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## Provisional Checklist of Mammals of South Dakota

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## Provisional Checklist of Mammals of South Dakota

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Distributional patterns of mammals in South Dakota are among the most poorly known for any region of similar size in temperate North America. The only state-wide treatment of the group was the mimeographed compilation by Over and Churchill (1945), which consisted mostly of nontechnical anecdotes. Consequently, much of what is known of the distribution of South Dakotan mammals has been derived from localized inventories (Findley 1956a on Clay County; Andersen and Jones 1971 on Harding County; Turner 1974 on the Black Hills; and Wilhelm et al. 1981 on Lacreek National Wildlife Refuge in Bennett County). These studies, supplemented with information contained in other sources cited in text, enabled preparation of the present preliminary checklist. Publications on the mammalian faunas of adjacent states and the monumental work by Hall (1981) on North America as a whole, together with recent systematic studies of mammalian taxa that occur in South Dakota, all were consulted in estimating the geographic distribution of included species. The reader is directed to the book by Hall and its predecessor (Hall and Kelson, 1959), for distributional details not documented herein.

This list should be regarded as provisional pending completion of additional field work in South Dakota. A checklist is useful in that it brings together in one reference information on the appropriate names and known distribution of taxa of the area covered. This, in turn, frequently stimulates research that eventually renders the checklist out-of-date, and we hope this one suffers that fate.

Eighty-six native species of mammals are here treated. In addition, one species (*Oreamnos americanus*) introduced on the Black Hills from elsewhere in North America and two murid rodents (*Mus musculus* and *Rattus norvegicus*) introduced from the Old World are listed and indicated by an asterisk. Mention is made, too, of several species presently unrecorded from South Dakota that may be found to occur in the state. Ordinal, familial, and generic names appear in currently accepted phylogenetic order, but species in each genus are arranged alphabetically. We follow Jones et al. (1979) in use of vernacular names. Locations of counties mentioned in text are shown in Fig. 1.

### ORDER MARSUPIALIA

#### Family DIDELPHIDAE — New World Opossums

*Didelphis virginiana*, Virginia opossum. Occurs throughout eastern part of state, west at least to Missouri River in north and nearly to Black Hills in south. The subspecies in South Dakota (Gardner 1973) is *D. v. virginiana* Kerr.

