Falcon, Merlin); nesting Swainson's and Ferruginous hawks were not surveyed.

METHODS

Historical records of nesting activity by the raptor species of interest on or near the Sioux District, Custer National Forest, Carter County, Montana and adjacent Harding County, South Dakota were found in the literature (see Bibliography) and the databases of the Montana and South Dakota Natural Heritage Programs. The search for nest records was comprehensive but should not be considered complete. Primary emphasis was placed on records and published studies from southeastern Montana and northwestern South Dakota, secondarily on studies from adjacent regions of the northern Great Plains, and finally on raptor studies from the western United States and Canada. Special attention was given to reports describing nest sites, nesting habitat, productivity/nest success, and food habits during the breeding season.

A ground survey of potential cliff nest sites was initiated in 1994. Areas examined were chosen following study of USGS topographic maps (7.5' quads). Cliffs were assigned to one of three size categories; *small*--(up to 3 m high), *medium*--(about 4-10 m high), *large*--(11-30 m high). Because of limited time, only the Chalk Buttes, Ekalaka Hills, and the southern half of the Long Pines (all in Carter County, Montana) were surveyed in 1994. Usually several hours were spent on foot visiting aggregations of cliffs. Cliffs were scanned with binoculars for evidence of nesting (whitewash, accumulations of nesting material) and monitored for vocalizing birds. Species-association with a particular nest site was based on direct observation of adult birds and/or characteristic nest structure (see Call 1978). Because the focus of 1994 ground surveys was cliff habitat, habitats used for nesting by species other than Prairie Falcons and Golden Eagles were not searched.

Nest sites from all sources (including 1994 ground surveys) were plotted on maps when locations were provided (see Appendices 2 and 3). Becker (1978) did not include nest location information for 1977-1978, but Becker (pers. comm.) provided this data for the entire period he was active on the Sioux District (1977-1981); site characteristics and reproductive data cited in species accounts are from Becker (1978). Sites positioned on maps in this report are to the nearest quarter-section; site descriptions are on file with the Montana Natural Heritage Program and the Custer National Forest.

RESULTS AND DISCUSSION

A total of 42 concentrations of cliffs, termed "cliff sites" (see Appendix 1), comprising >300 individual outcrops, was surveyed for nesting raptors in June and early July 1994 in the Montana units of the Sioux District. Only four sites appeared to be in use (see Appendix 2) at the time of the survey (two sites in the Chalk Buttes and two sites in the Ekalaka Hills); three sites were used by Prairie Falcons and one by a pair of Merlins. No field survey was conducted in South Dakota in 1994.

Element Occurrence (EO) Records for the Harding County, South Dakota portions of the Sioux District, obtained from the South Dakota Natural Heritage Program (see Appendix 3), provided locations for 50 Golden Eagle nests, 11 Merlin nests, and 13 Prairie Falcon nests in use between 1973 and 1989. Some of the nest sites are known to have been used in multiple years. Evidence also exists for Northern Goshawk and Peregrine Falcon breeding in the Slim Buttes, South Dakota units of the Sioux District (in 1976 and 1925, respectively).

Previous studies in and near the Carter County, Montana portion of the Sioux District (see Becker 1978, Becker and Sieg 1985, 1987, Sieg and Becker 1990, and Wittenhagen 1992) indicated that several pairs of the five raptor species of special interest nested in the area in recent years. Becker (pers. comm.) provided data on 25 Golden Eagle nest sites, 59 Merlin nest sites, and 40 Prairie Falcon nest sites in use during 1977-1981 (see Appendix 3). As in South Dakota, several of the sites in Montana were used in multiple years.

Discrepancies between the literature and the 1994 Heritage Program survey in Montana could be the result of several factors, including (1) the date of the survey (June and early July) relative to nesting phenology, (2) lack of thorough coverage of the Long Pines, (3) concentration of survey effort on one specific nesting habitat (cliffs), and (4) actual dramatic declines in numbers of nesting pairs of raptors on the Sioux District. Factors 1-3 seem unlikely to account for the low numbers of nesting raptors encountered. First, the survey was conducted when pairs should have been nesting, either with nestlings (Golden Eagle, Prairie Falcon) or eggs (Merlin). Second, many areas were visited in the Chalk Buttes, Ekalaka Hills, and Long Pines where raptors nested previously. Third, although Merlins may have been under-represented as a result of the survey methodology (they nest in pines below cliffs), Golden Eagles and Prairie Falcons should have been detected in greater numbers if they were present. An actual decline in the number of cliff nesting raptors seems a real possibility. Further field work seems warranted, given the lack of coverage in the South Dakota units, the limitations of the 1994 field effort, and the uncertainty of the current status of nesting raptors on Sioux District lands in general. If time is a constraint for survey efforts, helicopter or fixed-wing aircraft may be used effectively to assess the presence of Golden Eagles and Prairie Falcons (for example, see Call 1978). These two species nest in similar sites on the Sioux District (see species accounts).

The species accounts that follow are presented as summaries, and include data on nesting habitat, nest site specifications, and nesting success gleaned from the literature (see Bibliography). Heritage Program rank Global (G) and State (S) codes range from 1 (critically imperiled) to 5 (demonstrably secure, though possibly rare in parts of its range). Other codes are B (breeding occurrences), N (non-breeding occurrences for migratory species), Z (ranking not applicable), and X (believed to be extinct, historical records only).

Species Occurring on the Sioux District, Custer National Forest

Swainson's Hawk (*Buteo swainsoni*)

Distribution: Breeds locally in Alaska, the Yukon, and adjacent Mackenzie District south to northern Mexico, mostly west of the 100th meridian. Widespread during the breeding season in Montana (Bergeron *et al.* 1992) and South Dakota (S.D. Ornithol. Union 1991). Winters primarily on the pampas of southeastern South America.

Habitat Use: This is a hawk of open grassland and sagebrush, often seen perched on fence posts and telephone poles. During summer, birds seem to prefer mixed and short-grass prairie where they frequently forage for small rodents and insects. During the breeding season they prey mostly on ground squirrels and pocket gophers in North Dakota (Gilmer and Stewart 1984), and ground squirrels and voles in Montana (Restani 1991). Density of nesting pairs correlated with ground squirrel abundance in Alberta, Canada where grasslands are interspersed with agricultural fields (Schmutz and Hungle 1989).

Nest Sites: Prefers to nest in areas of open grassland with scattered trees. Swainson's Hawks are more likely to be found nearer agricultural habitat or human habitation than other *Buteos* (Bechard *et al.* 1990, Schmutz 1984, 1987). Wooded draws are considered important nesting habitat in North Dakota (Gaines and Kohn 1982), where nests are placed in green ash or American elm. In central North Dakota, 100% of 270 nests were in trees and 7.1 $\pm$ 3.3 m above ground (Gilmer and Stewart 1984). In southeastern Washington, 100% of 67 nests were in trees and 8.7 $\pm$ 0.5 m above the ground (Bechard *et al.* 1990). In southeastern Wyoming, 43 nests were in trees, 5 in willow shrubs, and 1 on a telephone pole crossbar (Dunkle 1977). In the Centennial Valley, Montana, >95% of nests were in willows (Restani 1991). While it nests lower in shorter trees than other *Buteos* in Alberta (Schmutz et al. 1980), the opposite is true in Oregon (Green and Morrison 1983). It will use artificial nest platforms (Schmutz *et al.* 1984). Nests are relatively flimsy compared to other *Buteo* nests in the region (Call 1978).

Nest Success: Usually lays 2-3 eggs. Seven nests produced 8 fledglings in North Dakota hardwood draws (Gaines and Kohn 1982); 1.6 young/active nest fledged in southcentral North Dakota (Gilmer and Stewart 1984); 1.4 young/laying pair fledged in southeastern Wyoming (Dunkle 1977); 42 nests produced 1.4 fledglings/active nest in Montana (Restani 1991).

Breeding Phenology: Usually breeds later than other *Buteo* species in region; arrives in Wyoming in late April (Dunkle 1977); nests in South Dakota May-July (S.D. Ornithol. Union 1991); average laying date mid-May in Montana (Restani 1991); eggs hatch in late June to early July in Alberta (Schmutz *et al.* 1980).

Status: Expected to be fairly common and widespread in region; Becker (1978) suspected nesting near the Carter County, Montana units of the Sioux District, but most (all?) pairs probably nest off of Forest Service land. Numbers are increasing in Montana and North Dakota, as it is more tolerant of agricultural landscapes than the Ferruginous Hawk (Dobkin 1994). White (1994), however, indicates that populations may be declining regionally, particularly in California and Oregon.

Natural Heritage Program rank: G4; S5B,SZN in Montana, S4B South Dakota.

Ferruginous Hawk (*Buteo regalis*)

Distribution: Breeds from eastern Washington, southern Alberta and Saskatchewan, and western North Dakota south to northern Arizona and New Mexico. Locally common in Montana (Bergeron *et al.* 1992) and western South Dakota (S.D. Ornithol. Union 1991). Winters from Nevada, Colorado, and Kansas south to northern Mexico.

Habitat Use: This is a hawk adapted primarily to semiarid grasslands with scattered trees and outcrops in the Great Plains. Less tolerant of agriculture than Swainson's Hawk (Schmutz 1984, 1987). Frequently seen in open terrain hunting for jackrabbits and ground squirrels (Gilmer and Stewart 1983, Schmutz and Hungle 1989, Smith *et al.* 1981, Woffinden and Murphy 1977); density of nesting pairs correlated with ground squirrel or jackrabbit abundance (Schmutz and Hungle 1989, Smith *et al.* 1981) in Alberta, Canada and Utah, respectively. Major foods in Carter County, Montana were Northern Pocket Gophers (*Thomomys talpoides*) and White-tailed Jackrabbits (*Lepus townsendii*) (Wittenhagen 1992).

Nest Sites: Uses the widest variety of nest sites of any of the raptors (Call 1978), including trees, buttes and cliffs, chimneys, windmills, hay stacks, power poles, abandoned buildings, large sagebrush, and sheepherder monuments. Of 45 nests in western North Dakota, 21 were on powerline towers, 15 on haystacks, 5 on the ground, and 4 in trees (Gilmer and Wiehe 1977); in another study in southcentral North Dakota 123 nests were in trees, 39 on the ground, 7 on haystacks, and 31 on powerline towers (Gilmer and Stewart 1983); for 27 nests in northern South Dakota, 12 were on the ground, 13 in trees and 2 on haystacks (Lokemoen and Duebbert 1976); of 29 nests in southeastern Washington 18 were on cliffs, 1 on a man-made structure, and 10 in trees. South of Ekalaka in Carter County, Montana, most of 26 nests (2 years in a study area of 463 km^2) were on the ground (Wittenhagen 1992). Over 70% of 24 nests in southcentral Montana were in willows (Restani 1991). Nest height is quite variable; 29 nests in southeastern Washington ranged from 2-56 m above the ground. This hawk will use artificial nest platforms (Schmutz *et al.* 1984). Nests are bulkier than Swainson's Hawk nests but can be confused with Red-tailed Hawk (*Buteo jamaicensis*) nests when in trees (Call 1978).

Nest Success: Usually lays 2-3 eggs. Young fledged/successful nest in Carter County, Montana in 4 years was 1.1 and 1.7 in 1981-82 (Ensign 1983), and 1.8 and 2.5 in 1990-91 (Wittenhagen 1992); nest success was 25-27% in the early 1980's and 75-93% in the early 1990's. Fledglings/active nest in 1987-88 was 2.2 in southcentral Montana (Restani 1991), 2.6 in southern Alberta in 1975-77 (Schmutz *et al.* 1980), and 2.0-2.5 in southcentral North Dakota in 1977-79 (Gilmer and Stewart 1983).

