

LA-UR-97-4786

Title

*A CHECKLIST OF MAMMALS FOUND AT
LOS ALAMOS NATIONAL LABORATORY
AND SURROUNDING AREAS*

Authors

*James Biggs, Kathryn Bennett, and
Melanie Martinez*

Los Alamos National Laboratory, an affirmative action equal opportunity employer, is operated by the University of California for the United States Department of Energy under contract W-7405-ENG-36.



13096

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither The Regents of the University of California, the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by The Regents of the University of California, the United States Government, or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of The Regents of the University of California, the United States Government, or any agency thereof. The Los Alamos National Laboratory strongly supports a researcher's right to publish; therefore, the Laboratory as an institution does not endorse the viewpoint of a publication or guarantee its technical correctness.

Title

*A CHECKLIST OF MAMMALS FOUND AT
LOS ALAMOS NATIONAL LABORATORY
AND SURROUNDING AREAS*

Authors

*James Biggs, Kathryn Bennett, and
Melanie Martinez*

A Checklist of Mammals Found at Los Alamos National Laboratory and Surrounding Areas

by

James Biggs, Kathryn Bennett, and Melanie Martinez

INTRODUCTION

The following annotated checklist of mammals of Los Alamos National Laboratory (LANL) has been compiled from numerous biological surveys and studies conducted on and adjacent to Laboratory property. This checklist also includes species that are known to occur on adjacent properties, such as Bandelier National Monument and Santa Fe National Forest. However, there may be additional species occurring on those properties that are not listed here. Some of these studies/surveys were specifically designed to identify mammal species within a particular study area while other studies were designed to collect data of different sorts (i.e., vegetation surveys, bird surveys, etc.). Most species listed here were identified by ESH-20 Biology Team members and other LANL environmental teams; however, some groups of animals (i.e., bats) were identified by personnel or organizations contracted by ESH-20. Once a draft list of species was developed using these studies/surveys, it was checked against the Biological Information System of New Mexico (BISON-M) developed by the New Mexico Department of Game and Fish. The BISON-M database contains detailed information about all wildlife species that have been identified in New Mexico, by county, and have been described in the literature. Some species on the draft list were not identified in the BISON-M database as occurring in Los Alamos County, which is made up primarily of LANL, however, this is to be expected since reports from only a few of the wildlife studies conducted at LANL have been readily available outside of the Laboratory. These reports are currently being compiled to be submitted to state natural resource agencies.

This checklist of mammal species can be used to support documents prepared by the Ecology Group at LANL and outside LANL contractors such as biological and environmental assessments, as well as environmental impact statements. This list is not intended to be a definitive list and should be used accordingly. Biological studies are a continuing activity for certain groups at the Laboratory and it is possible that new species currently not listed as occurring on LANL property will be found. Similarly, although less likely, some

species listed as occurring on LANL property may prove to be prior misidentifications and, as such, will be eliminated from the list. This list will be updated periodically as new information becomes available.

This list provides species that have been identified on or near LANL and some species that are expected to occur on or immediately adjacent to LANL based on vegetation descriptions for the area and other biological information databases. A summary description of plant communities occurring in and near LANL is given since each of these plant communities can support a differing array of wildlife species. The Laboratory is situated on the Pajarito Plateau, which is an extension of mesa tops and canyons off the east slope of the Jemez Mountains. This area is relatively unique in that it contains a large array of vegetation complexes dictated by a wide elevational range (5,000 to 10,000 ft). The Laboratory consists of a variety of plant communities that are dictated by the wide range of elevational zones. Three forested plant communities are found in the upland (nonriparian) mountainous areas and include the Rocky Mountain Subalpine Conifer Forest and Woodland, the Rocky Mountain Montane Conifer Forest, and the Great Basin Conifer Woodland (Brown 1982). There are also at least three different upland grassland communities found at the lower elevations of the region. These include the Plains Grassland, the Great Basin Shrub Grassland, and the Rocky Mountain Montane Grassland. In addition to the upland communities, there are numerous wetland (riparian) plant communities that occur in association with most of the previously mentioned uplands. In and around Los Alamos County, these wetland communities include marshlands, streams, and lakes. The Rio Grande floodplain contains the lowest elevations in or near Los Alamos County and is characterized by a Plains and Great Basin Riparian-Deciduous Forest with cottonwood and willow within its boundaries. A more complete checklist of plant species found within the plant communities of Los Alamos County and its borders are given in Foxx and Tierney (1985).