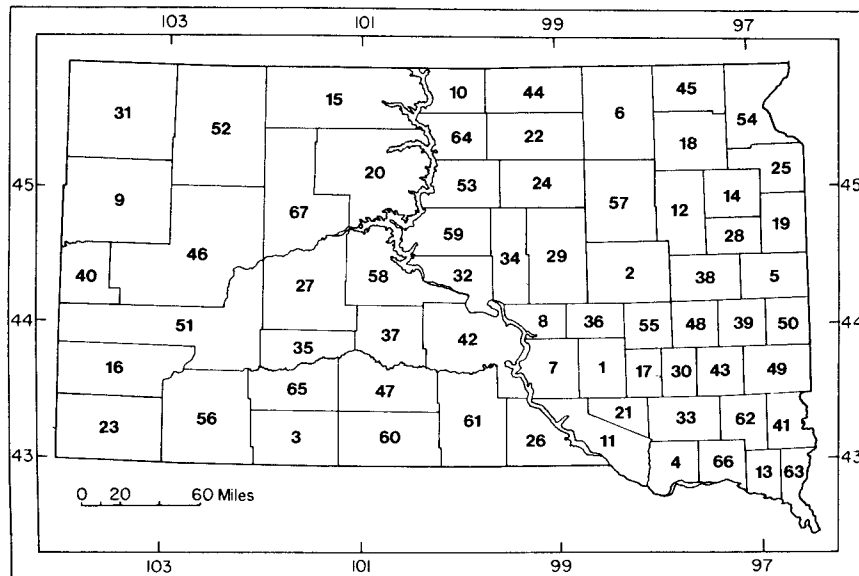


Figure 1. Map of South Dakota with counties numbered in alphabetical order: 1, Aurora; 2, Beadle; 3, Bennett; 4, Bon Homme; 5, Brookings; 6, Brown; 7, Brule; 8, Buffalo; 9, Butte; 10, Campbell; 11, Charles Mix; 12, Clark; 13, Clay; 14, Codington; 15, Corson; 16, Custer; 17, Davison; 18, Day; 19, Deuel; 20, Dewey; 21, Douglas; 22, Edmunds; 23, Fall River; 24, Faulk; 25, Grant; 26, Gregory; 27, Haakon; 28, Hamlin; 29, Hand; 30, Hanson; 31, Harding; 32, Hughes; 33, Hutchinson; 34, Hyde; 35, Jackson; 36, Jerauld; 37, Jones; 38, Kingsbury; 39, Lake; 40, Lawrence; 41, Lincoln; 42, Lyman; 43, McCook; 44, McPherson; 45, Marshall; 46, Meade; 47, Mellette; 48, Miner; 49, Minnehaha; 50, Moody; 51, Pennington; 52, Perkins; 53, Potter; 54, Roberts; 55, Sanborn; 56, Shannon; 57, Spink; 58, Stanley; 59, Sully; 60, Todd; 61, Tripp; 62, Turner; 63, Union; 64, Walworth; 65, Washabaugh; 66, Yankton; 67, Ziebach.

## ORDER INSECTIVORA

### Family SORICIDAE — Shrews

*Sorex arcticus*, arctic shrew. Known only from specimens taken more than a century ago at Ft. Sisseton, Marshall County (see Jackson 1928); current status uncertain. The subspecies is *S. a. laricorum* Jackson.

*Sorex cinereus*, masked shrew. Occurs throughout South Dakota in suitable habitats. The subspecies in the state is *S. c. haydeni* Baird; however, van Zyll de Jong (1980) has suggested that *haydeni* might be a species distinct from *cinereus*.

*Sorex nanus* Merriam, dwarf shrew. Known from five localities in Custer, Fall River, Jackson, and Pennington counties (Cinq-Mars et al. 1979). This species is monotypic.

*Sorex palustris*, water shrew. Same as for *S. arcticus* above. The subspecies in South Dakota is *S. p. hydrobadistes* Jackson.

*Microsorex hoyi*, pygmy shrew. Occurs in eastern fourth of state south to Nebraska border (Findley 1956b). The subspecies is *M. b. hoyi* (Baird). Diersing (1980) presented evidence for classifying *Microsorex* as a subgenus of *Sorex*.

*Blarina brevicauda*, northern short-tailed shrew. Found in eastern part of state, west at least to Missouri River and probably beyond in south. The subspecies in South Dakota is *B. b. brevicauda* (Say).

*Cryptotis parva*, least shrew. Known only from Jackson and Todd counties in south-central South Dakota (Findley 1956a), but no doubt occurs in southeastern part of state as well. The subspecies is *C. p. parva* (Say).

#### Family TALPIDAE — Moles

*Scalopus aquaticus*, eastern mole. Known from southern part of state, west at least to Bennett County (Jones et al. 1978). Subspecies are *S. a. caryi* Jackson in south-central South Dakota and *S. a. machrinoides* Jackson in the southeast.

### ORDER CHIROPTERA

#### Family VESPERTILIONIDAE — Vespertilionid Bats

*Myotis evotis*, long-eared myotis. Once thought to be widely distributed in far western South Dakota, but now known certainly only from Harding County in northwestern part of state (Jones and Choate 1978). The subspecies is *M. e. evotis* (H. Allen).

*Myotis keenii*, Keen's myotis. Occurs in eastern part of state and as disjunct population on Black Hills (see Turner 1974). The subspecies in South Dakota is *M. k. septentrionalis* (Trouessart); however, van Zyll de Jong (1979) has suggested that *septentrionalis* may be specifically distinct from *keenii*.

*Myotis leibii*, small-footed myotis. Found in western South Dakota, east at least to Haakon, Jackson, and Washabaugh counties (Jones and Genoways 1967; Tuttle and Heaney 1974). The subspecies in the state is *M. l. ciliolabrum* (Merriam).