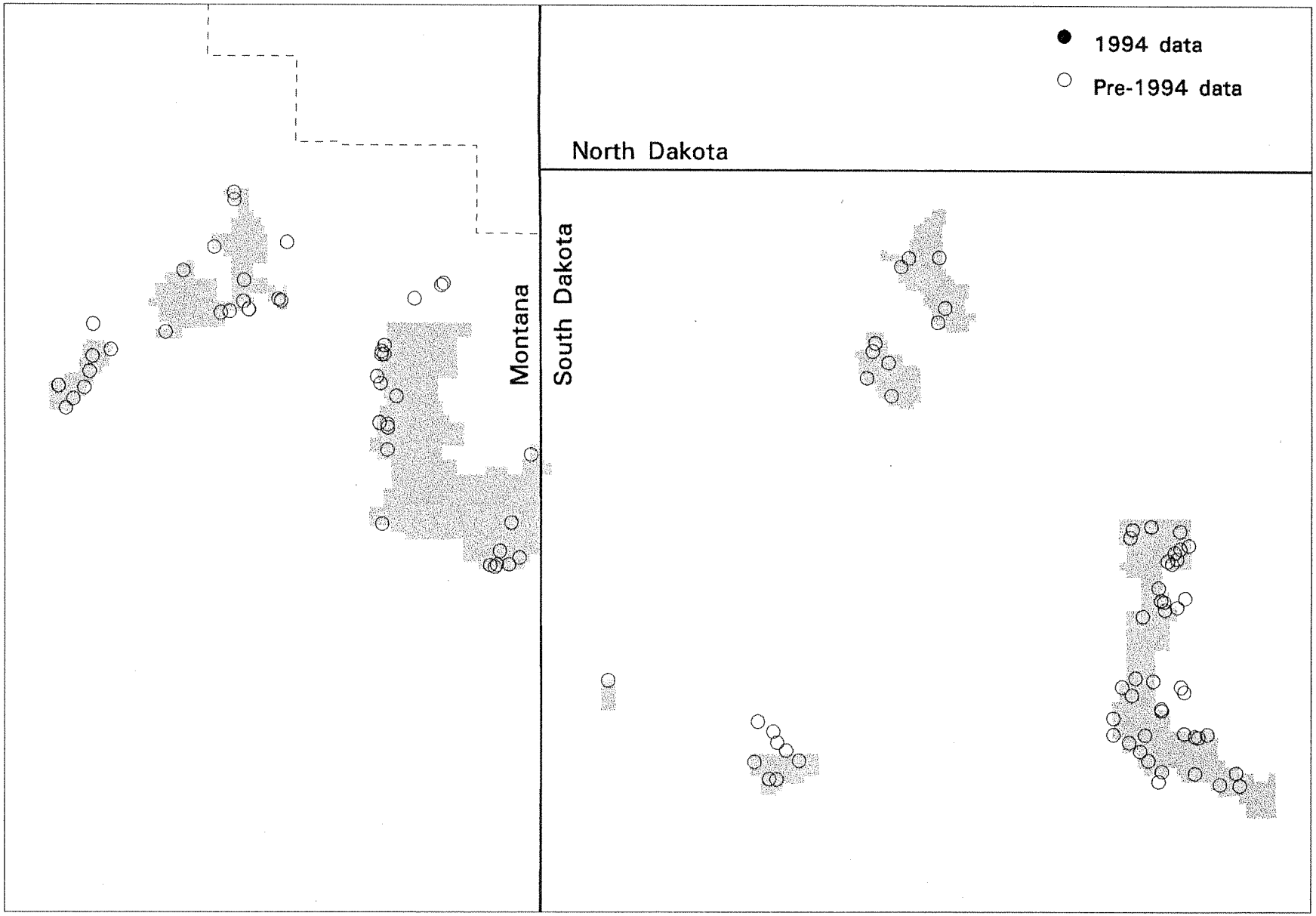
Breeding Phenology: In the Sioux District area (southeastern Montana and northwestern South Dakota), adults arrive in mid to late March, eggs are laid in mid-late April, hatching occurs between mid-May and early June, and young fledge in late June through mid-July (Becker 1978, Wittenhagen 1992).

Status: Breeds locally in the region. Numbers are up significantly in Montana, but only slightly in North Dakota (Dobkin 1994); trends variable throughout the entire West (White 1994), with large increases in the northern prairie provinces of Alberta and Manitoba. Olendorff (1993) indicated stable populations in Montana, South Dakota, and North Dakota, with a large increase in Wyoming. As with Swainson's Hawk, most (all?) pairs of this species

probably nest off of Forest Service lands. U.S.F.S. Sensitive Status; U.S.F.W.S. C2 Status (candidate for Federal Listing).

Natural Heritage Program rank: G4; S3B,SZN in Montana, S3B in South Dakota

Occurrences of Golden Eagle on or near the Sioux District, Custer National Forest



Species locations from the Montana Natural Heritage Program December 02, 1995

Golden Eagle (*Aquila chrysaetos*)

Distribution: Breeds in North America at high latitudes from Alaska to Labrador south to Baja California and west Texas. Common and widespread breeding bird in Montana (Bergeron *et al.* 1992) and South Dakota (S.D. Ornithol. Union 1991). Winters throughout the breeding range and into the eastern United States.

Habitat Use: Occurs in most habitats in the western states, from desert grasslands to above treeline in the mountains, possibly avoiding only dense forest where hunting would be difficult. During summer, it is often associated with outcrops and a dependable food supply. Primary foods from Carter County nests (Becker 1978) were white-tailed jackrabbits, white-tailed or mule deer fawns, cottontail rabbits, pronghorn fawns, and white-tailed prairie dogs. Along the Tongue River in northern Wyoming and southeastern Montana, prairie dogs and cottontail rabbits represented 80% of the prey biomass at 4 nests (Phillips *et al.* 1990).

Nest Sites: Prefers to nest on cliffs or large trees. Of 42 active and inactive nest sites in 1977-78 in Carter County (Becker 1978, pers. comm.), 76% were on cliff walls (12.0 $\pm$ 6.5 m above ground) and 24% in trees (11.1 $\pm$ 3.1 m above ground); near Livingston, Montana 62% of 92 nests were on cliffs, 2% on the ground, and the remainder in trees (McGahan 1968); in northeastern Wyoming 86% of 170 nests were in trees (13.4 $\pm$ 2.5 m above ground) (Menkens and Anderson 1987); elsewhere in northeastern Wyoming, 82% of nests were in trees (2/3 in deciduous, 1/3 in ponderosa pine), 8% on rock outcrops, 7% on man-made structures, and 3% in creek banks (Phillips and Beske 1990). Nest-site choice appears to depend on site availability. Golden Eagles will build several nests on a single territory, and rotate use of these over several years. Orientation of nests may be temperature dependent; over half of the nests in Montana faced south to west (McGahan 1968, Becker 1978). Will use artificial platforms (Phillips and Beske 1990). S.D. Natural Heritage Program EO's provided 5 nest records from the South Cave Hills, 5 from the North Cave Hills, 4 from the East Short Pine Hills, and 36 from Slim Buttes between 1974-89; 34% of nests were active in more than one year. Nests are larger and bulkier than *Buteo* nests (Call 1978).

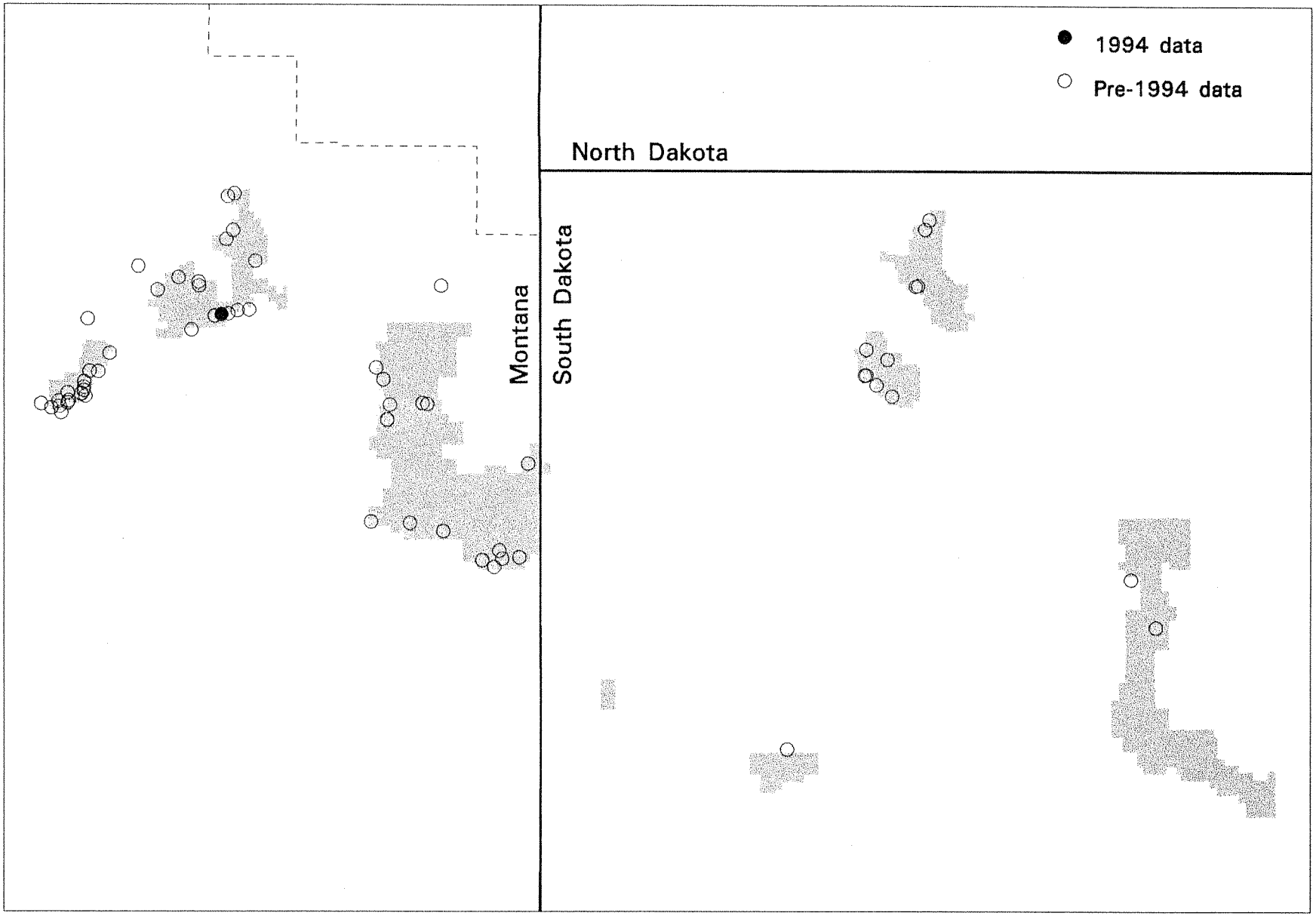
Nest Success: Usually lays 2-3 eggs. Young/nest was 1.43 for 67 active nests between 1974-89 in Harding County, South Dakota units of the Sioux District (Appendix 3); 40 nests contained 1 young, 25 nests contained 2, and 2 nests contained 3. Average number of fledglings/nest was probably less. Becker (1978) reported 1.25 fledglings/nest in 1977 (4 nests) and 1.33young/nest (21 nests) in 1978 in Carter County, Montana. McGahan (1968) reported 1.37-1.38 young/nest in Park County, Montana in 1963-64. In northeastern Wyoming the number of young/successful nest was 1.33-1.65 for 331 nests in 1981-85 (Phillips and Beske 1990).

Breeding Phenology: In Carter County, laying begins in mid-March, with hatching from late April to early May, and fledging in late June through July (Becker 1978). In northeastern Wyoming, the mean egg-laying date is mid-March, with mean hatching in late April, and mean fledging early July (Phillips and Beske 1990).

Status: A common, widespread breeding species in the area (Becker 1978, Phillips and Beske 1990, Phillips *et al.* 1990). Slightly declining in Montana, but steady in North Dakota (Dobkin 1994); apparently stable throughout the west (White 1994).

Natural Heritage Program rank: G4; S4 in Montana; S4B,S3N in South Dakota.

Occurrences of Merlin on or near the Sioux District, Custer National Forest



Species locations from the Montana Natural Heritage Program December 02, 1995

Merlin (*Falco columbarius*)

Distribution: In North America, breeding occurs from western Alaska east to Labrador and south to northern Maine, New York, Minnesota, southern Wyoming and Oregon. Widespread but local during the breeding season in Montana (Bergeron *et al.* 1992), and locally uncommon or rare in western South Dakota (S.D. Ornithol. Union 1991). Winters within southern breeding range south through Mexico and the Gulf coast to northern South America.

Habitat Use: Uses relatively dense coniferous forest to mixed grasslands with scattered trees for nesting, depending on the race. Needs open areas for hunting. The race breeding in southeastern Montana and northwestern South Dakota, *richardsonii*, uses grasslands and shrubsteppe habitats. In Carter County, Montana patchy shrub/grassland is the preferred hunting habitat (Becker and Sieg 1987), where sagebrush and grasses are interspersed; 92% of prey items were birds (mostly grassland species), 5% insects, and 3% mammals (Becker 1985). Ponderosa pine is probably not important hunting habitat, but it is used for nesting. Home ranges (13-28 km^2) include both habitat types. Some populations in Canada breed in urban habitat (Sodhi *et al.* 1993).

Nest Sites: Does not build nests; rather it uses old corvid and hawk nests. All nest sites (48) reported in Carter County, Montana (Becker 1978, Sieg and Becker 1990) were in old American Crow or Black-billed Magpie nests high (10-17 m above ground) in the crowns of live ponderosa pines. Nine nest sites described from Harding County, South Dakota units of the Sioux District (see Appendix 3) were in old magpie nests in ponderosa pines; nests are documented from the South Cave Hills (6 nests), North Cave Hills (3 nests), and Slim Buttes (2 nests) between 1979-1989. Merlins in northeastern Wyoming also use old magpie nests in pines (Phillips and Beske 1990, Phillips *et al.* 1990).

