

CONTENTS

ABSTRACT.....	1
1 INTRODUCTION.....	1
2 ENVIRONMENTAL SETTING.....	2
2.1 GENERAL SETTING.....	2
2.2 FLOODPLAINS AND WETLANDS.....	5
2.3 PLANTS.....	5
2.3.1 Vascular Plants.....	5
2.3.2 Non-Vascular Plants.....	6
2.4 WILDLIFE.....	6
2.4.1 Insects.....	6
2.4.2 Aquatic Macroinvertebrates.....	6
2.4.3 Reptiles and Amphibians.....	7
2.4.4 Birds.....	7
2.4.5 Fish.....	7
2.4.6 Mammals.....	7
2.5 THREATENED, ENDANGERED, AND SENSITIVE SPECIES.....	9
2.5.1 Plants.....	9
2.5.2 Wildlife.....	9
3.0 DATA PRESENTATION.....	9
PLANTS AT LANL AND SURROUNDING AREAS.....	10
FUNGI AT LANL AND SURROUNDING AREAS.....	22
BIRDS AT LANL AND SURROUNDING AREAS.....	28
MAMMALS AT LANL AND SURROUNDING AREAS.....	32
REPTILES AND AMPHIBIANS AT LANL AND SURROUNDING AREAS.....	34
ANT SPECIES LIST FROM MACKAY ET AL. (1986).....	36
TERRESTRIAL INSECTS AT LANL AND SURROUNDING AREAS.....	38
NON-INSECT TERRESTRIAL ARTHROPODS.....	41
AQUATIC INVERTEBRATES AT LANL AND ADJACENT AREAS.....	42
REFERENCES.....	52

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**A CHECKLIST OF PLANT AND ANIMAL SPECIES
AT LOS ALAMOS NATIONAL LABORATORY
AND SURROUNDING AREAS**

Compiled by Hector Hinojosa

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ABSTRACT

Past and current members of the Biology Team (BT) of the Ecology Group have completed biological assessments (BAs) for all of the land that comprises Los Alamos National Laboratory (LANL). Within these assessments are lists of plant and animal species with the potential to exist on LANL lands and the surrounding areas. To compile these lists, BT members examined earlier published and unpublished reports, surveys, and data bases that pertained to the biota of this area or to areas that are similar. The species lists that are contained herein are compilations of the lists from these BAs, other lists that were a part of the initial research for the performance of these BAs, and more recent surveys.

1 INTRODUCTION

As part of Los Alamos National Laboratory's (LANL's) Ecology Program activities, the Biology Team (BT) of the Ecology Group (ESH-20) at LANL has completed a series of biological assessments for all of the areas within LANL boundaries. The purpose of each assessment was threefold: to ascertain before site characterization or construction if there are any plant or wildlife species or critical habitats that are protected under the Endangered Species Act; to identify any sensitive areas such as floodplains or wetlands and their general characteristics; and to provide baseline data about plant and animal species to help define the habitat types of the area. The compilation of baseline data pertaining to existing species involved the review of earlier published and unpublished reports, surveys, and data bases, resulting in quite an extensive listing of plant and animal species with the potential to exist in this area. This checklist brings together all of the lists from all of the biological assessments (all of which have been included in the References) and other miscellaneous research documents into one publication.

2 ENVIRONMENTAL SETTING

2.1 General Setting

LANL is located in north-central New Mexico approximately 80 km (62 mi) by air north of Albuquerque and 32 km (22 mi) northwest of Santa Fe (Figure 1). The Laboratory is located on the Pajarito Plateau, an apron of volcanic sedimentary rocks stretching north-south for 32 to 40 km (20 to 25 mi), and east-west for 8 to 16 km (5 to 10 mi). The 2250-m (7500-ft) -high plateau slopes gently eastward toward the Rio Grande from the edge of the Jemez Mountains, a complex pile of volcanic rock along the northwest margin of the Rio Grande rift. At 1860 m (6200 ft), the plateau slopes steeply, a result of the down-cutting of the Rio Grande, which lies below the plateau at 1620 m (5400 ft).

Intermittent streams, draining adjacent mountains and tablelands, flow southeastward dissecting the plateau into a number of finger-like narrow mesas separated by deep canyons. Major canyons include Los Alamos, Sandia, Mortandad, Pajarito, Ancho, Potrillo, and Water Canyons. Chaquehui, Indio, Fence, and Cedro Canyons and Cañada del Buey all have smaller drainage areas.

Geological substrate, Bandelier Tuff, was deposited from volcanic eruptions in the Jemez Mountains about 1.1 to 1.4 million years ago (ESG 1988). The tuff overlaps other volcanics that are underlain by the conglomerate of the Puye Formation (ESG 1988). This conglomerate intermixes with Chino Mesa basalts along the Rio Grande.

The area is characterized by a semiarid, temperate mountain climate with summer temperatures typically ranging from a low of 10° C to a high of 27° C (50° F to 80° F) during a 24-h period (Bowen 1990). Winter temperatures generally range from -12° C to about 10° C (10° F to 50° F) during a 24-h period. The annual precipitation in the vicinity ranges from 33 to 46 cm (13 to 18 in.), with much of it occurring during summer rain showers in July and August.