*Myotis lucifugus*, little brown myotis. Occurs in eastern South Dakota, west at least to Missouri River, and on Black Hills and in adjacent areas. The two subspecies — *M. l. lucifugus* (Le Conte) in the east and *M. l. carissima* Thomas in the west — may not meet across the essentially treeless interior of the state.

*Myotis thysanodes*, fringe-tailed myotis. Known from southwestern part of state (Black Hills and adjacent areas of badlands — see Jones and Choate 1978). The subspecies is *M. t. pahasapensis* Jones and Genoways.

*Myotis volans*, long-legged myotis. Found in western part of state, east at least to Badlands National Park (Farney and Jones 1980). The subspecies in South Dakota is *M. v. interior* Miller.

*Lasionycteris noctivagans* Le Conte, silver-haired bat. Resident on Black Hills, in Harding County in northwest, and possibly elsewhere in state in summer (migrates southward in cold months); state-wide during seasonal migrations. This species is monotypic.

*Eptesicus fuscus*, big brown bat. State-wide in distribution. Subspecies in South Dakota are *E. f. fuscus* (Palisot de Beauvois) in the eastern third and *E. f. pallidus* Young elsewhere in the state.

*Lasiurus borealis*, red bat. State-wide in suitable habitats in summer except northwestern counties; migrates southward in cold months. The subspecies in South Dakota is *L. b. borealis* (Müller).

*Lasiurus cinereus*, hoary bat. State-wide in suitable habitats in summer; migrates southward in cold months. The subspecies is *L. c. cinereus* (Palisot de Beauvois).

*Plecotus townsendii*, Townsend's big-eared bat. Occurs in western part of state, east at least to Jackson County (Farney and Jones 1980). The subspecies in South Dakota is *P. t. pallescens* (Miller).

## ORDER LAGOMORPHA

### Family LEPORIDAE — Hares and Rabbits

*Sylvilagus audubonii*, desert cottontail. Known from western third of state; eastern limits of distribution poorly documented. The subspecies in South Dakota is *S. a. baileyi* (Merriam).

*Sylvilagus floridanus*, eastern cottontail. State-wide in suitable habitats (restricted to riparian communities in west), except absent from Black Hills. The subspecies in South Dakota are *S. f. mearnsii* (J. A. Allen) in the extreme east and *S. f. similis* Nelson in the remainder of the state.

*Sylvilagus nuttallii*, Nuttall's cottontail. Known only from Black Hills. The subspecies is *S. n. grangeri* (J. A. Allen).

*Lepus californicus*, black-tailed jackrabbit. Rare to locally common in southern part of state, northward at least to Lyman County (Findley 1956a). The subspecies in South Dakota is *L. c. melanotis* Mearns.

*Lepus townsendii*, white-tailed jackrabbit. Occurs throughout South Dakota. The subspecies in the state is *L. t. campanius* Hollister.

## ORDER RODENTIA

### Family SCIURIDAE — Squirrels

*Tamias striatus*, eastern chipmunk. Known certainly only from Marshall and Roberts counties, but may occur also in Lincoln County (Over and Churchill 1945); current status uncertain. The subspecies is *T. s. griseus* Mearns.

*Eutamias minimus*, least chipmunk. Occurs in western part of state, east at least to Badlands National Park. The subspecies *E. m. cacodemus* Cary inhabits the Badlands, *E. m. pallidus* (J. A. Allen) occurs in sparsely forested foothills of the Black Hills and along wooded escarpments in westernmost South Dakota, and *E. m. silvaticus* White is found on the Black Hills. Nadler et al. (1977) regarded *Eutamias* as a subgenus of the genus *Tamias*, but Ellis and Maxon (1979) presented data supporting the present taxonomic arrangement. The status of the generic name *Eutamias* thus is uncertain.

*Marmota flaviventris*, yellow-bellied marmot. Known only from Black Hills. The subspecies is *M. f. dacota* (Merriam).