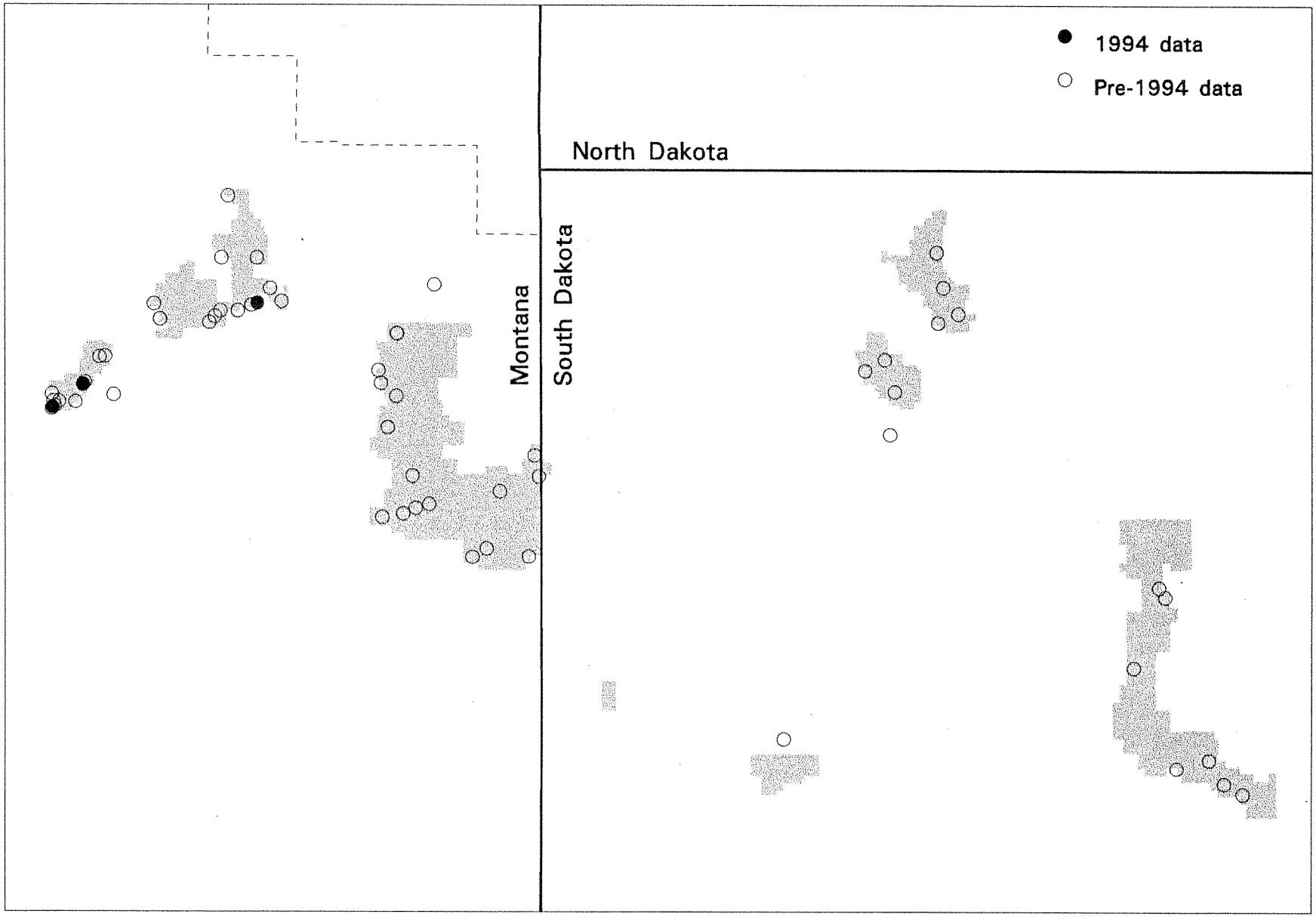
Nest Success: Usually lays 3-6 eggs. Mean clutch size in Carter County, Montana ranged from 4.1-4.5 in 1978-1981 for 48 clutches; 43 (90%) of the clutches produced an average of 3.6 fledglings/nest (Becker and Sieg 1985). Productivity in Alberta and Saskatchewan was 3.6-3.8 young/nest for 276 nests (Sodhi *et al.* 1993).

Breeding Phenology: For Carter County, Montana, egg-laying occurs from mid-April to early June, eggs hatch from late May to late June, and fledging occurs in late June through July (Becker and Sieg 1985). In South Dakota, the nesting season extends from late April through July (Pettingill and Whitney 1965, S.D. Ornithol. Union 1991). Fledging usually occurs in July in Saskatchewan (Sodhi *et al.* 1993).

Status: Locally rare to common. Pulkrabuk and O'Brien (1974) estimated 52 nesting pairs in Harding County, South Dakota. Becker (1978) considered the Merlin to be fairly common in the Montana units of the Sioux District. However, more recent Breeding Bird Survey data indicate significant declines in Montana (Dobkin 1994). While numbers have been decreasing in the southern breeding range, such as Wyoming, there are significant increases in Alberta (White 1994).

Natural Heritage Program rank: G4; S4 in Montana; S3B,S3N in South Dakota.

Occurrences of Prairie Falcon on or near the Sioux District, Custer National Forest



Species locations from the Montana Natural Heritage Program December 02, 1995

Prairie Falcon (*Falco mexicanus*)

Distribution: Breeds in grasslands, breaks, and shrubsteppe from southeastern British Columbia and southern Saskatchewan south to Baja California and west Texas, west of the 100th meridian. Widespread during the breeding season in Montana (Bergeron *et al.* 1992), while uncommon in western South Dakota (S.D. Ornithol. Union 1991). Winters in grasslands and open country within the breeding range east to eastern Kansas and Oklahoma, south to southern Mexico.

Habitat Use: Generally found in rather open grassland, sagebrush desert, and other arid habitats with sparse tree cover and nearby cliffs and outcrops, including terrain above upper treeline in high mountains. Habitat use varies with the availability of prey and cliff nest sites. Prey items from nests in Carter County, Montana (Becker 1978, pers. comm.) included 76% birds (Western Meadowlarks, bluebirds, Lark Buntings, Rock Doves, and American Kestrel) and 24% small mammals (Thirteen-lined Ground Squirrels and Least Chipmunks). In northcentral Montana small mammals (at least 5 rodent species and cottontail rabbits) comprised 57% of the prey items, while birds (at least 4 passerine species, American Kestrel, Gray Partridge, and unidentified ducks) comprised the remaining 43% (Harmata 1991).

Nest Sites: All Prairie Falcon nests (n = 26) reported by Becker (1978) from Carter County, Montana were on cliffs ranging from 7-52 m high; mean nest height was 12.8 $\pm$ 10.8 m above ground, with a range of 5-50 m. The 3 nest areas found in the Chalk Buttes and Ekalaka Hills in 1994 were cliff faces, and the 4 nests from Harding County, South Dakota with site descriptions (see Appendix 3) were also on cliffs. Harding County nests include 3 from South Cave Hills, 4 from North Cave Hills, and 6 from Slim Buttes between 1973-1989; at least 15% of these nest sites were used during multiple years. Cliffs are also the sites used in northeastern Wyoming (Phillips and Beske 1990, Phillips et al. 1990), western North Dakota (Allen 1987), and other western states (Enderson 1964, Runde and Anderson 1986). Nesting has occurred in old magpie nests (MacLaren et al. 1984) and on transmission towers (Roppe *et al.* 1989). Nest exposures tend to be southerly (Runde and Anderson 1986); 89% of the nests reported by Becker (1978) in Carter County, Montana faced south to west. Most nests are scrapes (depressions) without twigs or sticks (Call 1978).

Nest Success: Usually lays 3-6 eggs. Becker (1978) reported a mean clutch size of 4.8 in Carter County, Montana in 1978; 65% of 20 active Prairie Falcon nests produced fledglings, with a mean of 3.3 fledglings/nest. The mean brood size for 10 nests in Harding County, South Dakota (Appendix 3) was 3.2; the mean number of fledglings/nest in northcentral Montana was 2.8-4.3, depending on distance from oil and gas activity (Harmata 1991).

Breeding Phenology: In Carter County, Montana, egg-laying was from mid-March to mid-April, hatching from mid-May to mid-June, and fledging from late June to late July (Becker 1978). In northcentral Montana, egg-laying took place in late April, with hatching in late May, and fledging in early July (Harmata 1991). Nesting season lasts from mid-April through July in South Dakota (S.D. Ornithol. Union 1991).

Status: Widespread and locally common in region; populations appear to be stable in Montana and North Dakota (Dobkin 1994), and throughout western North America (White 1994).

Natural Heritage Program rank: G5; S4 in Montana; S3S4B,S4N in South Dakota.

Occurrences of Northern Goshawk on or near the Sioux District, Custer National Forest

Species locations from the Montana Natural Heritage Program December 02, 1995

Species Potentially Present on the Sioux District, Custer National Forest

Northern Goshawk (*Accipiter gentilis*)

Distribution: Breeds in North America from western Alaska east to eastern Labrador within the boreal forest, south in the west to northern Arizona, New Mexico, the mountains of western Mexico, and in the east south down the Appalachian Mountains to northern Georgia. It is widespread in Montana during the breeding season mostly in the western mountains and southeastern pine hills (Bergeron *et al.* 1992); present year-round in the Black Hills of South Dakota (Pettingill and Whitney 1965, Bartelt 1974, S.D. Ornithol. Union 1991), rare in Harding County.

Habitat Use: Uses a variety of forested habitats, prefering conifers, but also using deciduous forest stands (see Younk and Bechard 1994). Breeding season prey tend to be woodland species; in northern Arizona coniferous forests (Boal and Mannan 1994), ground squirrels, chipmunks, tree squirrels, and cottontail rabbits comprised the majority of mammalian prey (94% of prey biomass), while jays and woodpeckers accounted for the majority of the birds (6% of prey biomass). Mammalian prey are also predominant in Nevada aspen forests (Younk and Bechard 1994).

Nest Sites: Nests are in trees and composed of small and medium-sized twigs, forming a platform about 0.6 m diameter (Call 1978). In western Montana and northern Idaho (on both sides of the Continental Divide), prefers to nest in mature forest stands with high canopy closure (78-80%) and large forest openings < 1 km distant (Hayward and Escano 1989); nest trees (9) averaged 22 m tall, and nest height averaged 10 m above ground.

Breeding Phenology: Nesting lasts from late March to early August in the Black Hills, South Dakota (S.D. Ornithol. Union 1991).

Status: May breed in low numbers in units of the Sioux District. Becker (1978, pers. comm.) reported no breeding records from Carter County, Montana. Historical breeding season records exist from the "Cave Hills" (Visher 1914), and an adult with two fledglings was seen in the Slim Buttes in 1976 (see Appendix 3). During the 1994 survey one adult was observed along Capitol Rock Road (T3S R62E S6) in the Long Pines on 12 June, but no evidence of nesting was indicated. In 1976, a nest was found in a dense stand of ponderosa pine in the Wolf Mountains, Big Horn County, Montana (Phillips *et al.* 1990) about 225 km (140 miles) west of the Sioux District. Seven nests have been reported from the Ashland District (Custer National Forest) about 120 km (80 miles) west in Rosebud and Powder River counties, Montana during 1985-1991 (McCarty, pers. comm.). Two nests were found in 1981 in adjacent Campbell County, Wyoming (Phillips and Beske 1990). Northern Goshawks probably have nested on the Sioux District more frequently than current records indicate. Extensive loss of forest canopy from wildfire, however, has greatly reduced suitable nesting habitat on the district. Numbers appear to be declining significantly in Montana and western North and South Dakota (Dobkin 1994). Nonetheless, White (1994) suggested that populations may be relatively stable over much of their range. U.S.F.S. Sensitive Status; U.S.F.W.S. C2 Status (candidate for Federal Listing).

Natural Heritage Program rank: G5; S3S4 in Montana, S3B,S2N in South Dakota

Peregrine Falcon (*Falco peregrinus*)

Distribution: Breeds or formerly bred in North America from western Alaska east to eastern Labrador and south, in the west along the coast and interior mountains and breaks, and in the east in the Appalachian Mountains, to northern Mexico. Widespread but rare and local during the breeding season in Montana (Bergeron et al. 1992); formerly bred in the Black Hills, South Dakota (S.D. Ornithol. Union 1991).

Habitat Use: Closely associated with water and tall cliffs, which serve as nest and perch sites (Call 1978). Hunts almost exclusively for birds, typically in relatively open terrain (Johnsgard 1990).

Nest Sites: Usually a shallow scrape on cliff ledges (Call 1978). Cliffs used for nesting often exceed 30 m in height.

Breeding Phenology: Eggs laid in early April, with young fledging in June (Call 1978).

Status: Could potentially reestablish in low numbers in the Sioux District and adjacent areas. There is one historical breeding record for 1925 in the Slim Buttes of Harding County, South Dakota (see Appendix 3). Increasing throughout western North America (White 1994). U.S.F.S. Endangered Status; U.S.F.W.S. LE (Endangered).

Natural Heritage Program rank: G4; S1S2B, SZN in Montana, SXB,SZN in South Dakota.