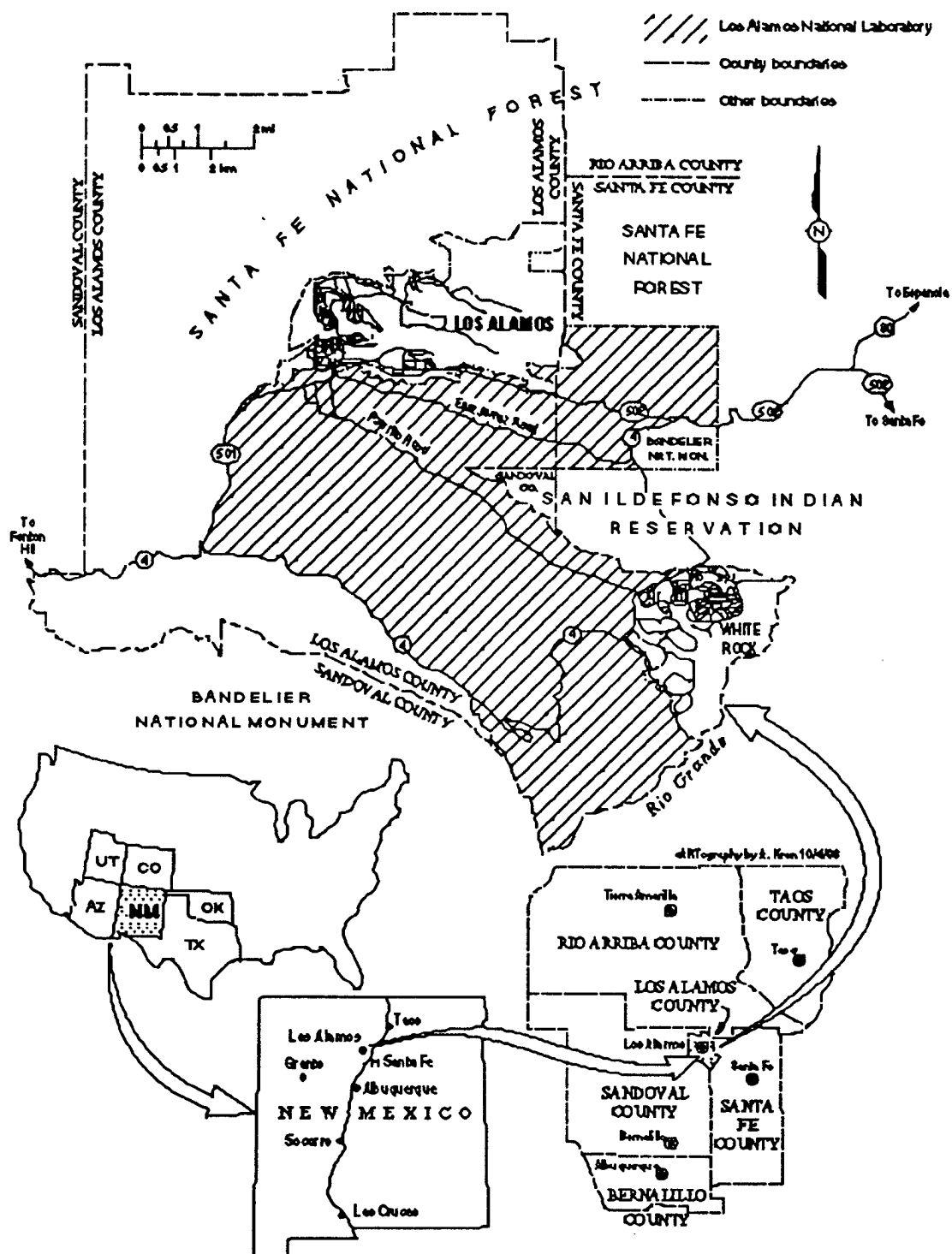


Figure 1. Location of Los Alamos National Laboratory.

The plant cover types on the Pajarito Plateau and surrounding Jemez Mountains are diverse. Five major plant cover types have been defined within the boundaries of LANL: juniper savannah, piñon-juniper woodlands, ponderosa pine forests, mixed conifer forests, and grasslands. Along ephemeral and perennial streams, riparian zones are common.

The juniper savannah is found predominantly in White Rock Canyon to an elevation of approximately 1829 m (6000 ft). The piñon-juniper woodlands range from elevations of approximately 1830 to 2129 m (6000 to 6988 ft). Blue grama (*Bouteloua gracilis*), galleta (*Hillaria jamesii*), and little bluestem (*Schizachyrium scoparius*) are common understory species.

Stands of ponderosa pine (*Pinus ponderosa*) make up the upper one third of the plateau, ranging from an elevation of approximately 2121 to 2438 m (6960 to 8000 ft). At lower elevations these trees are found on the north-facing canyon walls, along streams, and within mixed conifer forests in the upper reaches of the canyons. The dominant grass species include mountain muhly (*Muhlenbergia montana*), pine dropseed (*Blephaneuron tricholepsis*), and little bluestem.

At various elevations atop the Pajarito Plateau are grasslands created by turn-of-the-century agriculture and other human-caused disturbance. Other grasslands were created by the La Mesa fire of 1977 in LANL's Technical Area 49.

On the plateau, Frijoles, Los Alamos, and Guaje Canyons have natural perennial water flow. There is some baseflow in streams in Pajarito and Ancho Canyons as a result of springs.

Springs in the upper and lower part of Pajarito Canyon provide perennial flow in most parts of the canyon throughout the year. Springs and seeps that emerge from the walls of Ancho and Chaquehui Canyons in White Rock Canyon feed short stretches of perennial streams. Generally, most canyon streams flow only during spring snow melt and heavy rainstorms.

2.2 Floodplains and Wetlands

The Environmental Protection Agency required a determination of all wetlands in the watershed of lands owned by the Department of Energy for the Resource Conservation and Recovery Act and Hazardous and Solid Waste Act Part B Permit. Consequently, the US Fish and Wildlife Service (USFWS) undertook a project in 1990 to map and characterize those wetlands in accordance with the National Wetlands Inventory (NWI). More recently, ESH-20 has mapped additional wetlands areas—both human-created and natural.

The NWI includes all wetlands and deep-water habitats throughout the US, including rivers, lakes, streams, marshes, bogs, and ponds. In cooperation with other federal and state agencies, private organizations, and individuals, the USFWS developed a wetland definition for conducting an inventory of the Nation's wetlands. This definition was published in the "Classification of Wetlands and Deep-Water Habitats of the United States" (Cowardin et al. 1979). In the NWI, wetlands are defined as "lands transitional between aquatic and terrestrial systems where the water table is usually at or near the surface, or the land is covered by shallow water." In addition, the definition requires that the land support predominantly hydrophytes, and the substrate is drained hydric soils (Dunke et al. 1989).

2.3 Plants

2.3.1 Vascular Plants

Several surveys have been conducted since 1974 at LANL. Foxx and Tierney (1980) conducted comprehensive plant surveys of LANL in 1978. The results, published as "Status of the Flora of the Los Alamos National Environmental Research Park, Vol. I," recorded locations and habitats. Surveys were done on Material Disposal Area E as part of a greater study to determine the floristic composition of old waste sites (Tierney and Foxx 1982). "Status of the Flora of the Los Alamos National Environmental Research Park, Vol. II," (Foxx and Tierney 1984) reports field work done in 1979. This data and

data from current surveys are incorporated into an updated checklist by Foxx et al. (1996), and the development of a land cover map for this area is underway (Koch et al. 1996).

Guthrie (1981) and Moeur and Guthrie (1981) surveyed Frijoles Mesa after the La Mesa fire to determine habitat types for wildlife studies. Potter and Foxx (1979) studied revegetation after the La Mesa fire as part of a recovery and mortality investigation of ponderosa pine.

2.3.2 Non-Vascular Plants

Jarmie and Rogers (1996, 1997) undertook a survey for macromycetes at LANL, Bandelier National Monument, and Los Alamos County from 1991 to 1995 and cataloged 1048 specimens representing 175 species.

2.4 Wildlife

A limited number of studies since 1986 characterize the fauna of the area and are discussed below. Foxx et al. (1995) established ecological baseline data in a two-year project (1993 and 1994) for two canyon systems, Los Alamos and Guaje Canyons, to begin to understand what effect, if any, LANL activities have on the local ecology.

2.4.1 Insects

MacKay et al. (1986) collected ants during the summer of 1986 in Los Alamos County and Bandelier National Monument. Since the summer of 1991, the BT of ESH-20 has used pit traps to collect terrestrial insects in lower Ancho Canyon and other areas in and around LANL.

2.4.2 Aquatic Macroinvertebrates

Extensive field surveys have been conducted for macroinvertebrates throughout LANL and the surrounding areas. Cross (1995) reported on water quality and surveyed for aquatic macroinvertebrates in Sandia Canyon in 1994 and again in 1995 (Cross and Nottleman 1996).

2.4.3 *Reptiles and Amphibians*

In 1978, Charles Bogart, consultant to the Laboratory, surveyed reptiles and amphibians within Laboratory boundaries (Bogart 1978). Bogart collected specimens of collared lizard (*Crotaphytus collaris*), eastern fence lizard (*Sceloporus undulatus*), and checkered whiptail (*Cnemidophorus* spp.) in the eastern portions of the Laboratory. Bowker and Ferenbaugh (1982) collected checkered whiptails, collared lizards, and tree lizards (*Urosaurus ornatus*).

Studies have been conducted by the BT for the past five years in Pajarito and Sandia Canyons.

2.4.4 *Birds*

The Pajarito Ornithological Society conducted a five-year study on the breeding birds of Los Alamos County (Travis 1992).

In 1977, the La Mesa fire decimated portions of LANL and Bandelier. Moeur and Guthrie (1981) studied how wildfire and the clearing of fire-killed trees affect birds. Wauer and Johnson (1981) published the results of a bird study that was begun before the La Mesa fire and then continued after the fire to assess the fire's effects on bird populations.