*Marmota monax*, woodchuck. Possibly occurs in many of easternmost counties in state although reported only from Roberts and Union counties (Jones et al. 1978). Subspecies are *M. m. monax* (Linnaeus) in the southeast and *M. m. rufescens* (Howell) in the northeast.

*Spermophilus franklinii* (Sabine), Franklin's ground squirrel. Occurs east of Missouri River in northern half of state, and probably as far west as Bennett County in south (Wilhelm et al. 1981); western limits of distribution poorly known. The species is monotypic.

*Spermophilus richardsonii*, Richardson's ground squirrel. Occurs east of Missouri River in northern South Dakota, south at least to Hamlin County (Fredrickson 1972). The subspecies is *S. r. richardsonii* (Sabine).

*Spermophilus pilosoma*, spotted ground squirrel. Known only in southern South Dakota from sandy areas in Bennett and Shannon counties. The subspecies is *S. s. obsoletus* Kennicott.

*Spermophilus tridecemlineatus*, thirteen-lined ground squirrel. State-wide in distribution. Subspecies in South Dakota are *S. t. pallidus* J. A. Allen west of the Missouri River and *S. t. tridecemlineatus* (Mitchill) to the east. A third subspecies, *S. t. olivaceous* J. A. Allen, was described from the Black Hills, but was placed in synonymy under *S. t. pallidus* by Howell (1938); Long (1965) reinstated *olivaceous*, but Turner (1974) returned it to synonymy. Accordingly, the taxonomic status of populations on the Black Hills is uncertain.

*Cynomys ludovicianus*, black-tailed prairie dog. Formerly widespread in all but eastern South Dakota; in 1967, occurred throughout West River areas of state and as far east as McPherson, Lake, and Bon Homme counties (Henderson et al. 1974). The subspecies is *C. l. ludovicianus* (Ord).

*Sciurus niger*, fox squirrel. Formerly restricted to timbered areas and urban communities in eastern third of state; presently state-wide in suitable riparian habitats except in northwest, where species probably occurs only in vicinity of Little Missouri River. The subspecies is *S. n. rufiventer* E. Geoffroy St.-Hilaire.

*Tamiasciurus hudsonicus*, red squirrel. Known certainly only from Black Hills, where the subspecies is *T. h. dakotensis* (J. A. Allen). The latter also is known from the Long Pine Hills of Carter County, Montana (Lampe et al. 1974), and individuals occasionally may wander to pine-clad buttes in Harding County. Several reports of this squirrel, subspecies *T. h. minnesota* (J. A. Allen), from extreme northeastern South Dakota have not been verified, and the species doubtfully occurs there.

*Glaucomys sabrinus*, northern flying squirrel. Known only from Black Hills (Turner 1974), where the subspecies is *G. s. bangsi* (Rhoads). Another subspecies, *G. s. canescens* A. H. Howell, is recorded from North Dakota and Minnesota, and may occur in northeasternmost South Dakota.

#### Family GEOMYIDAE — Pocket Gophers

*Thomomys talpoides*, northern pocket gopher. Occurs in all but southern and eastern parts of state. The subspecies *T. t. nebulosus* V. Bailey is endemic to the Black Hills; *T. t. pierreicolus* Swenk occurs south of the Black Hills, but the extent of its distribution in South Dakota is uncertain; *T. t. bullatus* V. Bailey occurs in at least the northwestern corner (Harding County) of South Dakota (Andersen and Jones 1971), and probably ranges southward east of the Black Hills;

*T. t. rufescens* Wied-Neuwied presumably inhabits the remainder of central South Dakota, and extends westward in the north as shown by its presence in southwestern North Dakota (Genoways and Jones 1972). The distributional limits of the species as a whole and of individual subspecies (with the exception of *T. t. nebulosus*) in South Dakota are poorly known.

*Geomys bursarius*, plains pocket gopher. Occurs in eastern (west at least to Marshall, Clark, and Kingsbury counties) and southern (north at least to Fall River, Jackson, and Tripp counties) parts of state, in those areas not occupied by *T. talpoides*. The subspecies *G. b. bursarius* (Shaw) is known from eastern South Dakota south to Lincoln County; *G. b. lutescens* Merriam is known from southern South Dakota east to near the Missouri River; *G. b. majusculus* Swenk is known only from Bon Homme, Clay, Union, and Yankton counties in the southeast (Jones et al. 1978).