The wide range of plant communities contains an equally wide range of micro- and macrohabitats in the Los Alamos County area. This diversity of habitats results in a relatively large diversity of wildlife species, including both invertebrates and vertebrates with a variety of species interactions. Many species of small mammals (i.e., mice, woodrats, voles, squirrels, chipmunks) occur in the area, some of which are specific to certain elevational gradients. Another group of small mammals, bats, are present within the Laboratory

boundaries as well, and consist of at least 15 different species. Mule deer and elk are the most well known of the larger mammals of the region, although their populations and distributions are constantly changing. Little is known on other large and medium size mammals of the area, but based on observations and current studies, at least 12 species of carnivores are present. Among these are black bear, mountain lion, bobcat, fox, and coyote.

This list provides the common and scientific name, the order and family, the authoritative author, and the reference(s) for each species. The list is arranged alphabetically by order, family, and scientific name. The references are listed as Biology, Bogan, Bison, or Mammal. The species that are referenced by Bogan were identified during species-specific surveys conducted by the US Geological Survey Biological Research Division under a contract with ESH-20. The Bison reference refers to the BISON-M database, which contains detailed information about all wildlife species that have been identified in New Mexico, by county. Species referenced by Mammal are contained in a wildlife observation database that is maintained by ESH-20. This database contains species that were observed by either LANL employees, including those from ESH-20, or by individuals external to the Laboratory that took the time to report sightings. Only species that were observed on or directly adjacent to LANL property are included in this database. Species that are referenced by Biology were identified and, in some cases, collected during field studies conducted by members of the Biology Team of ESH-20 or by other LANL biologists/ecologists performing similar ecological field studies. A comprehensive listing of field study references can be found in Hinojosa (1997).

ORDER: Artiodactyla

FAMILY: Cervidae
COMMON: **Elk**
SCIENTIFIC: *Cervus elaphus*
AUTHORITY: Linnaeus
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Cervidae
COMMON: **Mule Deer**
SCIENTIFIC: *Odocoileus hemionus*
AUTHORITY: Rafinesque
REFERENCE(S): Bison, Mammal, and Biology

ORDER: Carnivora

FAMILY: Canidae
COMMON: **Coyote**
SCIENTIFIC: *Canis latrans*
AUTHORITY: Say
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Canidae
COMMON: **Common Gray Fox**
SCIENTIFIC: *Urocyon cinereoargenteus*
AUTHORITY: Mearns
REFERENCE(S): Bison and Biology

FAMILY: Canidae
COMMON: **Red Fox**
SCIENTIFIC: *Vulpes vulpes*
AUTHORITY: Linnaeus
REFERENCE(S): Mammal

FAMILY: Felidae
COMMON: **Mountain Lion**
SCIENTIFIC: *Felis concolor*
AUTHORITY: Linnaeus
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Felidae
COMMON: **Bobcat**
SCIENTIFIC: *Lynx rufus*
AUTHORITY: Schreber
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Mustelidae
COMMON: **Striped Skunk**
SCIENTIFIC: *Mephitis mephitis*
AUTHORITY: Schreber
REFERENCE(S): Biology

FAMILY: Mustelidae

COMMON: **Ermine Weasel**
SCIENTIFIC: *Mustela erminea*
AUTHORITY: Bangs
REFERENCE(S): Bison and Mammal

FAMILY: Mustelidae

COMMON: **Long-tailed Weasel**
SCIENTIFIC: *Mustela frenata*
AUTHORITY: Lichtenstein
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Mustelidae

COMMON: **American Badger**
SCIENTIFIC: *Taxidea taxus*
AUTHORITY: Schreber
REFERENCE(S): Mammal and Bison

FAMILY: Procyonidae

COMMON: **Ringtail**
SCIENTIFIC: *Bassariscus astutus*
AUTHORITY: Lichtenstein, 1830
REFERENCE(S): Mammal and Biology

FAMILY: Procyonidae

COMMON: **Common Raccoon**
SCIENTIFIC: *Procyon lotor*
AUTHORITY: Linnaeus
REFERENCE(S): Mammal and Biology

FAMILY: Ursidae

COMMON: **Black Bear**
SCIENTIFIC: *Ursus americanus*
AUTHORITY: Baird
REFERENCE(S): Bison, Mammal, and Biology

ORDER: Chiroptera

FAMILY: Molossidae

COMMON: **Big Free-tailed Bat**
SCIENTIFIC: *Nyctinomops macrotis*
AUTHORITY: Gray
REFERENCE(S): Bison

FAMILY: Molossidae

COMMON: **Brazilian Free-tailed Bat**
SCIENTIFIC: *Tadarida brasiliensis*
AUTHORITY: Suassure
REFERENCE(S): Bogan

FAMILY: Vespertilionidae

COMMON: **Pallid Bat**
SCIENTIFIC: *Antrozous pallidus*
AUTHORITY: Le Conte
REFERENCE(S): Bison and Bogan

FAMILY: Vespertilionidae

COMMON: **Big Brown Bat**
SCIENTIFIC: *Eptesicus fuscus*
AUTHORITY: Young
REFERENCE(S): Bison