In addition to resident and breeding birds, the Pajarito Plateau is along the flight path and wintering areas for a number of species.

2.4.5 *Fish*

No definitive fish surveys have been conducted in and around LANL because there are no permanent water sources or perennial streams other than Rito de los Frijoles in Frijoles Canyon, the Los Alamos Reservoir in Los Alamos Canyon, and the Guaje Reservoir in Guaje Canyon.

2.4.6 *Mammals*

Guthrie (1975) conducted a small mammal study in Alamo Canyon and in Frijoles Canyon in Bandelier National Monument. The purpose of the study was to determine the potential impact of the maximum floodpool level of Cochiti Reservoir on the fauna of the

lower canyons. The capture-release studies were conducted in three habitats: river floodplain, riparian woodland, and juniper woodland below 1680 m (5512 ft). Guthrie did not census the medium or large mammals but recorded observations on nine species.

From 1975 through 1980, Guthrie and Large (1980) mist-netted bats at various elevations (i.e., 1910 m [6300 ft] in Capulin Canyon and at 1650 m [5143 ft] along the Rio Grande) at ponds, along streams, the Rio Grande, and sewage lagoons. They identified six foraging species of bats. 3-D Environmental Services mist-netted in the summer of 1992. The Midcontinent Ecological Science Center (MESC) has mist-netted bats since 1995. Over 1500 bats representing 15 species, including a couple of specimens of the state listed species, spotted bat (*Euderma maculata*), have been captured over this three-year timeframe.

Guthrie and Large (1980) published a distribution and status list of mammals in Bandelier National Monument.

A mammal study begun in 1977 before the La Mesa fire and continued after the fire assesses how wildfire and the clearing of fire-killed trees affects small mammals (Guthrie 1981, Mouer and Guthrie 1981). Guthrie reported increases in deer mouse (*Peromyscus maniculatus*), montane vole (*Microtus montanus*), long-tailed vole (*M. longicaudus*), least chipmunk (*Eutamias minimus*), and Colorado chipmunk (*E. quadrivittatus*). Moeur and Guthrie (1981) found no significant differences in small mammal populations between LANL and Bandelier sites.

More recent studies include a biological information document (Biggs 1995), which summarizes more recent biological studies, and reports about radionuclide contaminants in relation to small mammals (Biggs et al. 1996) and medium-sized mammals (Hansen et al. 1997) at LANL.

2.5 Threatened, Endangered, and Sensitive Species

2.5.1 Plants

Foxx and Tierney (1980, 1984) surveyed for sensitive plant species.

Lochner, Inc., surveyed portions of White Rock Canyon for the Los Alamos Transportation Corridor in cooperation with the New Mexico State Highway and Transportation Department. These studies were primarily confined to the east side of the Rio Grande. They found no sensitive plant species.

2.5.2 Wildlife

Several threatened and endangered species studies have been conducted in and around LANL boundaries.

Guthrie and Large (1980) included bat distribution and status in their study. They did not net any spotted bats in Bandelier. This species had been collected only in the Jemez Mountains until 1997 when MESC identified roosting locations on Laboratory lands.

Eagle Ecological Services and Johnson (1988) assessed portions of the Pajarito Plateau for bald eagle (*Haliaeetus leucocephalus*) and peregrine falcon (*Falco peregrinus*) habitat. Other studies (Keller et al. 1996) have been conducted for Mexican spotted owl (*Strix occidentalis lucida*) and southwestern willow flycatcher (*Empidonax trailii extimus*) as well as other species of concern listed by the state of New Mexico.

3.0 Data Presentation

What follows are the tables that have been compiled from earlier published and unpublished reports, surveys, and data bases that pertained to the biota of this area or to areas that are similar. The plant species are all included in one table while the various animal species are divided by type.

Plants at LANL and Surrounding Areas

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
ACERACEAE	<i>Acer glabrum neomexicanum</i>	ACGL	New Mexico maple
	<i>Acer negundo</i>	ACNE	Boxelder maple
AMARANTHACEAE	<i>Amaranthus retroflexus</i>	AMRE	Green amaranth, Pigweed
ANACARDIACEAE	<i>Rhus radicans</i>	RHRA	Poison ivy
	<i>Rhus trilobata</i>	RHTR	Squaw bush, Skunk bush
APOCYNACEAE	<i>Apocynum androsaemifolium</i>	APAN	Spreading dogbane
ASCLEPIADACEAE	<i>Asclepias asperula</i>	ASAS	Antelope horns, Immortal
	<i>Asclepias speciosa</i>	ASSP	Showy milkweed
	<i>Asclepias subverticillata</i>	ASSU	Poison milkweed
	<i>Asclepias tuberosa</i>	ASTU	Butterflyweed
BERBERIDACEAE	<i>Berberis fendleri</i>	BEFE	Fendler barberry
	<i>Berberis repens</i>	BERE	Creeping barberry
BETULACEAE	<i>Alnus tenuifolia</i>	ALTE	Thinleaf alder
	<i>Betula occidentalis</i>	BEOC	Water birch
BORAGINACEAE	<i>Cryptantha fendleri</i>	CRFE	Fendler cryptantha
	<i>Cryptantha jamesii</i>	CRJA	James hiddenflower
	<i>Hackelia hirsuta</i>	HAHI	Beggarlice
	<i>Lappula echinata</i>	LAEC	Stickseed
	<i>Lappula redowskii</i>	LARE	Stickseed
	<i>Lappula texana</i>	LATE	Stickseed
	<i>Lithospermum incisum</i>	LIIN	Fringed puccoon
	<i>Lithospermum multiflorum</i>	LIMU	Puccoon, Many-flowered stoneseed
	<i>Mertensia lanceolata fendleri</i>	MELA	Bluebells
	<i>Mertensia lanceolata secundorum</i>	MELA	Bluebells
CACTACEAE	<i>Coryphantha vivipara</i>	COVI	Pincushion cactus
	<i>Echinocereus fendleri</i>	ECFE	Fendler hedgehog cactus
	<i>Echinocereus triglochidiatus</i>	ECTR	Hedgehog cactus
	<i>Echinocereus viridiflora</i>	ECVI	Strawberry cactus
	<i>Opuntia</i> sp.	OPUX	Prickly pear cactus
	<i>Opuntia imbricata</i>	OPIM	Walkingstick cactus
	<i>Opuntia phaeacantha</i>	OPPH	Prickly pear cactus
	<i>Opuntia polyacantha</i>	OPPO	Plains prickly pear cactus, Starvation cactus
CAMPANULACEAE	<i>Campanula rotundiflora</i>	CARO	Harebell