#### Family HETEROMYIDAE — Heteromyids

*Perognathus fasciatus*, olive-backed pocket mouse. Known from as far east as Beadle County; probably occurs in suitable habitats throughout western three-fourths of state. The only subspecies recognized in South Dakota by Williams and Genoways (1979) was *P. f. fasciatus* Wied-Neuwied.

*Perognathus flavescens*, plains pocket mouse. Occurs in eastern South Dakota westward at least as far as Bennett and Todd counties. Specimens from the south-central part of the state pertain to the subspecies *P. f. flavescens* Merriam, whereas those from central and eastern South Dakota have been referred to the subspecies *P. f. perniger* Osgood.

*Perognathus hispidus*, hispid pocket mouse. Known in South Dakota only west of Missouri River. The subspecies is *P. h. paradoxus* Merriam.

*Dipodomys ordii*, Ord's kangaroo rat. Occurs on sandy soils in western part of state. The subspecies *D. o. luteolus* (Goldman) occurs over much of western South Dakota, whereas *D. o. terrosus* Hoffmeister is found in the extreme northwest.

#### Family CASTORIDAE — Beavers

*Castor canadensis*, beaver. State-wide in rivers and other suitable aquatic habitats. The subspecies is *C. c. missouriensis* V. Bailey.

#### Family CRICETIDAE — Native Rats and Mice

*Reithrodontomys megalotis*, western harvest mouse. State-wide in distribution, but restricted to relatively mesic habitats in west. The subspecies in South Dakota is *R. m. dychei* J. A. Allen.

*Reithrodontomys montanus*, plains harvest mouse. Known from much of West River area of state, but limits of distribution poorly defined. The subspecies is *R. m. albescens* Cary.

*Peromyscus leucopus*, white-footed mouse. Occurs over much of state in suitable woodland habitats, but unknown from treeless areas in west and some populations there probably isolated. Subspecies in South Dakota are *P. l. noveboracensis* (Fischer) in at least the eastern fourth of the state and *P. l. aridulus* Osgood elsewhere.

*Peromyscus maniculatus*, deer mouse. Abundant state-wide. The subspecies *P. m. bairdii* (Hoy and Kennicott) occurs in the east, *P. m. luteus* Osgood occurs in the central part, and *P. m. nebrascensis* (Coues) occurs in the west. The limits of distribution of subspecies are, however, poorly known.

*Onychomys leucogaster*, northern grasshopper mouse. Distributed state-wide in suitable habitats. The subspecies *O. l. arcticeps* Rhoads is known from west of the Missouri River, north at least to Custer, Meade, and Stanley counties; *O. l. leucogaster* (Wied-Neuwied) presumably occurs throughout the area east of the Missouri River; and *O. l. missouriensis* (Audubon and Bachman) is known from the northwest.

*Neotoma cinerea*, bushy-tailed woodrat. Occurs only in western part of state; eastern limit of range poorly known. The subspecies *N. c. orolestes* Merriam is found on the Black Hills, whereas *N. c. rupicola* J. A. Allen occurs in breaks and badlands to the north, east, and south of the Black Hills.

*Clethrionomys gapperi*, southern red-backed vole. Known in South Dakota only from Black Hills and from Marshall County in Northeast. Subspecies in the two areas are *C. g. brevicaudus* (Merriam) and *C. g. loringi* (V. Bailey), respectively.

*Microtus longicaudus*, long-tailed vole. Found in South Dakota only on Black Hills. The subspecies is *M. l. longicaudus* (Merriam).

*Microtus ochrogaster*, prairie vole. Occurs throughout state. Subspecies are *M. o. minor* (Merriam) in the northeast, *M. o. similis* Severinghaus in Custer and Fall River counties in the southwest (Severinghaus 1977), and *M. o. haydenii* (Baird) in other areas (Choate and Williams 1978). Some paleontologists would employ the generic name *Pitymys* for this vole (see Jones and Choate 1980).