FAMILY: Vespertilionidae

COMMON: **Spotted Bat**
SCIENTIFIC: *Euderma maculatum*
AUTHORITY:
REFERENCE(S): Bogan

FAMILY: Vespertilionidae

COMMON: **Silver-haired Bat**
SCIENTIFIC: *Lasiorycteris noctivagans*
AUTHORITY: Le Conte
REFERENCE(S): Bogan

FAMILY: Vespertilionidae

COMMON: **Hoary Bat**
SCIENTIFIC: *Lasiurus cinereus*
AUTHORITY: Palisot de Beauvois
REFERENCE(S): Bogan

FAMILY: Vespertilionidae

COMMON: **California Myotis Bat**
SCIENTIFIC: *Myotis californicus*
AUTHORITY: Audobon & Bachman
REFERENCE(S): Bogan

FAMILY: Vespertilionidae
COMMON: **Small-footed Myotis Bat**
SCIENTIFIC: *Myotis ciliolabrum*
AUTHORITY: Audobon & Bachman
REFERENCE(S): Bogan

FAMILY: Vespertilionidae
COMMON: **Long-eared Myotis Bat**
SCIENTIFIC: *Myotis evotis*
AUTHORITY: H. Allen
REFERENCE(S): Bogan

FAMILY: Vespertilionidae
COMMON: **Fringed Myotis Bat**
SCIENTIFIC: *Myotis thysanodes*
AUTHORITY: Miller
REFERENCE(S): Bogan

FAMILY: Vespertilionidae
COMMON: **Long-legged Myotis Bat**
SCIENTIFIC: *Myotis volans*
AUTHORITY: Miller
REFERENCE(S): Bison and Bogan

FAMILY: Vespertilionidae
COMMON: **Yuma Myotis Bat**
SCIENTIFIC: *Myotis yumanensis*
AUTHORITY: H. Allen
REFERENCE(S): Bogan

FAMILY: Vespertilionidae
COMMON: **Western Pipistrelle Bat**
SCIENTIFIC: *Pipistrellus hesperus*
AUTHORITY: H. Allen
REFERENCE(S): Bogan

FAMILY: Vespertilionidae
COMMON: **Townsend's Big-eared Bat**
SCIENTIFIC: *Plecotus townsendii palleescens*
AUTHORITY: Miller
REFERENCE(S): Bison

ORDER: Insectivora

FAMILY: Soricidae

COMMON: **Dusky Shrew**
SCIENTIFIC: *Sorex monticolus*
AUTHORITY: Merriam, 1890
REFERENCE(S): Bison

FAMILY: Soricidae

COMMON: **Water Shrew**
SCIENTIFIC: *Sorex palustris*
AUTHORITY: Baird
REFERENCE(S): Bison and Biology

ORDER: Lagomorpha

FAMILY: Leporidae

COMMON: **Desert Cottontail Rabbit**
SCIENTIFIC: *Sylvilagus audubonii*
AUTHORITY: Baird
REFERENCE(S): Mammal and Biology

FAMILY: Leporidae

COMMON: **Nuttall's Cottontail Rabbit**
SCIENTIFIC: *Sylvilagus nuttallii*
AUTHORITY: J.A. Allen
REFERENCE(S): Mammal

FAMILY: Ochotonidae

COMMON: **Goat Peak Pika**
SCIENTIFIC: *Ochotona princeps nigrescens*
AUTHORITY: V. Bailey
REFERENCE(S): Bison

ORDER: Perissodactyla

FAMILY: Equidae

COMMON: **Burro**
SCIENTIFIC: *Equus asinus*
AUTHORITY: Linnaeus
REFERENCE(S): Mammal

ORDER: Rodentia

FAMILY: Dipodidae

COMMON: **Meadow Jumping Mouse**
SCIENTIFIC: *Zapus hudsonius luteus*
AUTHORITY: Miller
REFERENCE(S): Biology

FAMILY: Erethizontidae

COMMON: **Common Porcupine**
SCIENTIFIC: *Erethizon dorsatum*
AUTHORITY: Linnaeus
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Geomyidae

COMMON: **Botta's Pocket Gopher**
SCIENTIFIC: *Thomomys bottae*
AUTHORITY: Eydoux & Gervais
REFERENCE(S): Bison and Biology

FAMILY: Geomyidae

COMMON: **Northern Pocket Gopher**
SCIENTIFIC: *Thomomys talpoides*
AUTHORITY: Richardson
REFERENCE(S): Bison

FAMILY: Heteromyidae
COMMON: **Silky Pocket Mouse**
SCIENTIFIC: *Perognathus flavus*
AUTHORITY: Baird
REFERENCE(S): Biology

FAMILY: Muridae
COMMON: **Southern Red-backed Vole**
SCIENTIFIC: *Clethrionomys gapperi*
AUTHORITY: Green, 1928
REFERENCE(S): Bison