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
CAMPANULACEAE	<i>Lobelia cardinales</i>	LOCA	Cardinal lobelia
CAPPARIDACEAE	<i>Polanisia trachysperma</i>	POTR	Clammyweed
CAPRIFOLOACEAE	<i>Symbucus microbotrys</i>	SYMI	Red elderberry
	<i>Symphoricarpos</i> sp.	SYMX	Snowberry
CARYOPHYLLACEAE	<i>Arenaria fendleri</i>	ARFE	Fendler sandwort
	<i>Cerastium</i> sp.	CERX	Chickweed
	<i>Stellaria jamesiana</i>	STJA	Jame's starwort
CELASTRACEAE	<i>Pachystima myrsinites</i>	PAMY	Myrtle boxleaf
CHENOPODACEAE	<i>Atriplex canescens</i>	ATCA	Fourwing saltbush
	<i>Chenopodium album</i>	CHAL	Lamb's quarters
	<i>Chenopodium fremonti</i>	CHFR	Fremont goosefoot
	<i>Chenopodium gigantospermum</i>	CHGI	Chenopodium
	<i>Chenopodium graveolens</i>	CHGR	Chenopodium
	<i>Chenopodium leptophyllum</i>	CHLE	Goosefoot
	<i>Kochia scoparia</i>	KOSC	Summer cypress
	<i>Salsola kali</i>	SAKA	Russian thistle
COMPOSITAE	<i>Achillea lanulosa</i>	ACLA	Yarrow
	<i>Ambrosia</i> sp.	AMOX	Ragweed
	<i>Ambrosia artemisiifolia</i>	AMAR	Common ragweed
	<i>Ambrosia confertifolia</i>	AMCO	Ragweed
	<i>Ambrosia coronopifolia</i>	AMCO	Ragweed
	<i>Anaphalis margaritacea</i>	ANMA	Pearly everlasting
	<i>Antennaria parvifolia</i>	ANPA	Pussytoes
	<i>Artemisia bigelovii</i>	ARBI	Bigelow sagebrush
	<i>Artemisia carruthii</i>	ARCA	Wormwood
	<i>Artemisia cana</i>	ARCA	Silver sagebrush
	<i>Artemisia dracunculoides</i>	ARDR	False tarragon
	<i>Artemisia filifolia</i>	ARFI	Sand sagebrush
	<i>Artemisia frigida</i>	ARFR	Estafiata
	<i>Artemisia ludoviciana</i>	ARLU	Wormwood
	<i>Artemisia tridentata</i>	ARTR	Big sagebrush
	<i>Aster</i> sp.	ASOX	Aster

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
COMPOSITAE	<i>Aster bigelovii</i>	ASBI	Bigelow aster
	<i>Aster hesperius</i>	ASHE	Marsh aster
	<i>Aster laevis</i>	ASLA	Smooth aster
	<i>Bahia dissecta</i>	BADI	Wild chrysanthemum
	<i>Berlandiera lyrata</i>	BELY	Lyre leaf
	<i>Bidens tenuisecta</i>	BITE	Sticktight
	<i>Brickellia</i> sp.	BROX	Brickelbush
	<i>Brickellia californica</i>	BRCA	California brickellia
	<i>Brickellia grandiflora</i>	BRGR	Tasseflower
	<i>Chrysopsis villosa</i>	CHVI	Hairy golden aster
	<i>Chrysopsis foliosa</i>	CHFO	Leafy golden aster
	<i>Chrysothamnus nauseosus</i>	CHNA	Chamisa, Rabbitbrush
	<i>Chrysothamnus viscidiflorus</i>	CHVI	Chamisa
	<i>Cichorium intybus</i>	CIIN	Chicory
	<i>Cirsium neomexicanum</i>	CINE	New Mexico thistle
	<i>Cirsium pallidum</i>	CIPA	Thistle
	<i>Conyza canadensis</i>	COCA	Horseweed
	<i>Cosmos parviflorus</i>	COPA	Cosmos
	<i>Erigeron canadensis</i>	ERCA	Canadian fleabane
	<i>Erigeron divergens</i>	ERDI	Fleabane daisy
	<i>Erigeron flagellaris</i>	ERFL	Spreading fleabane
	<i>Erigeron nudiflorus</i>	ERNU	Fleabane
	<i>Erigeron speciosus</i>	ERSP	Oregon fleabane
	<i>Erigeron subtrinervus</i>	ERSU	Three-nerve fleabane
	<i>Erigeron philadelphicus</i>	ERPH	Common fleabane
	<i>Eupatorium herbaceum</i>	EUHE	Desert thoroughwort
	<i>Franseria acanthicarpa</i>	FRAC	Bursage
	<i>Franseria confertifolia</i>	FRCO	Bursage
	<i>Gaillardia pulchella</i>	GAPU	Firewheel, Blanketflower
	<i>Grindelia aphanactis</i>	GRAP	Gumweed
	<i>Gutierrezia sarothrae</i>	GUSA	Snakeweed
	<i>Haplopappus spinulosus</i>	HASP	Spiny goldenweed
	<i>Helianthus annuus</i>	HEAN	Common sunflower
	<i>Helianthus petiolaris</i>	HEPE	Prairie sunflower
	<i>Hymenopappus filifolius</i>	HYFI	White ragweed, yellow cutleaf
	<i>Hymenoxys argentea</i>	HYAR	Perky Sue
	<i>Hymenoxys richardsonii</i>	HYRI	Bitterweed, Pinque

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
COMPOSITAE	<i>Iva xanthifolia</i>	IVXA	Marsh elder
	<i>Kuhnia chlorolepis</i>	KUCH	False boneset, Kuhnia
	<i>Lactuca</i> sp.	LACX	Prickly lettuce
	<i>Liatris punctata</i>	LIPU	Gayfeather
	<i>Pectis angustifolia</i>	PEAN	Fetid marigold
	<i>Pericome caudata</i>	PECA	Taperleaf
	<i>Ratibida</i> sp.	RATX	Coneflower
	<i>Ratibida columnifera</i>	RACO	Prairie coneflower
	<i>Rudbeckia hirta</i>	RUHI	Black-eyed susan
	<i>Rudbeckia laciniata</i>	RULA	Cutleaf coneflower
	<i>Pericome caudata</i>	PECA	Taperleaf
	<i>Senecio cymbalarioides</i>	SECY	Groundsel, senecio
	<i>Senecio eremophilus</i>	SEER	Groundsel, senecio
	<i>Senecio fendleri</i>	SEFE	Fendler's senecio
	<i>Senecio longilobus</i>	SELO	Longleaf senecio
	<i>Senecio mutabilis</i>	SEMU	Groundsel, senecio
	<i>Senecio</i> sp.	SENX	Groundsel, senecio
	<i>Solidago</i> sp.	SOLX	Goldenrod
	<i>Sonchus asper</i>	SOAS	Spiny-leaved sow-thistle
	<i>Stephanomeria</i> spp.	STEX	Skeletonweed
	<i>Taraxacum officinale</i>	TAOF	Common dandelion
	<i>Thelesperma trifidum</i>	THTR	Greenthread
	<i>Thelesperma megapotamicum</i>	THME	Indian tea, Navajo tea
	<i>Townsendia exscapa</i>	TOEX	Easter daisy
	<i>Townsendia incana</i>	TOIN	Townsend's aster
	<i>Tragopogon dubius</i>	TRDU	Salisfy, Goatsbeard
	<i>Verbesina encelioides</i>	VEEN	Crownbeard
	<i>Viguiera multiflora</i>	VIMU	Goldeneye
	<i>Xanthium strumarium</i>	XAST	Cocklebur
CONVOLVULACEAE	<i>Convolvulus arvensis</i>	COAR	Bindweed
	<i>Ipomonea</i> spp.	IPOX	Morning glory
	<i>Ipomonea coccinea</i>	IPCO	Star glory
CORNACEAE	<i>Cornus stolonifera</i>	COST	Red-osier dogwood
CRUCIFERAE	<i>Arabis fendleri</i>	ARFE	Fendler's rockcress
	<i>Capsella bursa pastoris</i>	CABU	Shepherd's purse
	<i>Descurainia</i> sp.	DEOX	Tansey mustard
	<i>Descurainia richardsonii</i>	DERI	Tansey mustard
	<i>Descurainia sophia</i>	DESO	Tansey mustard
	<i>Diathyrea wislizenii</i>	DIWI	Spectacle pod
	<i>Erysimum capitatum</i>	ERCA	Western wallflower
	<i>Lepidium medium</i>	LEME	Peppergrass