*Microtus pennsylvanicus*, meadow vole. Occurs state-wide in mesic habitats. The subspecies *M. p. insperatus* (J. A. Allen) occurs in the northwest and on the Black Hills, whereas *M. p. pennsylvanicus* (Ord) is found in the remainder of South Dakota; the limits of distribution of these two taxa are, however, poorly known. A third subspecies, *M. p. drummondii* (Audubon and Bachman), occurs in adjacent eastern North Dakota and may be found in the extreme northeast.

*Lagurus curtatus*, sagebrush vole. Known in South Dakota only from two specimens taken in Harding County (Birney and Lampe 1972). The subspecies is *L. c. pallidus* (Merriam).

*Ondatra zibethicus*, muskrat. State-wide in rivers, lakes, and other suitable aquatic habitats. The subspecies is *O. z. cinnamominus* (Hollister).

#### Family MURIDAE — Old World Rats and Mice

\**Rattus norvegicus* (Berkenhout), Norway rat. State-wide around human habitation.

\**Mus musculus* Linnaeus, house mouse. State-wide, especially in association with human habitation.

#### Family ZAPODIDAE — Jumping Mice

*Zapus hudsonius*, meadow jumping mouse. Possibly state-wide in mesic or riparian habitats; distribution in much of western South Dakota poorly known. Subspecies are *Z. b. campestris* Preble on the Black Hills (Turner 1974) and in Harding County (Andersen and Jones 1971), *Z. b. pallidus* Cockrum and Baker



in at least southernmost South Dakota (Wilhelm et al. 1981), and *Z. b. intermedius* Krutzsch elsewhere.

*Zapus princeps*, western jumping mouse. Known only from Day County in northeast. The subspecies is *Z. p. minor* Preble.

Family ERETHIZONTIDAE — New World Procupines

*Erethizon dorsatum*, porcupine. Distributed state-wide. Subspecies are *E. d. bruneri* Swenk in the west and *E. d. dorsatum* (Linnaeus) in the east.

## ORDER CARNIVORA

Family CANIDAE — Canids

*Canis latrans*, coyote. Occurs throughout state. Subspecies are *C. l. latrans* Say in western and central South Dakota and *C. l. thomasi* Jackson in the east.

*Canis lupus*, gray wolf. Formerly state-wide in distribution; now extirpated. Subspecies were *C. l. irremotus* Goldman on the Black Hills and *C. l. nubilus* Say elsewhere.

*Vulpes velox*, swift fox. Once occurred in all but easternmost counties; presently known only from West River area. Subspecies, poorly defined, are *V. v. hebes* Merriam in the north and *V. v. velox* (Say) in the south. Van Gelder (1978) recently proposed that all Recent North American canids, including foxes of the genera *Vulpes* and *Urocyon*, should be included in the genus *Canis*.

*Vulpes vulpes*, red fox. Distributed state-wide in suitable habitats. The subspecies is *V. v. regalis* Merriam. Generic status is uncertain (see account of *V. velox*).

*Urocyon cinereoargenteus*, gray fox. Formerly occurred primarily east of Missouri River, but now known as far west as Butte County (Jones and Henderson 1963). The subspecies is *U. c. ocythous* Bangs. Generic status is uncertain (see account of *V. velox*).

Family URSIDAE — Bears

*Ursus americanus*, black bear. Formerly state-wide in suitable woodland habitats; now extirpated or limited to a few individuals on Black Hills. The subspecies is *U. a. americanus* Pallas.

*Ursus arctos*, grizzly bear. Formerly state-wide in suitable habitats; now extirpated. The subspecies in South Dakota was *U. a. horribilis* Ord.

Family PROCYONIDAE — Procyonids

*Procyon lotor*, raccoon. Occurs throughout South Dakota, principally in wooded habitats. The subspecies is *P. l. hirtus* Nelson and Goldman.