FAMILY: Muridae
COMMON: **Long-tailed Vole**
SCIENTIFIC: *Microtus longicaudus*
AUTHORITY: Merriam
REFERENCE(S): Bison and Biology

FAMILY: Muridae
COMMON: **Montane Vole**
SCIENTIFIC: *Microtus montanus*
AUTHORITY: Peale
REFERENCE(S): Biology

FAMILY: Muridae
COMMON: **Meadow Vole**
SCIENTIFIC: *Microtus pennsylvanicus*
AUTHORITY: Baird
REFERENCE(S): Biology

FAMILY: Muridae
COMMON: **House Mouse**
SCIENTIFIC: *Mus musculus*
AUTHORITY: Linnaeus
REFERENCE(S): Biology

FAMILY: Muridae
COMMON: **White-throated Wood Rat**
SCIENTIFIC: *Neotoma albigula*
AUTHORITY: Hartley
REFERENCE(S): Bison and Biology

FAMILY: Muridae
COMMON: **Bushy-tailed Wood Rat**
SCIENTIFIC: *Neotoma cinerea*
AUTHORITY: Ord in Guthrie
REFERENCE(S): Bison

FAMILY: Muridae

COMMON: Mexican Wood Rat
SCIENTIFIC: *Neotoma mexicana*
AUTHORITY: Baird
REFERENCE(S): Bison and Biology

FAMILY: Muridae

COMMON: Brush Mouse
SCIENTIFIC: *Peromyscus boylii*
AUTHORITY: J.A. Allen
REFERENCE(S): Bison and Biology

FAMILY: Muridae

COMMON: White-footed Mouse
SCIENTIFIC: *Peromyscus leucopus*
AUTHORITY: Rafinesque
REFERENCE(S): Biology

FAMILY: Muridae

COMMON: Deer Mouse
SCIENTIFIC: *Peromyscus maniculatus*
AUTHORITY: Baird
REFERENCE(S): Bison and Biology

FAMILY: Muridae

COMMON: Northern Rock Mouse
SCIENTIFIC: *Peromyscus nastutus*
AUTHORITY: J.A. Allen
REFERENCE(S): Bison

FAMILY: Muridae

COMMON: Pinyon Mouse
SCIENTIFIC: *Peromyscus truei*
AUTHORITY: Shufeldt
REFERENCE(S): Bison and Biology

FAMILY: Muridae

COMMON: Western Harvest Mouse
SCIENTIFIC: *Reithrodontomys megalotis*
AUTHORITY: Baird
REFERENCE(S): Bison and Biology

FAMILY: Sciuridae

COMMON: Gunnison's Prairie Dog
SCIENTIFIC: *Cynomys gunnisonni*
AUTHORITY: Baird
REFERENCE(S): Mammal

FAMILY: Sciuridae

COMMON: Abert's Squirrel
SCIENTIFIC: *Sciurus aberti*
AUTHORITY: Woodhouse
REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Sciuridae

COMMON: Golden-mantled Ground Squirrel
SCIENTIFIC: *Spermophilus lateralis*
AUTHORITY: Say
REFERENCE(S): Bison and Mammal

FAMILY: Sciuridae

COMMON: Spotted Ground Squirrel
SCIENTIFIC: *Spermophilus spilosoma*
AUTHORITY: Bennett
REFERENCE(S): Mammal

FAMILY: Sciuridae

COMMON: Rock Squirrel
SCIENTIFIC: *Spermophilus variegatus*
AUTHORITY: Erxleben
REFERENCE(S): Mammal and Biology

FAMILY: Sciuridae

COMMON: Least Chipmunk
SCIENTIFIC: *Tamias minimus*
AUTHORITY: Bachman
REFERENCE(S): Bison

FAMILY: Sciuridae

COMMON: Colorado Chipmunk
SCIENTIFIC: *Tamias quadrivittatus*
AUTHORITY: Say
REFERENCE(S): Bison and Biology

FAMILY: Sciuridae

COMMON: Red Squirrel
SCIENTIFIC: *Tamiasciurus hudsonicus*
AUTHORITY: Erxleben
REFERENCE(S): Bison and Mammal

References

Brown 1982: D. E. Brown, "Biotic Communities of the American Southwest, United States and Mexico," in:

Desert Plants (Boyce Thompson Arboretum, AZ).

Foxx and Tierney 1985: T. S. Foxx and G. D. Tierney, "Status of the Flora of the Los Alamos National Environmental Research Park—Checklist of Vascular Plants of the Pajarito Plateau and Jemez Mountains," Los Alamos National Laboratory report LA-8050-NERP, Vol. III.

Hinojosa 1997: H. A. Hinojosa, "A Checklist of Plant and Animal Species at Los Alamos National Laboratory and Surrounding Areas," Los Alamos National Laboratory report LA-UR-97-4501.