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
CRUCIFERAE	<i>Lesquerella fendleri</i>	LEFE	Bladderpod
	<i>Rorippa</i> sp.	RORX	Yellow cress
	<i>Rorippa nasturtium</i>	RONA	Watercress
	<i>Sisymbrium altissimum</i>	SIAL	Tumble mustard
	<i>Thelypodium wrightii</i>	THWR	Wright's thelypody
	<i>Thlaspi alpestre</i>	THAL	Mountain candytuft
CUPRESSACEAE	<i>Juniperus communis</i>	JUCO	Dwarf juniper
	<i>Juniperus monosperma</i>	JUMO	One-seed juniper
	<i>Juniperus scopulorum</i>	JUSC	Rocky Mountain juniper
CYPERACEAE	<i>Carex</i> sp.	CARX	Sedge
	<i>Carex esculentus</i>	CAES	Yellow nut sedge
	<i>Carex nebraskensis</i>	CANE	Nebraska sedge
	<i>Eleocharis macrostachya</i>	ELMA	Pale spikerush
	<i>Scripus</i> sp.	SCRX	Rush
	<i>Elaeagnus angustifolia</i>	ELAN	Russian olive
EQUISETUM	<i>Equisetum hiemele</i>	EQHI	Horsetail
	<i>Equisetum laevigatum</i>	EQLA	Smooth horsetail
ERICACEAE	<i>Arctostaphylos uva-ursi</i>	ARUV	Kinnikinnik, Bear berry
	<i>Monotropa latisquama</i>	MOLA	Pinesap
	<i>Pterospora andromedea</i>	PTAN	Pinedrops
EUPHORBIACEAE	<i>Croton texensis</i>	CRTE	Doveweed, Croton
	<i>Euphorbia</i> sp.	EUPX	Spurge
	<i>Euphorbia dentata</i>	EUDE	Wild poinsetta
	<i>Euphorbia serpylliflora</i>	EUSE	Thymeleaf spurge
FAGACEAE	<i>Quercus gambelii</i>	QUGA	Gambel oak
	<i>Quercus</i> sp.	QUEX	Hybrid oak
	<i>Quercus grisea</i>	QUGR	Gray oak
	<i>Quercus turbinella</i>	QUTU	Shrub live oak
	<i>Quercus undulata</i>	QUUN	Wavyleaf oak
FUMARIACEAE	<i>Corydalis aurea</i>	COAU	Golden smoke
GENTIANACEAE	<i>Gentiana bigelovii</i>	GEBI	Bigelow gentian
GERANIACEAE	<i>Erodium cicutarium</i>	ERCI	Cranesbill, Filaree
	<i>Geranium</i> sp.		Geranium
	<i>Geranium caespitosum</i>	GECA	James geranium
GRAMINEAE	<i>Agrostis alba</i>	AGAL	Redtop
	<i>Agrostis pallustris</i>	AGPA	Creeping bent

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
GRAMINEAE	<i>Andropogon barbinodis</i>	ANBA	Cane bluestem
	<i>Andropogon gerardii</i>	ANGE	Big bluestem
	<i>Schizachyrium scoparius</i>	ANSC	Little bluestem
	<i>Agropyron</i> sp.		Wheatgrass
	<i>Agropyron cristatum</i>	AGCR	Crested wheatgrass
	<i>Agropyron desertorum</i>	AGDE	Russian wheatgrass
	<i>Agropyron smithii</i>	AGSM	Western wheatgrass
	<i>Agropyron trachycaulum</i>	AGTR	Slender wheatgrass
	<i>Aristida adscensionis</i>	ARAD	Six-weeks three-awn
	<i>Aristida divaricata</i>	ARDI	Poverty three-awn
	<i>Aristida longiseta</i>	ARLO	Red three-awn grass
	<i>Blephaneuron tricholepsis</i>	BLTR	Pine dropseed
	<i>Bouteloua curtipendula</i>	BOCU	Side-oats grama
	<i>Bouteloua eriopoda</i>	BOER	Black grama, Hairy grama
	<i>Bouteloua gracilis</i>	BOGR	Blue grama
	<i>Bromus anomalus</i>	BRAN	Nodding brome
	<i>Bromus frondosus</i>	BRFR	Weeping brome
	<i>Bromus japonicus</i>	BRJA	Japanese brome
	<i>Bromus purgans</i>	BRPU	Canada brome
	<i>Bromus tectorum</i>	BRTE	Cheat grass, Downy chess
	<i>Bromus</i> sp.	BROX	Bromegrass
	<i>Buchloe dactyloides</i>	BUDA	Buffalo grass
	<i>Echinochloa colonum</i>	ECCO	Jungle grass
	<i>Echinochloa crus-galli</i>	ECCR	Barnyard grass
	<i>Elymus canadensis</i>	ELCA	Canada wildrye
	<i>Dactylis glomerata</i>	DAGL	Orchard grass
	<i>Festuca octoflora</i>	FEOC	Six-weeks fescue
	<i>Festuca ovina</i>	FEOV	Sheep fescue
	<i>Hilaria jamesii</i>	HIJA	Galleta
	<i>Hordeum</i> sp.	HORX	Barley grass
	<i>Hordeum jubatum</i>	HOJU	Foxtail barley
	<i>Koeleria cristata</i>	KOCR	Junegrass
	<i>Lelium perenne</i>	LEPE	Perennial rye
	<i>Lycrus phleoides</i>	LYPH	Wolftail
	<i>Muhlenbergia montana</i>	MUMO	Mountain muhly
	<i>Muhlenbergia torreyi</i>	MUTO	Ring muhly
	<i>Muhlenbergia wrightii</i>	MUWR	Spike muhly

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
GRAMINEAE	<i>Munroa squarosa</i>	MUSQ	False buffalo grass
	<i>Oryzopsis micrantha</i>	ORMI	Littleseed rice grass
	<i>Oryzopsis hymenoides</i>	ORHY	Indian rice grass
	<i>Panicum capillare</i>	PACA	Witchgrass
	<i>Phleum pratensis</i>	PHPR	Common timothy
	<i>Poa</i> sp.	POAX	Bluegrass
	<i>Poa pratensis</i>	POPR	Kentucky bluegrass
	<i>Poa interior</i>	POIN	Inland bluegrass
	<i>Poa fendleriana</i>	POFE	Muttongrass
	<i>Setaria lutescens</i>	SELU	Bristle grass
	<i>Sitanion hystrix</i>	SIHY	Bottlebrush squirreltail
	<i>Sporobolus contractus</i>	SPCO	Spike dropseed
	<i>Sporobolus cryptandrus</i>	SPCR	Sand dropseed
	<i>Stipa comata</i>	STCO	Needle-and-thread grass
	<i>Phacelia</i> spp.	PHAX	Scorpionweed
JUNCAEAE	<i>Juncus</i> sp.	JUNX	Rush
	<i>Juncus interior</i>	JUIN	Inland rush
LABIATAE	<i>Mentha arvensis</i>	MEAR	Mint
	<i>Marrubium vulgare</i>	MAVU	Horehound
	<i>Monarda menthaefolia</i>	MOME	Horsemint, Beebalm
	<i>Monarda pectinata</i>	MOPE	Ponymint
	<i>Moldavica multiflora</i>	MOMU	Dragonhead
	<i>Prunella vulgaris</i>	PRVU	Selfheal
LEGUMINOSEAE	<i>Astragalus missouriensis</i>	ASMI	Milkvetch
	<i>Astragalus</i> sp.	ASTX	Milkvetch
	<i>Glycyrrhiza lepidota</i>	GLLE	Licorice
	<i>Lathyrus arizonicus</i>	LAAR	Peavine
	<i>Lotus wrightii</i>	LOWR	Deervetch
	<i>Lupinus caudatus</i>	LUCA	Lupine
	<i>Lupinus kingsii</i>	LUKI	King's lupine
	<i>Medicago lupulina</i>	MELU	Black medic
	<i>Medicago sativa</i>	MESA	Alfalfa
	<i>Melilotus albus</i>	MEAL	White sweet clover
	<i>Melilotus officinalis</i>	MEOF	Yellow sweet clover
	<i>Petalostemum candidum</i>	PECA	White prairie clover
	<i>Petalostemum purpureum</i>	PEPU	Purple prairie clover
	<i>Robinia neomexicana</i>	RONE	New Mexico locust
	<i>Thermopsis pinetorum</i>	THPI	Big golden-pea