Family MUSTELIDAE — Mustelids

*Mustela erminea*, ermine. Recorded only from Black Hills, where the subspecies is *M. e. muricus* (Bangs). Another race, *M. e. bangsi* Hall, is known from eastern North Dakota and northwestern Iowa and may be found in the eastern part of the state.

*Mustela frenata*, long-tailed weasel. Occurs throughout state. Subspecies are *M. f. alleni* (Merriam) on the Black Hills, *M. f. longicauda* Bonaparte in most of

South Dakota, and *M. f. spadix* (Bangs) in the extreme east, west at least to Marshall and Douglas counties.

*Mustela nigripes* (Audubon and Bachman), black-footed ferret. Formerly occurred in western part of state, east at least as far as Jerauld County (Cahalane 1954); now extremely rare, and probably restricted to areas where prairie dogs are abundant in south-central part of state. The last substantiated sighting of this monotypic species in South Dakota was in 1974 (F. R. Henderson, personal communication).

*Mustela nivalis*, least weasel. Known from eastern part of state, west at least to Bennett County (Wilhelm et al. 1981). The reported subspecies is *M. n. campestris* Jackson, but *M. n. rixosa* (Bangs) may be found in the north or east.

*Mustela vison*, mink. Found throughout state around permanent bodies of water. The subspecies in South Dakota is *M. v. letifera* Hollister.

*Gulo gulo*, wolverine. Formerly occurred sparingly in at least western South Dakota; the most recently recorded specimen from the state was from Dewey County (Lee 1962). The subspecies is *G. g. luscus* (Linnaeus).

*Taxidea taxus*, badger. Distributed state-wide. The subspecies is *T. t. taxus* (Schreber).

*Spilogale putorius*, eastern spotted skunk. Probably nearly state-wide in distribution, although apparently rare in northwest. The subspecies is *S. p. interrupta* (Rafinesque).

*Mephitis mephitis*, striped skunk. Occurs throughout state. The subspecies in South Dakota is *M. m. hudsonica* Richardson.

*Lutra canadensis*, river otter. Formerly state-wide in permanent bodies of water, but subsequently extirpated; present status unknown. Subspecies in South Dakota probably were *L. c. canadensis* (Schreber) over most of the state and possibly *L. c. interior* Swenk in the south. We follow Sokolov (1973), rather than van Zyll de Jong (1972), in use of the generic name *Lutra* for river otters in the New World.

#### Family FELIDAE — Cats

*Felis concolor*, mountain lion. Formerly state-wide in suitable habitats; now of infrequent occurrence in remote areas. The subspecies in South Dakota is *F. c. hippolestes* Merriam. The race *F. c. schorgeri* Jackson, now extinct, formerly occurred in the northern Mississippi Basin and may have ranged into eastern South Dakota.

*Felis lynx*, lynx. Occurs sporadically in South Dakota (see, for example, Gunderson 1978). The subspecies is *F. l. canadensis* (Kerr). We currently follow Kurtén and Rausch (1959) in use of the above name-combination (rather than the long-used *Lynx canadensis*) for this species.

*Felis rufus*, bobcat. Distributed throughout state. Subspecies provisionally recognized in South Dakota are *F. r. pallescens* (Merriam) in the west and *F. r. rufus* Schreber in the east.

### ORDER ARTIODACTYLA

#### Family CERVIDAE — Cervids

*Cervus elaphus*, wapiti. Formerly occurred throughout state; subsequently extirpated, but now reestablished with introduced stock. The subspecies native to

South Dakota was *C. e. canadensis* Erxleben; Turner (1974) reported that individuals of the subspecies *C. e. nelsoni* V. Bailey (from Wyoming) were used to restock the Black Hills.

*Odocoileus hemionus*, mule deer. Distributed state-wide. The subspecies in South Dakota is *O. h. hemionus* (Rafinesque).

*Odocoileus virginianus*, white-tailed deer. Occurs throughout state. Subspecies of *O. virginianus* are in need of study. Names possibly applicable to populations in South Dakota are *O. v. dacotensis* Goldman and Kellogg in the north, *O. v. macrourus* (Rafinesque) in the southeast, and *O. v. texanus* (Mearns) in the southwest.