MANAGEMENT CONSIDERATIONS

Sensible regulation of human activity with regard to breeding raptors requires knowledge of two types. First, it is necessary to understand the breeding biology of the birds in the area where human activity may occur; this knowledge is obtained through survey and monitoring efforts. Second, it is important to know the sensitivity of different raptor species to disturbance, identifying the stages in the life cycle when sensitivity is most acute. This knowledge is more difficult to obtain, requiring sophisticated sampling and a large time investment, and is generally beyond the resources available to managers. Information on response to disturbance is available in the literature (see Bibliography). It should be kept in mind, however, that conditions vary in space and time, and that the manner in which raptors respond to disturbance may vary accordingly.

Survey and Monitoring Efforts: Field surveys and monitoring will provide information on habitat use, nest site use, nesting phenology, and reproductive success. Aerial and ground surveys can be used to obtain these types of information (Call 1978), but it is important to minimize the disturbance to raptors during nesting studies in order to obtain accurate measures of reproductive success (Fyfe and Olendorff 1976). Disturbance of nesting birds should be avoided during nest-building, egg-laying, and incubation. Adults are least likely to abandon nests once eggs have hatched. Low-flying fixed-wing aircraft are useful for survey and monitoring of Golden Eagle, Prairie Falcon, Swainson's Hawk, and Ferruginous Hawk nests and appear to be tolerated by nesting birds (Call 1978, Gilder and Wiehe 1977, Phillips and Beske 1990, Phillips et al. 1990). Merlin nests must be located by ground surveys (Becker 1978, Call 1978), and this approach is useful for locating nests of Northern Goshawk, Ferruginous Hawk, and Swainson's Hawk. Nests approached from the ground could lead predators to nests (Call 1978, Fyfe and Olendorff 1976).

Response to Human Activity: Availability of quality disturbance-free habitat is probably the most important variable for maintaining nesting raptors. Nesting sites and foraging sites around nests need separate consideration (Call 1979). Recommended buffer zones, in which disturbance should be avoided, are about 1 km or greater around nests (including noise disturbance) for the raptors considered in this report (Suter and Joness 1981), and 400 m around important prey concentrations. Ferruginous Hawks are generally considered the raptor most sensitive to nest disturbance (Fyfe and Olendorff 1976, Harmata 1991, Olendorff 1993), however Northern Goshawks are sensitive to low levels of canopy removal (Block et al. 1994, Crocker-Bedford 1990, Reynolds 1983) and may be precluded from nesting if dense stands of conifers are no longer available. Old Black-billed Magpie nests are used extensively by Merlins for nesting (Sieg and Becker 1990), and have been used as nest sites by other falcon species as well (Becker 1987, MacLaren et al. 1984). The importance of old corvid nests for a variety of diurnal and nocturnal raptor species needs to be quantified, but the use of "artificial magpie nests" might help mitigate disturbances at traditional nesting areas. Golden Eagles, Ferruginous Hawks, Swainson's Hawks, and Prairie Falcons sometimes use artificial nest substrates (e.g., Gilder and Wiehe 1977, Olendorff 1993, Phillips and Beske 1990, Poppe et al. 1989, Schmutz et al. 1984); use of artificial substrates may be a way to maintain nesting pairs in suitable habitat. Areas

chosen for artificial nest sites, however, must include consideration of the suitability of adjacent habitat for prey populations.

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APPENDIX 1

SITES VISITED DURING 1994 RAPTOR SURVEYS

APPENDIX 1. Cliff sites visited during 1994 raptor surveys.

USGS 7.5' Quad	Location	Date	Cliff Size[a]
Ekalaka Hills			
Stagville Draw	T1N R58E S21	03 June 1994	small
Stagville Draw	T1N R58E S28 SE4, S33 NE4	03 June 1994	small
Stagville Draw	T1S R58E S2 NW4	03 June 1994	small
Stagville Draw	T1N R58E S17 SW4, S18 NE4	03 June 1994	small
Stagville Draw	T1N R58E S8 SW4, S17 NW4	03 June 1994	small, medium
Stagville Draw	T1N R57E S25 S2, S36 NE4	03 June 1994	medium
Stagville Draw	T1S R58E S5 N2	03 June 1994	small, medium
Camp Needmore	T1N R59E S19 SW4	04 June 1994	large
Camp Needmore	T1N R59E S19 SW4, S30 NW4	06 June 1994	large
Camp Needmore	T1N R58E S25 SE4, T1N R59E S30 NW4	06 June 1994	medium, large
Camp Needmore	T1N R58E S25 S2, S26 S2, S35 NW4, S36 NW4	06 June 1994	large
Camp Needmore	T1N R58E S1 SW4	08 June 1994	small
Terrell Creek	T2N R59E S31 SE4	01 June 1994	medium
Camp Needmore	T1N R59E S20 SE4, S28 NW4, S29 E2	14 June 1994	large
Camp Needmore	T1N R58E S12 SE4	18 June 1994	medium, large
Camp Needmore	T1N R59E S7 NE4	18 June 1994	medium, large
Stagville Draw	T1N R58E S3 SW4, S10 NW4	19 June 1994	small, medium
Stagville Draw	T1N R58E S33 E2, S34 N2	21 June 1994	medium, large
Terrell Creek	T2N R58E S23 N2, S24 SW4	21 June 1994	medium, large
Chalk Buttes			
Chalk Buttes	T1S R57E S28 SW4, S29 SE4, S31 SE4, S32 NE4	04 June 1994	small, medium
Chalk Buttes	T2S R57E S6 NE4	04 June 1994	small, medium
Chalk Buttes	T1S R57E S28 NW4	04 June 1994	medium, large
Chalk Buttes	T1S R57E S29 SE4, S30 SW4, S31 S2NE4, S32 N2SW4	15 June 1994	large
Chalk Buttes	T1S R56E S25 SE4, S36 E2	15 June 1994	large

[a] small--up to 3 m, medium--about 4-10 m, large--10-30 m

Long Pines

APPENDIX 1 (cont.). Cliff sites visited during 1994 raptor survey.

USGS 7.5' Quad	Location	Date	Cliff Size[a]
Rustler Divide	T2S R61E S20 SW4	02 June 1994	small, medium
Rustler Divide	T2S R61E S20 W2, S29 NE4	12 June 1994	small, medium
Rustler Divide	T2S R61E S28 NW4	02 June 1994	medium
Rustler Divide	T2S R61E S27 SW4, S28 NE4	12 June 1994	medium
Capitol Rock	T3S R62E S6 SE4	02 June 1994	small
Capitol Rock	T3S R62E S8 SE4, S16 NW4, S17 N2SE4	12 June 1994	small, medium
Timber Hill	T3S R61E S10 NW4	03 June 1994	medium, large
Timber Hill	T3S R61E S4 SE4, S9 N2	13 June 1994	medium, large
Timber Hill	T3S R61E S5 S2, S6 SE4, S7 NE4	13 June 1994	small-large
North Slick Creek	T20N R1E S32 W2	24 June 1994	small, medium
North Slick Creek	T19N R62E S27 N2SE4	24 June 1994	small, medium
Capitol Rock	T2S R62E S32 E2, S33 W2	24 June 1994	small, medium
Capitol Rock	T2S R62E S34 NE4	04 June 1994	small, medium
Timber Hill	T2S R61E S31 SE4, S32 SE4	02 July 1994	medium
Timber Hill	T3S R61E S5 NW4, S6 NE4	02 July 1994	medium
Timber Hill	T2S R61E S33 NE4, S34 NW4	02 July 1994	medium
Timber Hill	T3S R61E S13 NE4SW4, S24 N2	03 July 1994	small, medium
Capitol Rock	T3S R62E S19 SE4, S20 S2, S21 NE4SW4	03 July 1994	medium, large

[a] small--up to 3 m, medium--about 4-10 m, large--10-30 m

APPENDIX 2

LOCATIONS AND SUMMARY OF BREEDING EVIDENCE

BY RAPTORS IN 1994, SIOUX DISTRICT, CUSTER NATIONAL FOREST

APPENDIX 2. Locations and summary of breeding evidence by raptors in 1994, Carter County, Montana, on the Sioux District, Custer National Forest.

Species	Forest unit	Location	Date	Breeding evidence
Prairie Falcon	Chalk Buttes	T1S R57E S28 NW4	4 June	active nest, adult calling
Prairie Falcon	Chalk Buttes	T1S R57E S31 SW4	14 June	adult distress calls
Prairie Falcon	Ekalaka Hills	T1N R59E S30 W2, at radio tower	6 June	adult distress calls
Merlin	Ekalaka Hills	T1N R58E S34 NE4	21 June	adult pair with fledgling

APPENDIX 3

ELEMENT OCCURRENCE RECORDS FOR NESTS OF SELECTED RAPTOR SPECIES, SIOUX DISTRICT, CUSTER NATIONAL FOREST, IN CARTER COUNTY, MONTANA AND HARDING COUNTY, SOUTH DAKOTA (LOCATIONS PLOTTED ON TEXT FIGURES)

County	Precision	Date	Breed	Data Type

NORTHERN GOSHAWK

Carter < .5 mile. 6/12/1994 No Observation
Tree along Capitol Rock Road

GOLDEN EAGLE

Carter < .5 mile. 6/20/1977 Yes Observation
Ca. 1.9 mi. from Camp Needmore on Carter Rimrock Rd.

Carter < .5 mile. 6/20/1977 Yes Observation
Ca. 1 mile W. of Molstad Ranch.

Carter < .5 mile. 7/ 1/1977 Yes Observation
Go W. from Lamkin Well to gate of FS boundary. Nest in cliffs south of gate

Carter < .5 mile. 7/ 7/1977 Yes Observation
Floyd Pierce Ranch, NE of house.

Carter < .5 mile. 6/19/1972 No Observation
Ca. 1.24 mi. N. of Plainview School

Carter < .5 mile. 6/19/1977 No Observation
NE of Padden Ranch

Carter < .5 mile. 6/19/1977 Yes Observation
Base of cliffs N. of B. Padden Ranch

Carter < .5 mile. 7/ 1/1972 No Observation
Ca. 1.5 mi. E. of Gross Ranch

Carter < .5 mile. 7/ 1/1977 No Observation
Ca. 0.5 mi. E. of Burditt Reservoir N. of Kennedy Ranch

Carter < .5 mile. 7/ 1/1976 No Observation
On cliffs between Lampkin Well and FS boundary

County	Precision	Date	Breed	Data Type

GOLDEN EAGLE (continued)

County	Precision	Date	Breed	Data Type
Carter	< .5 mile.	7/ 5/1977	No	Observation
S. of Box Elder Creek, ca. 0.5 mi. SE of McNary School				
Carter	< .5 mile.	8/ 2/1977	Yes	Observation
N. side of Box Elder Cr. and ca. 0.5 mi. SW of Knipfer Ranch buildings				
Carter	< .5 mile.	7/13/1977	Yes	Observation
Ellis Burch Ranch				
Carter	< .5 mile.	7/13/1977	Yes	Observation
NE of buildings of Ellis Burch Ranch				
Carter	< .5 mile.	7/15/1977	No	Observation
2.9 mi. W. of Camp Needmore on rimrocks				
Carter	< .5 mile.	7/15/1976	No	Observation
W. of Camp Needmore 4.5 mi on SE side of large rock outcrop				
Carter	< .5 mile.	7/18/1977	No	Observation
Ed Lamb Ranch				
Carter	< .5 mile.	7/18/1977	Yes	Observation
SE of Trenk Pass				
Carter	< .5 mile.	8/ 1/1976	No	Observation
Over hill from Camp Needmore of HWY 323.				
Carter	< .5 mile.	8/ 8/1977	Yes	Observation
N. of large butte, ca. 1 mi. N. of Carlisle Ranch				
Carter	< .5 mile.	7/ 6/1977	No	Observation
Butte on W. side of Kortum Ranch				
Carter	< .5 mile.	5/14/1978	Yes	Observation
ca. 0.5 mi. N. of Where Lamkin Well Rd. crosses FS boundary				

County	Precision	Date	Breed	Data Type

GOLDEN EAGLE (continued)

Carter < .5 mile. 5/25/1978 Yes Observation
Draw on E. side of long butte SW of Ed Lamb Ranch

Carter < .5 mile. 6/15/1978 No Observation
Ca. 1 mi. E. of Steig Ranch

Carter < .5 mile. 6/15/1978 No Observation
Ca. 1 mi. E. of Steig Ranch

Carter < .5 mile. 7/14/1978 Yes Observation
S. and W. of Camp Needmore across wide canyon

Carter < .5 mile. 7/ 7/1978 Yes Observation
Ca. 1 mi. N. of Ed Lamb Ranch

Carter < .5 mile. 7/18/1978 No Observation
NW face of long butte SW of Molstad Ranch

Carter < .5 mile. 7/18/1978 Yes Observation
NW face of long butte SW of Molstad Ranch

Carter < .5 mile. 7/23/1978 No Observation
Near FS boundary fence on 4th rocky outcrop

Carter < .5 mile. 7/23/1978 No Observation
Long Pines, just inside forest boundary

Carter < .5 mile. 7/23/1973 No Observation
Long Pines, just inside forest boundary

Carter < .5 mile. 7/23/1978 No Observation
1 mi. N. of Lampkin Well.