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
LEGUMINOSEAE	<i>Trifolium procumbens</i>	TRPR	Clover
	<i>Trifolium repens</i>	TRRE	White clover
	<i>Vicia americana</i>	VIAM	American vetch
LEMNACEAE	<i>Lemna minor</i>	LEMI	Lesser duckweed
LILIACEAE	<i>Alium cernuum</i>	ALCE	Nodding onion
	<i>Alium textila</i>	ALTE	Onion
	<i>Calochortus nuttallii</i>	CANU	Sego lily
	<i>Smilacina racemosa</i>	SMRA	False Solomon's seal
	<i>Yucca angustissima</i>	YUAN	Narrowleaf yucca
	<i>Yucca baccata</i>	YUBA	Banana yucca
LINACEAE	<i>Linum lewesii</i>	LILE	Western blue flax
	<i>Linum neomexicana</i>	LINE	New Mexico yellow flax
LOASACEAE	<i>Mentzelia</i> sp.		Blazing star
	<i>Mentzelia albicaulis</i>	MEAL	White-stemmed blazing star
	<i>Mentzelia pumila</i>	MEPU	Stickleaf
LORANTHACEAE	<i>Arceuthobium divaricatum</i>	ARDI	Dwarf mistletoe
	<i>Arceuthobium vaginatum</i>	ARVA	Mistletoe
	<i>Phoradendron juniperninum</i>	PHJU	Juniper mistletoe
MALVACEAE	<i>Sphaeralcea</i> sp.	SPHX	Scarlet globe mallow
	<i>Sphaeralcea coccinea</i>	SPCO	Red globe mallow
MORACEAE	<i>Humulus americanus</i>	HUAM	Hop
NYCTAGINACEAE	<i>Oxybaphus linearis</i>	OXLI	Desert four o'clock
	<i>Mirabilis linearis</i>	MILI	Four o'clock
	<i>Mirabilis oxybaphoides</i>	MIOX	Vining four o'clock
	<i>Mirabilis multiflora</i>	MIMU	Showy four o'clock
OLEACEAE	<i>Forestiera neomexicana</i>	FONE	New Mexico olive
ONAGRACEAE	<i>Epilobium angustifolium</i>	EPAN	Fireweed
	<i>Epilobium ciliatum</i>	EPCI	Willowweed
	<i>Epilobium</i> sp.	EPIX	Fireweed
	<i>Gaura coccinea</i>	GACO	Gaura
	<i>Oenothera caespitosa</i>	OECA	White stemless primrose
	<i>Oenothera coronopifolia</i>	OECO	Evening primrose
	<i>Oenothera hookeri</i>	OEHO	Hooker's evening primrose
	<i>Oenothera procera</i>	OEPR	Yellow evening primrose
ORCHIDACEAE	<i>Calypso bulbosa</i>	CABU	Fairy slipper
	<i>Corallorhiza maculata</i>	COMA	Spotted coralroot
	<i>Epipactis gigantea</i>	EPGI	Giant helleborine orchid
	<i>Habenaria sparsiflora</i>	HASP	Bog orchid

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
ORCHIDACEAE	<i>Malaxis</i> sp.	MALX	Orchid
OROBANCHACEAE	<i>Orobanche fasciculata</i>	ORFA	Broomrape
	<i>Orobanche multiflora</i>	ORMU	Broomrape
OXALIDACEAE	<i>Oxalis violacea</i>	OXVI	Violet wood-sorrel
PINACEAE	<i>Abies concolor</i>	ABCO	White fir
	<i>Picea pungens</i>	PIPU	Blue spruce
	<i>Pinus edulis</i>	PIED	Pinon pine
	<i>Pinus flexilis</i>	PIFL	Limber pine
	<i>Pinus ponderosa</i>	PIPO	Ponderosa pine
	<i>Pseudotsuga menziesii</i>	PSME	Douglas fir
PLANTAGINACEAE	<i>Plantago purshii</i>	PLPU	Woolly indian wheat
	<i>Plantago major</i>	PLMA	Rippleseed plantain
POLEMONIACEAE	<i>Ipomopsis aggregata</i>	IPAG	Scarlet trumpet, Skyrocket
	<i>Ipomopsis longiflora</i>	IPLO	Blue gilia
	<i>Polemonium</i> sp.	POLX	Skunk cabbage
PORTULACACEAE	<i>Portulaca oleracea</i>	POOL	Common purslane
POLYGONACEAE	<i>Rumex</i> sp.		Dock/Sorrel
	<i>Rumex crispus</i>	RUCR	Curly dock
	<i>Eriogonum abertianum</i>	ERAB	Wild buckwheat
	<i>Eriogonum</i>		Winged wild buckwheat
	<i>Eriogonum</i>		Annual wild buckwheat
	<i>Eriogonum effusum</i>	EREF	Wild buckwheat
	<i>Eriogonum racemosum</i>	ERRA	Redroot wild buckwheat
	<i>Eriogonum</i>		Nodding wild buckwheat
	<i>Eriogonum jamesii</i>	ERJA	Antelope sage
	<i>Eriogonum polycladon</i>	ERPO	Sorrel wild buckwheat
	<i>Polygonum convolvulus</i>	POCO	Black bindweed
	<i>Polygonum ramosissimum</i>	PORA	Knotweed
POLYPODIACEAE	<i>Cheilanthes feei</i>	CHFE	Fee's lip fern
	<i>Cystopteris fragilis</i>	CSFR	Brittle fern
PORTULACACEAE	<i>Portulaca oleracea</i>	POOL	Common purslane
PRIMULACEAE	<i>Androsace septentrionalis</i>	ANSE	Rock-jasmine
RANUNCULACEAE	<i>Actaea arguta</i>	ACAR	Western baneberry
	<i>Anemone cylindrica</i>	ANCY	Candle anemone
	<i>Clematis leucosticta</i>	CLLE	Western virgins bower
	<i>Clematis pseudoalpina</i>	CLPS	Rocky Mountain clematis
	<i>Delphinium virescens</i>	DEVI	Larkspur
	<i>Pulsatilla ludoviciana</i>	PULU	Pasque flower

