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

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

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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 (ie., 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. Similarily, 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).

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Section 1

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ORDER: Artiodactyla

FAMILY: Cervidae FAMILY: Cervidae

COMMON: Elk COMMON: Mule Deer

SCIENTIFIC: Cervus elaphus SCIENTIFIC: Odocoileus hemionus

AUTHORITY: Linnaeus AUTHORITY: Rafinesque

REFERENCE(S): Bison, Mammal, and Biology REFERENCE(S): Bison, Mammal, and Biology

ORDER: Carnivora

FAMILY: Canidae FAMILY: Canidae

COMMON: Coyote COMMON: Common Gray Fox

SCIENTIFIC: Canis latrans SCIENTIFIC: Urocyon cinereoargenteus

AUTHORITY: Say AUTHORITY: Mearns

REFERENCE(S): Bison, Mammal, and Biology REFERENCE(S): Bison and Biology

FAMILY: Canidae FAMILY: Felidae

COMMON: Red Fox COMMON: Mountain Lion
SCIENTIFIC: Vulpes vulpes SCIENTIFIC: Felis concolor

AUTHORITY: Linnaeus AUTHORITY: Linnaeus

REFERENCE(S): Mammal REFERENCE(S): Bison, Mammal, and Biology

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FAMILY: Felidae FAMILY: Mustelidae

COMMON: Bobcat COMMON: Striped Skunk

SCIENTIFIC: Lynx rufus SCIENTIFIC: Mephitis mephitis

AUTHORITY: Schreber AUTHORITY: Schreber REFERENCE(S): Bison, Mammal, and Biology REFERENCE(S): Biology

FAMILY: Mustelidae FAMILY: Mustelidae

COMMON: Ermine Weasel COMMON: Long-tailed Weasel

SCIENTIFIC: Mustela erminea SCIENTIFIC: Mustela frenata

AUTHORITY: Bangs AUTHORITY: Lichtenstein

REFERENCE(S): Bison and Mammal REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Mustelidae FAMILY: Mustelidae

COMMON: Black-footed Ferret COMMON: American Badger

SCIENTIFIC: Mustela nigripes SCIENTIFIC: Taxidea taxus

AUTHORITY: Audubon & Bachman AUTHORITY: Schreber

REFERENCE(S): Bison REFERENCE(S): Mammal and Bison

FAMILY: Procyonidae FAMILY: Procyonidae

COMMON: Ringtail COMMON: Common Racoon

SCIENTIFIC: Bassariscus astutus SCIENTIFIC: Procyon lotor
AUTHORITY: Lichtenstein, 1830 AUTHORITY: Linnaeus

REFERENCE(S): Mammal and Biology 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 FAMILY: Molossidae

COMMON: Big Free-tailed Bat COMMON: Brazilian Free-tailed Bat

SCIENTIFIC: Nyctinomops macrotis SCIENTIFIC: Tadarida brasiliensis

AUTHORITY: Gray AUTHORITY: Suassure REFERENCE(S): Bison REFERENCE(S): Bogan

FAMILY: Vespertilionidae FAMILY: Vespertilionidae

COMMON: Pallid Bat COMMON: Big Brown Bat

SCIENTIFIC: Antrozous pallidus SCIENTIFIC: Eptesicus fuscus

AUTHORITY: Le Conte AUTHORITY: Young

REFERENCE(S): Bison and Bogan REFERENCE(S): Bison

FAMILY: Vespertilionidae FAMILY: Vespertilionidae

COMMON: Spotted Bat COMMON: Silver-haired Bat

SCIENTIFIC: Euderma maculatum SCIENTIFIC: Lasionycteris noctivagans

AUTHORITY: Le Conte

REFERENCE(S): Bogan REFERENCE(S): Bogan

FAMILY: Vespertilionidae FAMILY: Vespertilionidae

COMMON: Hoary Bat COMMON: California Myotis Bat

SCIENTIFIC: Lasiurus cinereus SCIENTIFIC: Myotis californicus

AUTHORITY: Palisot de Beauvois AUTHORITY: Audobon & Bachman

REFERENCE(S): Bogan REFERENCE(S): Bogan

FAMILY: Vespertilionidae FAMILY: Vespertilionidae

COMMON: Small-footed Myotis Bat COMMON: Long-eared Myotis Bat

SCIENTIFIC: Myotis ciliolabrum SCIENTIFIC: Myotis evotis

AUTHORITY: Audobon & Bachman AUTHORITY: H. Allen

REFERENCE(S): Bogan REFERENCE(S): Bogan

FAMILY: Vespertilionidae FAMILY: Vespertilionidae

COMMON: Fringed Myotis Bat COMMON: Long-legged Myotis Bat

SCIENTIFIC: Myotis thysanodes SCIENTIFIC: Myotis volans

AUTHORITY: Miller AUTHORITY: Miller

REFERENCE(S): Bison and Bogan

FAMILY: Vespertilionidae FAMILY: Vespertilionidae

COMMON: Yuma Myotis Bat COMMON: Western Pipistrelle Bat

SCIENTIFIC: Myotis yumanensis SCIENTIFIC: Pipistrellus hesperus

AUTHORITY: H. Allen

REFERENCE(S): Bogan

REFERENCE(S): Bogan

FAMILY: Vespertilionidae

COMMON: Townsend's Big-eared Bat

SCIENTIFIC: Plecotus townsendii pallescens

AUTHORITY: Miller
REFERENCE(S): Bison

ORDER: Insectivora

FAMILY: Soricidae FAMILY: Soricidae

COMMON: **Dusky Shrew** COMMON: **Water Shrew** SCIENTIFIC: Sorex monticolus SCIENTIFIC: Sorex palustris