County	Precision	Date	Breed	Data Type

GOLDEN EAGLE (continued)

County	Precision	Date	Breed	Data Type
Carter	< .5 mile.	7/23/1978	No	Observation
1 mi. N. of Lampkin Well.				
Carter	< .5 mile.	7/23/1978	No	Observation
Halbert Gulch Road to road above rimrocks				
Carter	< .5 mile.	7/23/1978	No	Observation
Halbert Gulch Road to road above rimrocks				
Carter	< .5 mile.	5/14/1977	No	Observation
Ca. 50 yds below point where Devil's Canyon Rd. overlooks Dave Gross Ranch				
Carter	< .5 mile.	5/20/1978	No	Observation
Ca. 1 mi. NW of B. Padden Ranch				
Carter	< .5 mile.	7/25/1978	Yes	Observation
Ca. 0.75 mi. W. of old Stewart Ranch near Wickham Gulch.				
Carter	< .5 mile.	7/24/1978	No	Observation
Ca. 0.5 mi. NW of Walter White Ranch on Mill Iron Rd.				
Carter	< .5 mile.	5/29/1978	No	Observation
Ca. 2 mi. SE of Walt Gundlack Ranch				
Carter	< .5 mile.	6/28/1978	Yes	Observation
From Lampkin Well Rd, go S. along W. FS boundary ca. 1 mi.				
Carter	< .5 mile.	6/11/1979	Yes	Observation
Ca. 0.75 mi. from old Stewart Ranch				
Carter	< .5 mile.	6/ 1/1979	Yes	Observation
1 mi. NW of Lampkin Well				
Carter	< .5 mile.	/ /1978	Yes	Observation
Major butte on Kortum Ranch				

County	Precision	Date	Breed	Data Type

GOLDEN EAGLE (continued)

Carter	< .5 mile.	6/25/1979	Yes	Observation
Whitcomb Road				
Carter	< .5 mile.	6/27/1979	Yes	Observation
N. of Bergstrom Ranch				
Carter	< .5 mile.	/ /1979	No	Observation
Just below eagle nest GE-37, ca. 2 mi. E. of Snow Cr. Rd.				
Carter	< .5 mile.	/ /1978	No	Observation
Butte near D. Woodworth Ranch				
Carter	< .5 mile.	/ /1979	No	Observation
Cliff along Whitcomb Draw Road				
Carter	< .5 mile.	/ /1979	No	Observation
S. of Camp Needmore				
Carter	< .5 mile.	/ /1979	No	Observation
1 mi. SW of Knipfer Ranch along Boxelder Creek				
Carter	< .5 mile.	6/17/1980	Yes	Observation
S. Fork off Hidden Springs Road				
Carter	< .5 mile.	6/17/1980	Yes	Observation
S. Fork off Hidden Springs Road				
Carter	< .5 mile.	7/ 2/1980	Yes	Observation
Ca. 0.25 mi. NW of old homestead in Flasted Draw				

County	Precision	Date	Breed	Data Type

MERLIN

Carter < .5 mile. 6/15/1977 Yes Observation
50 yds. SW of pinacle on S. side of first ravine on Carter Rimrock Rd.

Carter < .5 mile. / /1979 No Observation
W. of D. Woolworth Ranch

Carter < .5 mile. 6/24/1977 Yes Observation
Ca. 1.6 mi. W. of Camp Needmore

Carter < .5 mile. 6/24/1977 Yes Observation
W. of Camp Needmore

Carter < .5 mile. 7/25/1977 Yes Observation
S. of T. Heggen Ranch (NE of Ekalaka)

Carter < .5 mile. 6/22/1979 Yes Observation
Ca. 0.25 mi. S. of Trenk Pass

Carter < .5 mile. 6/29/1977 Yes Observation
Draw W. of Kortum Ranch

Carter < .5 mile. 6/17/1977 Yes Observation
Ca. 0.5 mi. N. and 0.5 mi. W. of buildings on Padden Ranch

Carter < .5 mile. 6/17/1977 No Observation
Ca. 0.75 mi. N. and 0.5 mi. E. of B. Padden Ranch

Carter < .5 mile. 6/17/1977 Yes Observation
Near mouth of ravine near Lindsay Reservoir

Carter < .5 mile. 7/11/1978 Yes Observation
E. side of small ridge N. of gate W. of Lampkin Well

Carter < .5 mile. 7/ 1/1978 Yes Observation
1.5 mi. E. of D. Gross Ranch

County	Precision	Date	Breed	Data Type

MERLIN (continued)

Carter	< .5 mile.	7/ 9/1978	Yes	Observation

On E. side of Rustler Divide along Mobray Road

Carter	< .5 mile.	7/10/1978	Yes	Observation

On E. side of Rustler Divide along Mobray Road

Carter	< .5 mile.	6/15/1978	Yes	Observation

Ca. 1 mi. E. of E. Steig Ranch, and then 1.5 mi. S. to ridge

Carter	< .5 mile.	6/15/1978	Yes	Observation

Cliffs across valley from Bell-Tower Butte

Carter	< .5 mile.	6/ 4/1978	Yes	Observation

Ca. 0.5 mi. from forest boundary of Stagville Rd.

Carter	< .5 mile.	7/ 7/1978	Yes	Observation

Ca. 1 mi. N. and 0.75 mi. E from driveway of E. Peabody Ranch

Carter	< .5 mile.	5/23/1978	Yes	Observation

E. slope of large butte ca. 0.75 mi. N. of E. Lamb Ranch

Carter	< .5 mile.	5/25/1978	Yes	Observation

Ca. 0.5 mi. W. and 0.5 mi. S. of E. Lamb Ranch

Carter	< .5 mile.	5/25/1978	Yes	Observation

Ca. 0.25 mi. W. and 0.5 mi. S. of E. Lamb Ranch

Carter	< .5 mile.	7/ 9/1978	Yes	Observation

Ca. 3 mi. SW of Camp Needmore of Carter Rimrock Rd. on cliff on S. side rd.

Carter	< .5 mile.	6/15/1978	Yes	Observation

N. part Long Pines, take Halbert Gulch Rd. to rimrocks

Carter	< .5 mile.	6/ /1979	Yes	Observation

S. on Whitcomb Draw Rd. to steep hill and fence; then hike NE ca. 0.5 mi.

County	Precision	Date	Breed	Data Type

MERLIN (continued)

Carter	< .5 mile.	6/11/1979	Yes	Observation

W. of Lampkin Well to FS boundary, then hike S. ca. 0.75 mi.

Carter	< .5 mile.	5/29/1979	Yes	Observation

Ca. 1.7 mi. E. of turnoff for Woolworth's Ranch then N. 1.5 mi.

Carter	< .5 mile.	6/11/1979	Yes	Observation

Ca 0.75 mi. W. of Stewart Ranch.

Carter	< .5 mile.	5/24/1979	Yes	Observation

NE of Kettel Ranch, rimrocks

Carter	< .5 mile.	7/ 5/1979	Yes	Observation

Ca. 0.5 mi. SW of Knipfer Ranch along Boxelder Creek

Carter	< .5 mile.	6/ 7/1979	Yes	Observation

Ca. 1.5 mi. NW of major butte on Kortum Ranch

Carter	< .5 mile.	6/16/1979	Yes	Observation

Ca. 1 mi. NW of major butte on Kortum Ranch

Carter	< .5 mile.	6/13/1979	Yes	Observation

Major butte on Kortum Ranch, southern peninsula

Carter	< .5 mile.	6/13/1979	Yes	Observation

Major butte on Kortum Ranch, cliff on W. end

Carter	< .5 mile.	5/16/1979	Yes	Observation

S. on Whitcomb Draw Rd. to steep hill and fence, then E. ca. 1 mi. to cliff

Carter	< .5 mile.	6/14/1979	Yes	Observation

Gergen Spring

Carter	< .5 mile.	7/ 5/1979	Yes	Observation

Mobray Reservoir Road

County	Precision	Date	Breed	Data Type

MERLIN (continued)

Carter	< .5 mile.	/ /1979	Yes	Observation
Butte near White Ranch				
Carter	< .5 mile.	7/ 1/1979	Yes	Observation
Cliff on W. side of major butte on Kortum Ranch				
Carter	< .5 mile.	7/16/1979	Yes	Observation
Dugan Draw				
Carter	< .5 mile.	6/ 1/1980	Yes	Observation
Butte near Lamb Ranch				
Carter	< .5 mile.	6/12/1980	Yes	Observation
Steep slope N. of Trenk Pass				
Carter	< .5 mile.	5/27/1980	Yes	Observation
Trenk Pass				
Carter	< .5 mile.	5/26/1980	Yes	Observation
E. side of draw below rock pinnacle near Carter Rimrock Rd.				
Carter	< .5 mile.	5/27/1980	Yes	Observation
SW end of Chalk Buttes at W. end of long S. butte				
Carter	< .5 mile.	5/28/1980	Yes	Observation
Stagville Draw				
Carter	< .5 mile.	5/27/1980	Yes	Observation
Butte N. of J. Carey Ranch				
Carter	< .5 mile.	5/27/1980	Yes	Observation
Draw due N. of Kortum Ranch				
Carter	< .5 mile.	5/27/1980	Yes	Observation
Draw 0.75 mi. NW of Carey Ranch				

County	Precision	Date	Breed	Data Type

MERLIN (continued)

County	Precision	Date	Breed	Data Type
Carter	< .5 mile.	6/ 4/1980	Yes	Observation
E. end forested ridge ca. 0.5 mi. N. of Chessman Draw entrance				
Carter	< .5 mile.	6/ 4/1980	Yes	Observation
Below low cliffs in basin due N. of B. Padden Ranch				
Carter	< .5 mile.	5/28/1980	Yes	Observation
Ca. 0.25 mi. N. of old ranchhouse in Flasted Draw				
Carter	< .5 mile.	/ /	0 No	Observation
Ridge below cliffs S. of Hidden Springs Loop Road				
Carter	< .5 mile.	/ /	0 No	Observation
Ridge below cliffs SW of Hidden Springs Loop Road				
Carter	< .5 mile.	/ /	0 No	Observation
On S. side trail between long butte and westernmost butte in Chalk Buttes				
Carter	< .5 mile.	7/14/1981	Yes	Observation
Up draw from old well house NE of Kortum Ranch				
Carter	< .5 mile.	7/13/1981	Yes	Observation
Ridge NW of J. Carey Ranch				
Carter	< .5 mile.	7/16/1981	Yes	Observation
W. side of ridge N. of Trenk Pass				
Carter	< .5 mile.	6/14/1981	Yes	Observation
Devil's Canyon				
Carter	< .5 mile.	6/30/1981	Yes	Observation
Below N. rim of long butte S. of Molstad Ranch in Chalk Buttes				
Carter	< .5 mile.	6/21/1994	Yes	Observation
Ekalaka Hills (NE4 of section)				

County	Precision	Date	Breed	Data Type

PRAIRIE FALCON

Carter	< .5 mile.	6/15/1977	Yes	Observation
Ca. 2 mi. NE of Kettleman Ranch, rimrocks				
Carter	< .5 mile.	6/16/1977	Yes	Observation
4.5 mi. from Camp Needmore of Carter Rimrock Rd, then S along E side canyon				
Carter	< .5 mile.	6/17/1977	Yes	Observation
2.9 mi. from Camp Needmore on Carter Rimrock Rd. and up ridge to left				
Carter	< .5 mile.	6/19/1977	Yes	Observation
1.5 mi. E. of Kennedy Ranch on Speelman Cr. Rd., then to cliffs across cr.				
Carter	< .5 mile.	6/24/1977	Yes	Observation
SE of Ekalaka on Rt. 323 ca. 2.5 mi. to point N. of Carlisle Ranch				
Carter	< .5 mile.	6/29/1977	Yes	Observation
Ca. 1 mi. W. of Kortum Ranch, then 0.75 mi. N. of bins on cliffs				
Carter	< .5 mile.	6/29/1977	Yes	Observation
W. end of major butte on Kortum Ranch				
Carter	< .5 mile.	6/30/1977	Yes	Observation
Cliffs at W. of FS boundary NW of Molstad Ranch; Fighting Butte				
Carter	< .5 mile.	6/30/1977	Yes	Observation
1 mi. E. of Molstad Ranch				
Carter	< .5 mile.	7/ 1/1977	Yes	Observation
W. of Lampkin Well at FS Boundary at second sandstone cliff				
Carter	< .5 mile.	7/ 1/1977	Yes	Observation
N. Arpan Spring; ca. 0.75 mi. W. of Snow Cr. Rd.				
Carter	< .5 mile.	7/ 1/1977	Yes	Observation
Ca. 1 mi. E. of Gross Ranch				

County	Precision	Date	Breed	Data Type

PRAIRIE FALCON (continued)