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
RANUNCULACEAE	<i>Ranunculus cardiophyllus</i>	RACA	Buttercup
	<i>Ranunculus inamoenus</i>	RAIN	Homely buttercup
	<i>Ranunculus macranthus</i>	RAMA	Showy buttercup
	<i>Thalictrum fendleri</i>	THFE	Fendler meadowrue
RHAMNACEAE	<i>Ceanothus fendleri</i>	CEFE	Buckbrush
ROSACEAE	<i>Agrimonia striata</i>	AGST	Agrimony
	<i>Amelanchier alnifolia</i>	AMAL	Serviceberry
	<i>Cercocarpus montanus</i>	CEMO	Mountain mahogany
	<i>Fallugia paradoxa</i>	FAPA	Apache plume
ROSACEAE	<i>Fragaria americana</i>	FRAM	Wild strawberry
	<i>Potentilla fruticosa</i>	POFR	Shrubby potentilla
	<i>Potentilla hippiana</i>	POPU	Cinquefoil
	<i>Potentilla norvegica</i>	PONO	Norway cinquefoil
	<i>Potentilla pulcherrima</i>	POPU	Beauty cinquefoil
	<i>Rosa</i> sp.	ROST	Wild rose
	<i>Rosa woodsii</i> var. <i>fendleri</i>	ROWO	Fendler's rose
	<i>Prunus virgata</i>	PRVI	Chokecherry
	<i>Robinia neomexicana</i>	RONE	New Mexico locust
	<i>Rubus strigosus</i>	RUST	Wild raspberry
	<i>Sorbus scopulina</i>	SOSC	Mountain ash
RUBIACEAE	<i>Galium aparine</i>	GAAP	Bedstraw, Goosegrass
	<i>Galium asperum</i>	GAAS	Roughstemmed bedstraw
	<i>Galium boreale</i>	GABO	Northern bedstraw
	<i>Galium microphyllum</i>	GAMI	Littleleaf bedstraw
	<i>Galium fendleri</i>	GAFE	Fendler bedstraw
	<i>Galium tinctorum</i>	GATI	Bedstraw
RUTACEAE	<i>Ptelea trifoliata</i>	PTTR	Narrowleaf hoptree
SALICACEAE	<i>Salix</i> sp.	SALX	Willow
	<i>Populus angustifolia</i>	POAN	Narrowleaf cottonwood
	<i>Populus fremonti</i>	POFR	River cottonwood
	<i>Populus tremuloides</i>	POTR	Aspen
	<i>Salix exigua</i>	SAEX	Sandbar willow, Coyote willow
SANTALACEAE	<i>Comandra pallida</i>	COPA	Bastard toadflax
SAXIFRAGACEAE	<i>Fendlera rupicola</i>	FERU	Fendler bush
	<i>Heuchera parvifolia</i>	HEPA	Alumroot
	<i>Jamesia americana</i>	JAAM	Cliffbush
	<i>Philadelphus microphyllus</i>	PHMI	Mockorange
	<i>Ribes inermis</i>	RIIN	Whitestem gooseberry
	<i>Ribes cereum</i>	RICE	Wax currant

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
SAXIFRAGACEAE	<i>Ribes inebrians</i>	RIIN	Squaw currant
	<i>Ribes lepthanthum</i>	RILE	Trumpet gooseberry
SCROPHULARIACEAE	<i>Castilleja lineata</i>	CALI	Yellow paintbrush
	<i>Castilleja integra</i>	CAIN	Indian paintbrush
	<i>Mimulus glabratus</i>	MIGL	Smooth monkeyflower
	<i>Orthocarpus luteus</i>	ORLU	Yellow owl-clover
	<i>Orthocarpus purpureo-albus</i>	ORPU	Purple-white owl-clover
	<i>Penstemon barbatus</i>	PEBA	Scarlet bugler
	<i>Penstemon</i> sp.		Beardtongue
	<i>Penstemon secundiflorus</i>	PESE	Penstemon
	<i>Penstemon virgatus</i>	PEVI	Variegated penstemon
	<i>Verbascum thapsus</i>	VETH	Mullein
	<i>Veronica american</i>	VEAM	American brooklime
SOLANICEAE	<i>Physalis hederifolia</i>	PHHE	Ground cherry
	<i>Physalis neomexicana</i>	PHNE	Ground cherry
	<i>Lycium pallidum</i>	LYPA	Wolfberry
	<i>Solanum elaeagnifolium</i>	SOEL	Horse-nettle
	<i>Solanum</i> sp.	SOLX	Wild potato, nightshade
TAMARICACEAE	<i>Tamarix gallica</i>	TAGA	Tamarisk, Salt cedar
TYPHACEAE	<i>Typha angustifolia</i>	TYAN	Narrow-leaved cattail
	<i>Typha latifolia</i>	TYLA	Broad-leaved cattail
ULMACEAE	<i>Celtis reticulata</i>	CERE	Western hackberry
	<i>Ulmus pumila</i>	ULPA	Siberian elm
	<i>Ulmus</i> sp.	ULMX	Elm
UMBELLIFEREAE	<i>Heracleum lanatum</i>	HELA	Cow parsnip
	<i>Ligusticum porteri</i>	LIPO	Lovage
	<i>Pseudocymopterus montanus</i>	PSMO	Mountain parsley
	<i>Ozomhiza obtusa</i>	OZOB	Bluntseed sweet cicely
URTICACEAE	<i>Urtica gracilis</i>	URGR	Stinging nettle
VALERIANACEAE	<i>Valeriana acutiloba</i>	VAAC	Valeriana
	<i>Valeriana capitata</i>	VACA	Tobacco root
VERBENACEAE	<i>Verbena</i> sp.		Vervain
	<i>Verbena wrightii</i>	VEWR	Wright's vervain
VIOLACEAE	<i>Viola</i> sp.	VIOX	Violet
	<i>Viola adunca</i>	VIAD	Western dog violet
	<i>Viola pedatifida</i>	VIPE	Larkspur violet
	<i>Viola canadensis</i>	VICA	Canada violet
VITACEAE	<i>Parthenocissus inserta</i>	PAIN	Virginia creeper
	<i>Vitis arizonica</i>	VIAR	Canyon grape
MOSSES	<i>Ceratodon purpureus</i>	CEPU	Purple horned tooth moss

Plants at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	CODE	COMMON NAME
LICHENS	<i>Cladonia</i> sp.	CLAX	
	<i>Rhizocarpon</i> sp.	RHIX	Crustose rock lichen
	<i>Usnea</i> sp.	USNX	Old man's beard lichen
	<i>Xanthroparmelia</i> sp.	XANX	Green foliose rock lichen

Fungi at LANL and Surrounding Areas

GENUS	SPECIES	FAMILY	ORDER	COMMON NAME
Agaricus	<i>augustus</i>	Agaricaceae	Agaricales	The prince
	<i>barrowsii</i>			
	<i>bitorquis</i>			
	<i>campestris</i>			Meadow mushroom
	<i>haemorrhoidarius</i>			
	<i>silvicola</i>			
	<i>xanthodermus</i>			
Agrocybe	<i>pediades</i> cf.	Bolbitiaceae		
	<i>praecox</i> cf.			
Amanita	<i>bisporigera</i> cf.	Amanitaceae		Destroying angel
	<i>caesarea</i>			Caesar's mushroom
	<i>constricta</i>			
	<i>fulva</i>			
	<i>magniverrucata</i> cf.			
	<i>muscaria</i> var. <i>muscaria</i>			Fly agaric
	<i>pantherina</i>			
	<i>vaginata</i>			Grisette
Arcyria	<i>denudata</i>	Trichiaceae	Trichiales	Slime mold
Armillaria	<i>albolaripes</i>	Tricholomataceae	Agaricales	
	<i>mellea</i> cf.			Honey mushroom
	<i>straminia</i> cf.			
	<i>tabescens</i> cf.			
Astraeus	<i>hygrometricus</i>	Astraeaceae	Sclerodermatales	
Auricularia	<i>auricula</i>	Auriculariaceae	Auriculariales	Tree ear
Auriscalpium	<i>vulgare</i>	Hydnaceae	Aphyllaphorales	
Battarrea	<i>phalloides</i>	Tulostomataceae	Tulostomatales	
Bisporella	<i>citrina</i>	Leotiaceae	Helotiales	
Bjerkandera	<i>adusta</i>	Polyporaceae	Aphyllaphorales	
Boletus	<i>barrowsii</i>	Boletaceae	Agaricales	
	<i>calopus</i>			
	<i>chalciporus</i> cf.			
	<i>chrysenteron</i> cf.			
	<i>edulis</i>			
	<i>haematinus</i>			
	<i>rubripes</i>			
Caloporus	<i>dichrous</i>	Polyporaceae	Aphyllaphorales	
Calvatia	<i>gigantea</i>	Lycoperdaceae	Lycoperdales	Giant puffball
Cantharellus	<i>cibarius</i>	Cantharellaceae	Aphyllaphorales	Chanterelle
Catathelasma	<i>ventricosa</i>	Tricholomataceae	Agaricales	
Ceratiomyxa	<i>fruticulosa</i>	Ceratiomyxaceae	Ceratiomyxales	Slime mold
Cheimonophyllum	<i>candidissimus</i>	Tricholomataceae	Agaricales	