#### Family ANTILOCAPRIDAE — Pronghorn

*Antilocapra americana*, pronghorn. Formerly state-wide; now restricted to western third of state. The subspecies in South Dakota is *A. a. americana* (Ord). O'Gara and Matson (1975) classified *Antilocapra* in the subfamily Antilocaprinae, which was included within the family Bovidae.

#### Family BOVIDAE — Bovids

*Bison bison*, bison. Formerly state-wide; now extinct except where reintroduced on public or private lands. The subspecies in South Dakota was *B. b. bison* (Linnaeus).

\**Oreamnos americanus*, mountain goat. Introduced on Black Hills. The subspecies is *O. a. missoulae* J. A. Allen.

*Ovis canadensis*, mountain sheep. The subspecies *O. c. auduboni* Merriam formerly occurred on and around the Black Hills (summarized by Turner 1974), and on buttes in Harding County (Andersen and Jones 1971). That subspecies is extinct (Turner 1974), but populations of another subspecies, *O. c. canadensis* Shaw, have been reestablished on the Black Hills, Slim Buttes, and possibly elsewhere in the western part of the state.

#### SPECIES THAT MAY OCCUR IN SOUTH DAKOTA

*Sorex merriami* Dobson, Merriam's shrew. Known from just south of Shannon County in Nebraska, and from just west of Harding County in Montana; to be looked for in western South Dakota. This species is monotypic.

*Pipistrellus subflavus subflavus* (F. Cuvier), eastern pipistrelle. Known from eastern Nebraska, western Iowa, and central Minnesota; doubtfully will be found in southeastern part of state.

*Nycticeius humeralis humeralis* (Rafinesque), evening bat. Occurs in east-central Nebraska, and may occur in extreme southeastern South Dakota.

*Eudermis maculatum* (J. A. Allen), spotted bat. Known from as near South Dakota as south-central Montana and northern Wyoming; possibly will be found on Black Hills.

*Tadarida brasiliensis mexicana* (Saussure), Brazilian free-tailed bat. Known from a few miles south of South Dakota border along Niobrara River in Keya Paha County, Nebraska (Czaplewski et al. 1979); stagglers of this migrant occasionally may enter southern part of state.

*Tadarida macrotis* (Gray), big free-tailed bat. Recorded nearest South Dakota from Colorado, Iowa, and Kansas; possibly will be found in other plains states. This species is monotypic.

*Lepus americanus americanus* Erxleben, showshoe hare. Known from eastern North Dakota and possibly will be found in extreme northeastern South Dakota.

*Sciurus carolinensis*, gray squirrel. Occurs to the north (subspecies *S. c. hypophaeus* Merriam) and south (subspecies *S. c. pennsylvanicus* Ord) of state; Over and Churchill (1945) and Findley (1956b) mentioned specimens possibly taken in South Dakota along the James River and on the west side of Big Stone Lake.

*Glaucomys volans volans* (Linnaeus), southern flying squirrel. Undocumented sightings of this species in Roberts and Grant counties mentioned by Over and Churchill (1945); known from east and south of state.

*Perognathus flavus piperi* Goldman, silky pocket mouse. Documented nearest South Dakota from northwestern Nebraska and northeastern Wyoming.

*Neotoma floridana baileyi* Merriam, eastern woodrat. Occurs along Niobrara River in north-central Nebraska; doubtfully will be found in southernmost South Dakota.

*Synaptomys cooperi gossii* (Coues), southern bog lemming. Recorded from along Niobrara River in northern Nebraska; probably occurs in mesic habitats in southeastern part of state.

\**Cervus dama* Linnaeus, fallow deer. Introduced in Crook County, Wyoming, and occasional strays have been shot in southwestern South Dakota; probably not established in state (Turner 1974).

*Alces alces andersoni* Peterson, moose. Known from eastern North Dakota, and from wanderers as far south as Iowa and northern Missouri. Individuals occasionally may be found in eastern South Dakota.

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