AUTHORITY: Merriam, 1890 AUTHORITY: Baird

REFERENCE(S): Bison REFERENCE(S): Bison and Biology

ORDER: Lagomorpha

FAMILY: Leporidae FAMILY: Leporidae

COMMON: Desert Cottontail Rabbit COMMON: Nuttall's Cottontail Rabbit

SCIENTIFIC: Sylvilagus audubonii SCIENTIFIC: Sylivilagus nuttallii

AUTHORITY: Baird AUTHORITY: J.A. Allen REFERENCE(S): Mammal and Biology 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 FAMILY: Erethizontidae

COMMON: Meadow Jumping Mouse COMMON: Common Porcupine
SCIENTIFIC: Zapus hudsonius luteus SCIENTIFIC: Erethizon dorsatum

AUTHORITY: Miller AUTHORITY: Linnaeus

REFERENCE(S): Biology REFERENCE(S): Bison, Mammal, and Biology

FAMILY: Geomyidae FAMILY: Geomyidae

COMMON: Botta's Pocket Gopher COMMON: Northern Pocket Gopher

SCIENTIFIC: Thomomys bottae SCIENTIFIC: Thomomys talpoides

AUTHORITY: Eydoux & Gervais AUTHORITY: Richardson

REFERENCE(S): Bison and Biology REFERENCE(S): Bison

FAMILY: Heteromyidae FAMILY: Muridae

COMMON: Silky Pocket Mouse COMMON: Southern Red-backed Vole

SCIENTIFIC: Perognathus flavus SCIENTIFIC: Clethrionomys gapperi

AUTHORITY: Baird AUTHORITY: Green, 1928 REFERENCE(S): Biology REFERENCE(S): Bison

FAMILY: Muridae FAMILY: Muridae

COMMON: Long-tailed Vole COMMON: Montane Vole

SCIENTIFIC: Microtus longicaudus SCIENTIFIC: Microtus montanus

AUTHORITY: Merrian AUTHORITY: Peale REFERENCE(S): Bison and Biology REFERENCE(S): Biology

FAMILY: Muridae FAMILY: Muridae

COMMON: Meadow Vole COMMON: House Mouse

SCIENTIFIC: Microtus pennsylvanicus SCIENTIFIC: Mus musculus

AUTHORITY: Baird AUTHORITY: Linnaeus REFERENCE(S): Biology REFERENCE(S): Biology

FAMILY: Muridae FAMILY: Muridae

COMMON: White-throated Wood Rat COMMON: Bushy-tailed Wood Rat

SCIENTIFIC: Neotoma albigula SCIENTIFIC: Neotoma cinerea

AUTHORITY: Hartley AUTHORITY: Ord in Guthrie

REFERENCE(S): Bison and Biology REFERENCE(S): Bison

FAMILY: Muridae FAMILY: Muridae

COMMON: Mexican Wood Rat COMMON: Brush Mouse

SCIENTIFIC: Neotoma mexicana SCIENTIFIC: Peromycus boylii
AUTHORITY: Baird AUTHORITY: J.A. Allen

REFERENCE(S): Bison and Biology REFERENCE(S): Bison and Biology

FAMILY: Muridae FAMILY: Muridae

COMMON: White-footed Mouse COMMON: Deer Mouse

SCIENTIFIC: Peromycus leucopus SCIENTIFIC: Peromycus maniculatus

AUTHORITY: Rafinesque AUTHORITY: Baird

REFERENCE(S): Biology REFERENCE(S): Bison and Biology

FAMILY: Muridae FAMILY: Muridae

COMMON: Northern Rock Mouse COMMON: Pinyon Mouse SCIENTIFIC: Peromycus nastutus SCIENTIFIC: Peromycus truei

AUTHORITY: J.A. Allen AUTHORITY: Shufeldt

REFERENCE(S): Bison and Biology

FAMILY: Muridae FAMILY: Sciuridae

COMMON: Western Harvest Mouse COMMON: Gunnison's Prarie Dog

SCIENTIFIC: Reithrodontomys megalotis SCIENTIFIC: Cynomys gunnisonni

AUTHORITY: Baird AUTHORITY: Baird

REFERENCE(S): Bison and Biology REFERENCE(S): Mammal

FAMILY: Sciuridae FAMILY: Sciuridae

COMMON: Abert's Squirrel COMMON: Golden-mantled Ground

SCIENTIFIC: Sciurus aberti Squirrel

AUTHORITY: Woodhouse SCIENTIFIC: Spermophilus lateralis

REFERENCE(S): Bison, Mammal, and Biology AUTHORITY: Say

REFERENCE(S): Bison and Mammal

FAMILY: Sciuridae FAMILY: Sciuridae

COMMON: Spotted Ground Squirrel COMMON: Rock Squirrel

SCIENTIFIC: Spermophilus spilosoma SCIENTIFIC: Spermophilus variegatus

AUTHORITY: Bennett AUTHORITY: Erxleben

REFERENCE(S): Mammal and Biology

FAMILY: Sciuridae FAMILY: Sciuridae

COMMON: Least Chipmunk COMMON: Colorado Chipmunk

SCIENTIFIC: Tamias minimus SCIENTIFIC: Tamias quadrivittatus

AUTHORITY: Bachman AUTHORITY: Say

REFERENCE(S): Bison REFERENCE(S): Bison and Biology

FAMILY: Sciuridae

COMMON: Red Squirrel

SCIENTIFIC: Tamiasciurus hudsonicus

AUTHORITY: Erxleben

REFERENCE(S): Bison and Mammal

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