Carter	< .5 mile.	7/ 1/1977	Yes	Observation

Halbert Gulch Rd. to rd. above the rimrocks

Carter	< .5 mile.	7/ 8/1977	Yes	Observation

2.6 mi. from Camp Needmore on Carter Rimrock Rd., then sideroad on left

Carter	< .5 mile.	7/10/1977	Yes	Observation

ca. 0.75 mi. S. of buildings of B. Schele Ranch

Carter	< .5 mile.	7/12/1977	Yes	Observation

Ca. 1.25 mi. NE of buildings of Allen Ranch

Carter	< .5 mile.	6/17/1978	Yes	Observation

Camp Needmore on Carter Rimrock Rd. 1.1 mi to flat ridgetop W of radiotower

Carter	< .5 mile.	7/25/1977	Yes	Observation

NE of Belltower Butte

Carter	< .5 mile.	5/20/1978	Yes	Observation

0.5 mi. W. of Stewart Ranch to long slim butte

Carter	< .5 mile.	6/14/1978	Yes	Observation

0.75 mi. S. on Plum Creek Rd. then W. ca. 0.5 mi. on high cliffs

Carter	< .5 mile.	5/14/1978	Yes	Observation

From Lampkin Gulch Rd. follow FS boundary fence S. ca. 0.75 mi to 2nd cliff

Carter	< .5 mile.	5/21/1978	Yes	Observation

N. end Long Pines, up valley 0.75 mi. to W. edge of butte, then to top

Carter	< .5 mile.	5/22/1978	Yes	Observation

Ca. 0.5 mi. N. of Peabody's Ranch driveway

Carter	< .5 mile.	5/23/1978	Yes	Observation

Through gate at Lamb's Ranch to FS boundary, then to large butte

County	Precision	Date	Breed	Data Type

PRAIRIE FALCON (continued)

Carter	< .5 mile.	6/ 7/1978	Yes	Observation
Ca. 0.25 mi E from HWY 323 on Prairiedale Rd, turn rt. Continue to plateau				
Carter	< .5 mile.	6/ 7/1978	Yes	Observation
Ca. 1 mi. W. of D. Woolworth Ranch then NW ca. 0.75 mi.				
Carter	< .5 mile.	6/10/1978	Yes	Observation
Ca. 1.25 mi. W. of Knipfer Ranch on Boxelder Ranch				
Carter	< .5 mile.	6/27/1978	Yes	Observation
Maverick Gulch				
Carter	< .5 mile.	6/20/1978	Yes	Observation
0.25 mi. from White Ranch, turn left and continue 0.5 mi. to cliffs to N.				
Carter	< .5 mile.	6/15/1978	No	Observation
Ca. 1 mi E of E. Steig Ranch Driveway on Mill Iron Rd then SE thru pasture				
Carter	< .5 mile.	6/ 2/1979	Yes	Observation
0.5 mi. SE and 0.25 mi. W. of Ekalaka Park Campground				
Carter	< .5 mile.	6/24/1979	Yes	Observation
NW of Lamb Ranch				
Carter	< .5 mile.	6/25/1979	Yes	Observation
N. of B. Padden Ranch				
Carter	< .5 mile.	6/27/1979	Yes	Observation
Lost Farm Road loop				
Carter	< .5 mile.	7/ 7/1979	Yes	Observation
N. of Kortum Ranch				
Carter	< .5 mile.	7/13/1979	Yes	Observation
N. of White Ranch				

County	Precision	Date	Breed	Data Type

PRAIRIE FALCON (continued)

Carter	< .5 mile.	7/29/1979	Yes	Observation

Ca. 0.5 mi. from Camp Needmore, take left fork, rimrocks

Carter	< .5 mile.	6/25/1980	Yes	Observation

N. of Carey Ranch site on cliff face

Carter	< .5 mile.	6/ 8/1980	Yes	Observation

S. from sm. chimney across flat plateau along Carter Rimrock Plateau

Carter	< .5 mile.	7/ 9/1981	Yes	Observation

Bowl shaped draw on W. side of Chalk Buttes

Carter	< .5 mile.	7/ 9/1981	Yes	Observation

W. side of central butte oin W. wall of Chalk Buttes

Carter	< .5 mile.	6/13/1981	Yes	Observation

Cliffs E. of Ellis Ranch on S. side of Ekalaka Hills

Carter	< .5 mile.	6/18/1981	Yes	Observation

Ca. 0.25 mi. w. of Woolworth Ranch in SW part of Ekalaka Hills

Carter	< .5 mile.	6/ 4/1994	Yes	Observation

Chalk Buttes (NW4 of section)

Carter	< .5 mile.	6/14/1994	Yes	Observation

Chalk Buttes (SW4 of section)

Carter	< .5 mile.	6/ 6/1994	Yes	Observation

Ekalaka Hills (W2 of section, at radio tower)

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: ACCIPITER GENTILIS
Common Name: NORTHERN GOSHAWK

Global rank: G4 Forest Service status:
State rank: S3B,S2N Federal Status: C2

Element occurrence code: ABNKC12060.037
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: IRISH BUTTE

Township: Range: Section: TRS comments:
016N 008E

Precision: G
Survey date: Elevation: 3500 -
First observation: 1976 Slope/aspect: P39L00
Last observation: 1976-07-24 Size (acres): 0

Location:
SOUTHERN SLIM BUTTES IN SE HARDING COUNTY.

Element occurrence data:
ADULT AND TWO RECENTLY FLEDGED YOUNG OBSERVED IN PONDEROSA PINES BY C.L.BLAIR.

General site description:

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
NO NEST WAS FOUND BUT OBSERVATION STRONGLY SUGGESTS NESTING IN THIS AREA.

Information source: SD BIRD NOTES. V33:37.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.033
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MOREAU PEAK

Township:	Range:	Section:	TRS comments:
016N	003E	10	SW4SW4NE4

Precision: S
Survey date: 1987-SUM Elevation: 3580 -
First observation: 1987 Slope/aspect: P51U02
Last observation: 1987-SUM Size (acres):

Location:
EAST SHORT PINE HILLS; 10 MI W AND 15 MI S OF BUFFALO

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
EAST SHORT PINE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.034
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MOREAU PEAK

Township:	Range:	Section:	TRS comments:
016N	003E	13	SW4NW4SW4

Precision: S
Survey date: 1982-SUM Elevation: 3820 -
First observation: 1982 Slope/aspect: P51N07
Last observation: 1982-SUM Size (acres):

Location:
EAST SHORT PINE HILLS; 8 MI W AND 16 MI S OF BUFFALO

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
EAST SHORT PINE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.040
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MOREAU PEAK

Township:	Range:	Section:	TRS comments:
016N	003E	14	SW4NW4SE4

Precision: S
Survey date: 1989-SUM
First observation: 1982
Last observation: 1982-SUM

Elevation: 3800 -
Slope/aspect: P51U01
Size (acres):

Location:
EAST SHORT PINE HILLS; 9 MI W AND 16 MI S OF BUFFALO

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
EAST SHORT PINE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#35GE10

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.035
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MOREAU PEAK

Township:	Range:	Section:	TRS comments:
016N	004E	07	SE4SW4NE4

Precision: S
Survey date: 1987-SUM Elevation: 3540 -
First observation: 1987 Slope/aspect: P51N00
Last observation: 1987-SUM Size (acres):

Location:
EAST SHORT PINE HILLS; 7 MI W AND 15 M S OF BUFFALO

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
EAST SHORT PINE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.087
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
016N	007E	01	SE4NE4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3500 -
First observation: 1987 Slope/aspect: P52H00
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 11 MI S OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.069
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: IRISH BUTTE

Township:	Range:	Section:	TRS comments:
016N	008E	06	NE4SW4SW4

Precision: S
Survey date: 1983-SUM Elevation: 3500 -
First observation: 1983 Slope/aspect: P52H02
Last observation: 1983-SUM Size (acres):

Location:
SLIM BUTTES; 11 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.070
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: IRISH BUTTE

Township:	Range:	Section:	TRS comments:
016N	008E	07	NE4NW4SE4

Precision: S
Survey date: 1983-SUM Elevation: 3580 -
First observation: 1983 Slope/aspect: P52H02
Last observation: 1983-SUM Size (acres):

Location:
SLIM BUTTES; 11 MI S OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.073
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	008E	15	SE4NE4

Precision: S
Survey date: 1987-SUM Elevation: 3350 -
First observation: 1982 Slope/aspect: P52D00
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 3 MI E AND 12 MI S OF REVA GAP

Element occurrence data:
1982-TWO YOUNG OBSERVED AT NEST SITE; 1987-TWO YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.072
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: IRISH BUTTE

Township:	Range:	Section:	TRS comments:
016N	008E	17	SE4NW4NE4

Precision: S
Survey date: 1982-SUM Elevation: 2980 -
First observation: 1982 Slope/aspect: P52D00
Last observation: 1982-SUM Size (acres):

Location:
SLIM BUTTES; 12 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH, & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.075
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	008E	24	SE4NW4NE4

Precision: S
Survey date: 1987-SUM Elevation: 3300 -
First observation: 1984 Slope/aspect: P52A00
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 5 MI E AND 13 MI S OF REVA GAP

Element occurrence data:
1984-TWO YOUNG OBSERVED AT NEST SITE; 1987-ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.074
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	009E	18	SE4SW4NE4

Precision: S
Survey date: 1989-SUM Elevation: 3190 -
First observation: 1989 Slope/aspect: P39H00
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 5 MI E AND 13 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.076
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	009E	20	SW4NW4NW4

Precision: S
Survey date: 1984-SUM Elevation: 3260 -
First observation: 1984 Slope/aspect: P39H00
Last observation: 1984-SUM Size (acres):

Location:
SLIM BUTTES; 7 MI E AND 13 MI S OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.077
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	007E	12	SE4NW4SE4

Precision: S
Survey date: 1983-SUM Elevation: 3440 -
First observation: 1983 Slope/aspect: R26B00
Last observation: 1983-SUM Size (acres):

Location:
SLIM BUTTES; 6 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.079
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	007E	14	NE4NW4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3215 -
First observation: 1989 Slope/aspect: R26B01
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 8 MI S OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.081
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	007E	24	NW4NE4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3480 -
First observation: 1983 Slope/aspect: R26B00
Last observation: 1983-SUM Size (acres):

Location:
SLIM BUTTES; 8 MI S OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE67

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY ,SD 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.082
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	007E	26	NE4NW4SW4

Precision: S
Survey date: 1984-SUM Elevation: 3300 -
First observation: 1984 Slope/aspect: P52H00
Last observation: 1984-SUM Size (acres):

Location:
SLIM BUTTES; 2 MI W AND 8 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.084
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	007E	35	SW4NW4SW4

Precision: S
Survey date: 1989-SUM Elevation: 3150 -
First observation: 1989 Slope/aspect: P52H00
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 2 MI W AND 10 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.080
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	008E	16	SW4NE4NE4

Precision: S
Survey date: 1989-SUM Elevation: 3300 -
First observation: 1989 Slope/aspect: P39P01
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 2 MI E AND 6 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
HARDING CO SCHOOL AND PUBLIC LAND #1

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.078
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	008E	18	SW4NE4NE4

Precision: S
Survey date: 1983-SUM Elevation: -
First observation: 1983 Slope/aspect: P39Q01
Last observation: 1983-SUM Size (acres):

Location:
SLIM BUTTES; 7 MI S OF REVA GAP

Element occurrence data:
THREE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.089
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	008E	29	NE4NE4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3360 -
First observation: 1979 Slope/aspect: P39P02
Last observation: 1979-07-30 Size (acres):

Location:
SLIM BUTTES; 1 MI E AND 9 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED BY D. BECKER; 1989-NO ACTIVITY

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE66

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.083
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	008E	29	NE4NE4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3380 -
First observation: 1987 Slope/aspect: P39P02
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI E AND 9 MI S OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.085
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	008E	31	SE4NW4SW4

Precision: S
Survey date: 1989-SUM Elevation: 3450 -
First observation: 1983 Slope/aspect: P39000
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 10 MI S OF REVA GAP

Element occurrence data:
1983-ONE YOUNG OBSERVED AT NEST SITE; 1989-ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#35GE37

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.086
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	008E	33	SE4NE4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3280 -
First observation: 1983 Slope/aspect: P39000
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 2 MI E AND 10 MI S OF REVA GAP

Element occurrence data:
1983-TWO YOUNG OBSERVED AT NEST SITE; 1989-TWO YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE65

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.066
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: FLAT TOP BUTTE

Township:	Range:	Section:	TRS comments:
017N	008E	34	NE4SW4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3230 -
First observation: 1989 Slope/aspect: P39000
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 5 MI E AND 11 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.067
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: FLAT TOP BUTTE

Township:	Range:	Section:	TRS comments:
017N	008E	34	SE4SE4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3300 -
First observation: 1989 Slope/aspect: P39000
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 5 MI E AND 11 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#35GE5A

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.060
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	04	NE4NW4NW4

Precision: S
Survey date: 1982-SUM Elevation: 3240 -
First observation: 1982 Slope/aspect: P39N03
Last observation: 1982-SUM Size (acres):

Location:
SLIM BUTTES, 1 MI E AND 1 MI N OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.025
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	08	

Precision: G
Survey date:
First observation: 1974
Last observation: 1974-10-04

Elevation: 3400 -
Slope/aspect: P39P04
Size (acres): 0

Location:
NEAR REVA CAMPGROUND AND N OF HWY AT N END OF SLIM BUTTES.

Element occurrence data:
SEVERAL ADULTS, 8-9 IMMATURES, AND 3 NESTS OBSERVED 1-4 OCTOBER 1974 BY TOM KUCK-GFP.

General site description:

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: ANDERSON, MAURICE E.(ANDY). END.SPEC.COORD. USFWS. SD FIELD OFFICE, PIERRE,SD. 224-8692.(MISC. ANIMAL SIGHTINGS).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.061
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	17	SE4NE4SW4

Precision: S
Survey date: 1987-SUM Elevation: 3250 -
First observation: 1983 Slope/aspect: R26A02
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI S OF REVA GAP

Element occurrence data:
1983-ONE YOUNG OBSERVED AT NEST SITE; 1987- TWO YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.062
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	17	SW4NW4SE4

Precision: S
Survey date: 1984-SUM Elevation: 3300 -
First observation: 1984 Slope/aspect: R26A02
Last observation: 1984-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI S OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.064
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	19	SW4NW4SW4

Precision: S
Survey date: 1989-SUM Elevation: 3280 -
First observation: 1984 Slope/aspect: R26A03
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI W AND 2 MI S OF REVA GAP

Element occurrence data:
1984-ONE YOUNG OBSERVED AT NEST SITE; 1989-TWO YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.065
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	20	SE4NW4NE4

Precision: S
Survey date: 1989-SUM Elevation: 3380 -
First observation: 1982 Slope/aspect: R26A02
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 2 MI S OF REVA GAP

Element occurrence data:
1982-TWO YOUNG OBSERVED AT NEST SITE; 1989- ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE69

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.051
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	007E	24	SW4NE4SW4

Precision: S
Survey date: 1989-SUM Elevation: 3400 -
First observation: 1979 Slope/aspect: R23A00
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 16 MI E OF BUFFALO

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE58

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.052
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	007E	25	NE4SW4NW4

Precision: S
Survey date: 1989-SUM
First observation: 1983
Last observation: 1984-SUM

Elevation: 3400 -
Slope/aspect: R23000
Size (acres):

Location:
SLIM BUTTES; 16 MI E OF BUFFALO

Element occurrence data:
1983-ONE YOUNG OBSERVED AT NEST SITE; 1984-ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE57

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.053
Element occurrence type:

Survey site name:
EO rank: A
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	19	NE4NW4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3450 -
First observation: 1987 Slope/aspect: R19A00
Last observation: 1989-SUM Size (acres):

Location:
SLIM BUTTES; 17 MI E OF BUFFALO

Element occurrence data:
1987-ONE YOUNG OBSERVED; 1989-TWO YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#GE89

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.054
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	21	NW4SE4SE4

Precision: S
Survey date: 1987-SUM
First observation: 1987
Last observation: 1987-SUM
Elevation: 2980 -
Slope/aspect: R17A00
Size (acres):

Location:
SLIM BUTTES; 19 MI E OF BUFFALO

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.055
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	27	NW4SE4SW4

Precision: S
Survey date: 1984-SUM Elevation: 3020 -
First observation: 1983 Slope/aspect: R17000
Last observation: 1984-SUM Size (acres):

Location:
SLIM BUTTES; 3 MI E AND 3 MI N OF REVA GAP

Element occurrence data:
1983-ONE YOUNG OBSERVED AT NEST SITE; 1984-ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.059
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	32	SE4SE4SE4

Precision: S
Survey date: 1984-SUM
First observation: 1984
Last observation: 1984-SUM

Elevation: 3300 -
Slope/aspect: P39N03
Size (acres):

Location:
SLIM BUTTES; 2 MI N OF REVA GAP

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.056
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	33	SW4NW4NE4

Precision: S
Survey date: 1987-SUM Elevation: 3150 -
First observation: 1983 Slope/aspect: R17000
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI E AND 2 MI N OF REVA GAP

Element occurrence data:
1983-TWO YOUNG OBSERVED AT NEST SITE; 1984-ONE YOUNG; 1987-ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.057
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	33	NE4SE4NW4

Precision: S
Survey date: 1987-SUM Elevation: 3220 -
First observation: 1987 Slope/aspect: R17000
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI E AND 2 MI N OF REVA GAP

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.058
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
019N	008E	33	SW4NW4SE4

Precision: S
Survey date: 1987-SUM Elevation: 3400 -
First observation: 1983 Slope/aspect: P39N03
Last observation: 1987-SUM Size (acres):

Location:
SLIM BUTTES; 1 MI E AND 2 MI N OF REVA GAP

Element occurrence data:
1983-TWO YOUNG OBSERVED AT NEST SITE; 1984-ONE YOUNG;1987-ONE YOUNG

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.044
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
020N	005E	06	NE4NE4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3340 -
First observation: 1983 Slope/aspect: R25B00
Last observation: 1983-SUM Size (acres):

Location:
SOUTH CAVE HILLS; 10 MI N OF BUFFALO

Element occurrence data:
1983-TWO YOUNG OBSERVED AT NEST SITE; 1989-POSSIBLY ACTIVE, BUT UNCONFIRMED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#GE73

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.041
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
021N	004E	13	SW4SW4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3200 -
First observation: 1979 Slope/aspect: R24D00
Last observation: 1984-SUM Size (acres):

Location:
SOUTH CAVE HILLS; 10 MI W AND 4 MI S OF LUDLOW

Element occurrence data:
1979-ADULT AND ONE YOUNG OBSERVED AT STICK NEST; 1984-ONE YOUNG OBSERVED; 1989-NO ACTIVITY OBSERVED AT STICK NEST

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#GE79

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.042
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
021N	004E	24	SE4SE4NW4

Precision: S
Survey date: 1987-SUM Elevation: 3300 -
First observation: 1987 Slope/aspect: R24D00
Last observation: 1987-SUM Size (acres):

Location:
SOUTH CAVE HILLS; 10 MI W AND 5 MI S OF LUDLOW

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.045
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
021N	004E	36	NW4SW4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3330 -
First observation: 1979 Slope/aspect: R25C02
Last observation: 1979-06-20 Size (acres):

Location:
SOUTH CAVE HILLS; 1 MI W AND 11 MI N OF BUFFALO

Element occurrence data:
1979-TWO YOUNG OBSERVED AT NEST SITE; 1989-NO ACTIVITY OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#GE55

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.043
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
021N	005E	30	NE4SW4NE4

Precision: S
Survey date: 1989-SUM Elevation: 3260 -
First observation: 1983 Slope/aspect: R24D02
Last observation: 1984-SUM Size (acres):

Location:
SOUTH CAVE HILLS; 9 MI W AND 6 MI S OF LUDLOW

Element occurrence data:
1983-THREE YOUNG OBSERVED AT NEST SITE; 1984-TWO YOUNG OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#GE74

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.047
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
021N	005E	02	NE4NE4

Precision: S
Survey date:
First observation: 1983
Last observation: 1989-SUM
Elevation: 3240 -
Slope/aspect: R24E01
Size (acres):

Location:
NORTH CAVE HILLS; 5 MI W AND 1 MI S OF LUDLOW

Element occurrence data:
1983-ONE YOUNG OBSERVED AT NEST SITE; 1989-TWO YOUNG OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.048
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
021N	005E	11	NE4NW4SW4

Precision: S
Survey date:
First observation: 1989
Last observation: 1989-SUM

Elevation: 3240 -
Slope/aspect: R24E01
Size (acres):

Location:
NORTH CAVE HILLS; 4 MI W AND 3 MI S OF LUDLOW

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.046
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
022N	005E	23	SEC 22

Precision: M
Survey date: 1989-SUM Elevation: 3200 -
First observation: 1989 Slope/aspect: Q26L01
Last observation: 1989-07-12 Size (acres):

Location:
NORTH CAVE HILLS; 5 MI W AND 1 MI N OF LUDLOW

Element occurrence data:
1 FLEDGLING, 2 ADULTS OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#35GE56

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.050
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
022N	005E	20	SE4SW4

Precision: S
Survey date:
First observation: 1983
Last observation: 1989-SUM
Elevation: 3400 -
Slope/aspect: Q26L00
Size (acres):

Location:
NORTH CAVE HILLS; 7 MIW AND 2 MI N OF LUDLOW

Element occurrence data:
1983-ONE YOUNG OBSERVED AT NEST SITE; 1989-TWO YOUNG OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME,FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 57701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: AQUILA CHRYSAETOS
Common Name: GOLDEN EAGLE

Global rank: G4 Forest Service status:
State rank: S4B,S3N Federal Status:

Element occurrence code: ABNKC22010.049
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
022N	005E	20	SE4NE4

Precision: S
Survey date:
First observation: 1984
Last observation: 1984-SUM

Elevation: 3220 -
Slope/aspect: Q26L05
Size (acres):

Location:
NORTH CAVE HILLS; 7 MI W AND 2 MI N OF LUDLOW

Element occurrence data:
ONE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:

Information source: BENZON, TED, WILDLIFE BIOLOGIST, GAME, FISH & PARKS, 3305 W. SOUTH ST., RAPID CITY, SD, 5 7701, 394-1751

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO PEREGRINUS
Common Name: PEREGRINE FALCON

Global rank: G3 Forest Service status: ENDANGERED
State rank: SXB,SZN Federal Status: E/SA

Element occurrence code: ABNKD06070.001
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: J B HILL
BATTLESHIP ROCK
IRISH BUTTE

Township: Range: Section: TRS comments:

Precision: G
Survey date:
First observation: 1925
Last observation: 1925-05-09
Elevation: -
Slope/aspect: P39000
Size (acres): 0

Location:
SLIM BUTTES, HARDING CO.

Element occurrence data:
NOTED NESTING IN AREA 9 MAY 1925 BY F.A.PATTON.

General site description:

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: ANDERSON, MAURICE E.(ANDY). END.SPEC.COORD. USFWS. SD FIELD OFFICE, PIERRE, SD. 224-8692. (PEREGRINE FALCON SIGHTINGS).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.004
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
022N	005E	33	NE4SW4NW4NE4

Precision: SC
Survey date:
First observation: 1981
Last observation: 1981-10-06

Elevation: 3200 -
Slope/aspect: R24E00
Size (acres): 0

Location:
0.25 MI S, 6.5 MI W OF LUDLOW.

Element occurrence data:
ONE ADULT BIRD SHOWING NEST DEFENSE BEHAVIOR OF TREE NEST. REPORTED BY BENZON. NEST CONTENTS UNKNOWN.

General site description:

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.005
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
022N	005E	33	CENTER OF SW4NE4NW4

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-07-18

Elevation: 3200 -
Slope/aspect: R24E00
Size (acres): 0

Location:
0.25 MI S, 6.5 MI W OF LUDLOW.

Element occurrence data:
FLEDGED YOUNG OBSERVED IN TREE NEST BY STEVEN MACKEY, USFS- SIOUX DISTRICT.

General site description:
OLD MAGPIE NEST IN PONDERSOA PINE OF NORTH CAVE HILLS.

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.002
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: EAGLES NEST BUTTE

Township:	Range:	Section:	TRS comments:
022N	005E	10	NE4NW4SW4NW4

Precision: SC
Survey date:
First observation: 1981
Last observation: 1981-10-06
Elevation: 3150 -
Slope/aspect: Q26L03
Size (acres): 0

Location:
2.25 MI S, 0.25 MI W OF EAGLES NEST BUTTE.

Element occurrence data:
ONE ADULT BIRD OBSERVED IN TREE NEST BY BENZON. NEST CONTENTS UNKNOWN.

General site description:

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION, SOURCE NEST#35M25.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.014
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
021N	004E	35	SEC 36

Precision: M
Survey date: 1989-SUM Elevation: 3400 -
First observation: 1979 Slope/aspect: R25C02
Last observation: 1979-07-13 Size (acres):

Location:
SOUTH CAVE HILLS; 9 MI W AND 7 MI S OF LUDLOW

Element occurrence data:
FOUR FLEDGLINGS OBSERVED IN OLD MAGPIE NEST IN PONDEROSA PINE BY S. MACKEY; 1989-NO ACTIVITY OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#M61

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.008
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
021N	004E	36	SW4SW4NW4NW4

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-07-13

Elevation: 3400 -
Slope/aspect: R25C01
Size (acres): 0

Location:
10.5 MI N, 1 MI W OF BUFFALO.

Element occurrence data:
ADULT AND YOUNG OBSERVED IN TREE NEST BY STEVEN MACKEY, USFS-SIOUX DISTRICT. NEST VISITED AGAIN ON 13 JULY 1979 AND AT LEAST 4 FLEDGLINGS WERE SEEN.

General site description:
OLD MAGPIE NEST IN PONDEROSA PINE OF SOUTH CAVE HILLS.

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.015
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
021N	004E	36	SE4SW4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3370 -
First observation: 1989 Slope/aspect: R25C01
Last observation: 1989-06-26 Size (acres):

Location:
SOUTH CAVE HILLS; 10 MI N AND 1 MI W OF BUFFALO

Element occurrence data:
THREE YOUNG IN NEST

General site description:

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
NEST 30 FEET HIGH IN PONDEROSA PINE

Information source: MELIUS, M.M. 1989. FIELD SURVEY TO SOUTH CAVE HILLS, JUNE 26-27.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.006
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
021N	005E	30	SE4NE4SE4NE4NW4

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-07-17
Elevation: 3300 -
Slope/aspect: R24D02
Size (acres): 0

Location:
12 MI N OF BUFFALO.

Element occurrence data:
BOTH ADULTS OBSERVED IN TREE BY STEVEN MACKEY, USFS-SIOUX DISTRICT.

General site description:
OLD MAGPIE NEST IN PONDEROSA PINE OF SOUTH CAVE HILLS.

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.010
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	007E	01	SE4SW4NE4NW4

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-07-26

Elevation: 3400 -
Slope/aspect: R26A00
Size (acres): 0

Location:
5.75 MI W, 0.75 MI N OF REVA.

Element occurrence data:
AT LEAST 3 YOUNG OBSERVED IN TREE NEST BY STEVEN MACKEY, USFS-SIOUX DISTRICT.

General site description:
OLD MAGPIE NEST IN PONDEROSA PINE.

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.011
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
018N	008E	29	

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-07-16

Elevation: 3500 -
Slope/aspect: P39Q00
Size (acres): 0

Location:
3 MI S, 5 MI W OF REVA.

Element occurrence data:
BOTH ADULTS AND AT LEAST TWO COMPLETELY FEATHERED YOUNG OBSERVED IN TREE NEST BY STEVEN MACKEY, USFS-SIOUX DISTRICT.

General site description:
OLD MAGPIE NEST IN PONDEROSA PINE OF BOBCAT CANYON.

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.009
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
020N	005E	06	E2SE4NE4SE4 S05

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-07-16
Elevation: 3400 -
Slope/aspect: R25B00
Size (acres): 0

Location:
10 MI N OF BUFFALO.

Element occurrence data:
ONE ADULT AND AT LEAST THREE YOUNG OBSERVED IN TREE NEST BY STEVEN MACKEY, USFS-SIOUX DISTRICT.

General site description:
OLD MAGPIE NEST IN PONDEROSA PINE OF SOUTH CAVE HILLS.

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION; AT LEAST 3 SUITABLE NESTS OCCUR CLOSE TOGETHER IN THE DRAW.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO COLUMBARIUS
Common Name: MERLIN

Global rank: G4 Forest Service status:
State rank: S3B,S3N Federal Status:

Element occurrence code: ABNKD06030.007
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
021N	004E	24	SW4SW4NW4

Precision: SC
Survey date:
First observation: 1979
Last observation: 1979-06-20

Elevation: 3300 -
Slope/aspect: R24D00
Size (acres): 0

Location:
12.5 MI N, 1.5 MI W OF BUFFALO.

Element occurrence data:
BOTH ADULTS AND FOUR YOUNG (2 WKS OLD) OBSERVED IN TREE NESTBY DALE BECKER, USFS-SIOUX DISTRICT.

General site description:
OLD MAGPIE NEST IN PONDEROSA PINE OF SOUTH CAVE HILLS.

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
SEE SOURCE REPORT FOR SPECIFIC LOCATION.

Information source: SHARPS, JON. END.SPEC.COORD. SDGFP. 3305 W. SOUTH ST. RAPID CITY, SD. 394-2391. (MERLIN DATA).

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.006
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	008E	11	SE4NE4

Precision: S
Survey date: 1989-06 Elevation: 3320 -
First observation: 1979 Slope/aspect: P39H00
Last observation: 1989-06-25 Size (acres):

Location:
SLIM BUTTES; 3 MI E AND 11 MI S OF REVA GAP

Element occurrence data:
1979-FOUR YOUNG IN CLIFF POTHOLE; 1989-YOUNG OBSERVED IN WEST-FACING CRACK, MIDWAY UP 50 FT. CLIFF

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#PF59

Information source: MELIUS, M.M. 1989. FIELD SURVEY TO SLIM BUTTES, JUNE 22-26.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.015
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: IRISH BUTTE

Township:	Range:	Section:	TRS comments:
016N	008E	16	NE4NW4NE4

Precision: S
Survey date: 1989-SUM Elevation: 3590 -
First observation: 1989 Slope/aspect: P52D00
Last observation: 1989-06-25 Size (acres):

Location:
SLIM BUTTES; 1 MI E AND 12 MI S OF REVA GAP

Element occurrence data:
TWO, POSSIBLY THREE YOUNG OBSERVED ON LEDGE MIDWAY UP 100 FOOT CLIFF

General site description:

Land owner/manager:
SLIM BUTTES
HARDING CO SCHOOL AND PUBLIC LAND #1

Comments:

Information source: MELIUS, M.M. 1989. FIELD SURVEY TO SLIM BUTTES, JUNE 22-26.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.008
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	008E	24	NE4NE4NE4

Precision: S
Survey date: 1979-SUM Elevation: 3360 -
First observation: 1979 Slope/aspect: P52A00
Last observation: 1979-06-11 Size (acres):

Location:
SLIM BUTTES; 5 MI E AND 13 MI S OF REVA GAP

Element occurrence data:
DEFENSIVE ADULTS, FOUR YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#35PF49

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.007
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: SHEEP MOUNTAIN

Township:	Range:	Section:	TRS comments:
016N	009E	20	NE4SW4SW4

Precision: S
Survey date: 1977-SUM Elevation: 3400 -
First observation: 1977 Slope/aspect: P52A00
Last observation: 1077-04-29 Size (acres):

Location:
SLIM BUTTES; 6 MI E AND 13 MI S OF REVA GAP

Element occurrence data:
DEFENSIVE ADULTS, YOUNG HEARD-NUMBER UNKNOWN

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
CNF#35PF40

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.013
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: J B HILL

Township:	Range:	Section:	TRS comments:
017N	007E	12	SE4NE4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3500 -
First observation: 1989 Slope/aspect: R26B01
Last observation: 1989-06-23 Size (acres):

Location:
SLIM BUTTES; 1.5 MI W AND 5 MI S OF REVA GAP

Element occurrence data:
ACTIVE NEST WITH YOUNG

General site description:

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: MELIUS, M.M. 1989. FIELD SURVEY TO SLIM BUTTES, JUNE 22-26.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.014
Element occurrence type:

Survey site name:
EO rank: C
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	08	SW4NE4SW4

Precision: S
Survey date: 1989-06 Elevation: 3400 -
First observation: 1989 Slope/aspect: P39N00
Last observation: 1989-06-22 Size (acres):

Location:
SLIM BUTTES; REVA GAP

Element occurrence data:
ACTIVE NEST WITH AT LEAST THREE YOUNG IN WEST-FACING CRACK IN CLIFF

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE,SAGEBRUSH AND WOODY DRAWS.

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:
TWO YOUNG SUBSEQUENTLY FOUND DEAD

Information source: MELIUS, M.M. 1989. FIELD SURVEY TO SLIM BUTTES, JUNE 22-26.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.003
Element occurrence type:

Survey site name:
EO rank:
EO rank comments:

County:

USGS quadrangle: BATTLESHIP ROCK

Township:	Range:	Section:	TRS comments:
018N	008E	17	SW4NE4

Precision: S
Survey date:
First observation: 1973
Last observation: 1973-07
Elevation: 3340 -
Slope/aspect: P39P04
Size (acres): 0

Location:
BATTLESHIP ROCK, SLIM BUTTES.

Element occurrence data:
OBSERVED AND PHOTOGRAPHED BY D.ALLEN.

General site description:
SW-FACING SANDSTONE CLIFFS.

Land owner/manager:
SLIM BUTTES
CUSTER NATIONAL FOREST

Comments:

Information source: ALLEN,DON. RESOURCE STAFF SPECIALIST, PARKS.
SDGFP. ANDERSONBLDG. PIERRE, SD. 773-4502.

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.010
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
020N	005E	05	NE4SW4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3400 -
First observation: 1979 Slope/aspect: R25B00
Last observation: 1979-06-26 Size (acres):

Location:
SOUTH CAVE HILLS; 10 MI N OF BUFFALO

Element occurrence data:
NO NEST IDENTIFIED, FOUR YOUNG BIRDS OBSERVED WITH ONE ADULT BY S. MACKEY; 1989-NO ACTIVITY OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#PF45

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.009
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: MC KENZIE BUTTE

Township:	Range:	Section:	TRS comments:
021N	004E	26	SE4SE4SE4

Precision: S
Survey date: 1989-SUM Elevation: 3400 -
First observation: 1979 Slope/aspect: R25C02
Last observation: 1989-06-26 Size (acres):

Location:
SOUTH CAVE HILLS; 10 MI W AND 5 MI S OF LUDLOW

Element occurrence data:
UNKNOWN NO. OF YOUNG OBSERVED IN POTHOLE OF SANDSTONE CLIFF BY S. MACKEY; 1989-THREE YOUNG OBSERVED IN ADJACENT POTHOLES OF SOUTHWEST-FACING CLIFF

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#PF44

Information source: MELIUS, M.M. 1989. FIELD SURVEY TO SOUTH CAVE HILLS, JUNE 26-27

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.011
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LADNER SE

Township:	Range:	Section:	TRS comments:
021N	005E	30	NE4NE4NW4

Precision: S
Survey date: 1989-SUM Elevation: 3300 -
First observation: 1979 Slope/aspect: R24D02
Last observation: 1979-07-17 Size (acres):

Location:
SOUTH CAVE HILLS; 12 MI N OF BUFFALO

Element occurrence data:
ONE ADULT AND SEVERAL YOUNG OBSERVED AT NEST SITE BY S. MACKEY; 1989-
NO ACTIVITY OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH
AND WOODY DRAWS

Land owner/manager:
SOUTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#PF47, POSSIBLY SAME AS CNF#PF48

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK,
SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.018
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
021N	005E	10	NE4NE4SE4

Precision: S
Survey date:
First observation: 1979
Last observation: 1979-07-24
Elevation: 3270 -
Slope/aspect: R24E00
Size (acres):

Location:
NORTH CAVE HILLS; 6 MI W AND 3 MI S OF LUDLOW

Element occurrence data:
TWO YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#PF52

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.017
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
021N	005E	12	NW4NE4NW4

Precision: S
Survey date:
First observation: 1979
Last observation: 1979-07-23
Elevation: 3300 -
Slope/aspect: R24E01
Size (acres):

Location:
NORTH CAVE HILLS; 4 MI W AND 3 MI S OF LUDLOW

Element occurrence data:
TWO YOUNG OBSERVED AT NEST

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#PF51

Information source: USFS, CUSTER NF, RAPTOR INFORMATION SYSTEM, CAMP CROOK, SD 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.019
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
022N	005E	15	NW4SE4SE4

Precision: S
Survey date:
Elevation: 3280 -
First observation: 1979
Slope/aspect: Q26L01
Last observation: 1979-07-29
Size (acres):

Location:
NORTH CAVE HILLS; 5 MI W AND 2 MI N OF LUDLOW

Element occurrence data:
THREE YOUNG OBSERVED AT NEST SITE

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#PF57

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD, 57724

SOUTH DAKOTA NATURAL HERITAGE PROGRAM
Element Occurrence Record

Scientific Name: FALCO MEXICANUS
Common Name: PRAIRIE FALCON

Global rank: G5 Forest Service status:
State rank: S3S4B,S4N Federal Status:

Element occurrence code: ABNKD06090.020
Element occurrence type:

Survey site name:
EO rank: B
EO rank comments:

County:

USGS quadrangle: LUDLOW

Township:	Range:	Section:	TRS comments:
022N	005E	35	NE4SE4NW4

Precision: S
Survey date:
First observation: 1973
Last observation: 1973-06-25
Elevation: 3300 -
Slope/aspect: R24E02
Size (acres):

Location:
NORTH CAVE HILLS; 5 MI W OF LUDLOW

Element occurrence data:
FOUR FLEDGLINGS OBSERVED

General site description:
PONDEROSA PINE HILLS WITH STEEP CLIFFS, MIXED GRASS PRAIRIE, SAGEBRUSH AND WOODY DRAWS

Land owner/manager:
NORTH CAVE HILLS
CUSTER NATIONAL FOREST

Comments:
CNF#35PF8

Information source: USFS, CUSTER NF, RAPTOR INFO. SYSTEM, CAMP CROOK, SD 57724

APPENDIX 4

SIGHTINGS OF ADDITIONAL SPECIES OF SPECIAL INTEREST

ON OR NEAR SIOUX DISTRICT LAND, SUMMER 1994

APPENDIX 4. Sightings of other bird species of Special Interest (Natural Heritage Program lists) during summer 1994 in the vicinity of Sioux District units.

Species	Location	Date
Ferruginous Hawk	TO R56E S26 NW4 (Carter Co., MT)	17 June
Common Poorwill	T17N R7E S25 NE4 (Harding Co., SD)	13 June
Common Poorwill	T21N R4E S24 NW4 (Harding Co., SD)	16 June
Loggerhead Shrike	T22N R6E S16, S17 (Harding Co., SD)	16 June
Loggerhead Shrike	T3S R62E S26 (Carter Co., MT)	17 June
Loggerhead Shrike	T18N R1E S4 (Harding Co., SD)	17 June