Fungi at LANL and Surrounding Areas (cont.)

GENUS	SPECIES	FAMILY	ORDER	COMMON NAME
<i>Chlorociboria</i>	<i>aeruginascens</i>	Dermatiaceae	Helotiales	Blue stain
<i>Chlorophyllum</i>	<i>molybdites</i>	Lepiotaceae	Agaricales	
<i>Chroogomphus</i>	<i>tomentosus</i>	Gomphidiaceae		
	<i>vinicolor</i>			
<i>Clavariadelphus</i>	<i>lovejoyae</i>	Clavariaceae	Aphyllophorales	
	<i>pistillaris</i>			
	<i>truncatus</i>			
<i>Clavicornia</i>	<i>pyxidata</i>			Coral mushroom
<i>Clavulina</i>	<i>cristata</i> cf.			Coral mushroom
	<i>rugosa</i> cf.			Coral mushroom
<i>Clavulinopsis</i>	<i>corniculata</i>			
<i>Clitocybe</i>	<i>dealbata</i>	Tricholomataceae	Agaricales	
	<i>dilatata</i>			
	<i>gibba</i>			
	<i>gigantea</i> cf.			
<i>Collybia</i>	<i>dryophila</i>			
	<i>lentinoides</i> cf.			
	<i>spongiosa</i> cf.			
<i>Coltricia</i>	<i>perennis</i>	Polyporaceae	Aphyllophorales	
<i>Coniophora</i>	<i>puteana</i>	Coniophoraceae	Aphyllophorales	Wet rot
<i>Conocybe</i>	<i>lactea</i> cf.	Bolbitiaceae	Agaricales	
	<i>tenera</i> cf.			
<i>Coprinus</i>	<i>altramentarius</i>	Coprinaceae		Inky cap
	<i>comatus</i>			Shaggy mane
	<i>lagopus</i> cf.			
	<i>micaceus</i>			
<i>Coriolellus</i>	<i>carbonarius</i>	Polyporaceae	Aphyllophorales	
<i>Coriolopsis</i>	<i>gallica</i>			
<i>Cortinarius</i>	<i>albviolaceus</i> cf.	Cortinariaceae	Agaricales	
	<i>anomalus</i>			
	<i>calochrous</i>			
	<i>glaucopus</i> cf.			
<i>Crepidotus</i>	<i>applanatus</i> cf.	Crepitodaceae		
	<i>herbarum</i> cf.			
	<i>mollis</i>			
<i>Crucibulum</i>	<i>laeve</i>	Nidulariaceae	Nidulariales	Bird's nest
<i>Cudonia</i>	<i>circinans</i>	Leotiaceae	Helotiales	
<i>Cyathus</i>	<i>striatus</i>	Nidulariaceae	Nidulariales	
<i>Cyptotrama</i>	<i>chrysospeplum</i>	Tricholomataceae	Agaricales	
<i>Cystoderma</i>	<i>amianthinum</i> cf.			
	<i>granulosum</i> cf.			
<i>Dacrymyces</i>	<i>palmaris</i>	Dacrymycetaceae	Dacrymycetales	
<i>Daedaleopsis</i>	<i>confragosa</i>	Polyporaceae	Aphyllophorales	

Fungi at LANL and Surrounding Areas (cont.)

GENUS	SPECIES	FAMILY	ORDER	COMMON NAME
<i>Daldinia</i>	<i>concentrica</i> cf.	Xylariaceae	Sphaeriales	
<i>Flammulina</i>	<i>velutipes</i>	Tricholomataceae	Agaricales	Velvet foot
<i>Fomitopsis</i>	<i>canjanderi</i>	Polyporaceae	Aphyllophorales	
	<i>pinicola</i>			
<i>Fuligo</i>	<i>septica</i>	Physacaceae	Physarales	Slime mold
<i>Galerina</i>	<i>autumnalis</i>	Cortinariaceae	Agaricales	
<i>Ganoderma</i>	<i>applanatum</i>	Polyporaceae	Aphyllophorales	Artist's conk
<i>Gautieria</i>	<i>mexicana</i>	Gautieriaceae	Gautieriales	
<i>Geastrum</i>	<i>coronatum</i>	Geastraceae	Lycoperdales	Earth star
	<i>saccatum</i>			Earth star
	<i>triplex</i>			Earth star
<i>Globifomes</i>	<i>graveolens</i> cf.	Polyporaceae	Aphyllophorales	Sweet knot
<i>Gloeophyllum</i>	<i>sepiarium</i>			
<i>Gomphidius</i>	<i>glutinosus</i>	Gomphidiaceae	Agaricales	
	<i>oregonensis</i>			Insidious gomphus
<i>Gomphus</i>	<i>bonari</i>	Cantharellaceae	Aphyllophorales	
	<i>floccosus</i>			
<i>Guepiniopsis</i>	<i>alpinus</i>	Dacrymycetaceae	Dacrymycetales	
<i>Gymnopolis</i>	<i>sapineus</i>	Cortinariaceae	Agaricales	
<i>Gymnosporangium</i>	<i>speciosus</i> cf.	Pucciniaceae	Uredinales	Juniper rust
<i>Gyromitra</i>	<i>esculenta</i>	Helvellaceae	Pezizales	
	<i>infula</i>			
<i>Hebeloma</i>	<i>crustuliniforme</i>	Cortinariaceae	Agaricales	Poison pie
	<i>sinapizans</i> cf.			
<i>Helvella</i>	<i>acetabulum</i>	Helvellaceae	Pezizales	Cup fungus
	<i>crispa</i>			Saddle mushroom
	<i>elastica</i> cf.			Saddle mushroom
	<i>lacunosa</i>			Saddle mushroom
<i>Hemitrichia</i>	<i>clavata</i> cf.	Trichiaceae	Trichiales	Slime mold
<i>Hericium</i>	<i>abeitis</i>	Hydnaceae	Aphyllophorales	
<i>Hohenbuehelia</i>	<i>petaloides</i> cf.	Tricholomataceae	Agaricales	
<i>Humaria</i>	<i>hemisphaeria</i>	Pyronemataceae	Pezizales	
<i>Hygrophoropsis</i>	<i>aurantiaca</i>	Paxillaceae	Agaricales	False chanterelle
<i>Hygrophorus</i>	<i>acutoconica</i> cf.	Hygrophoraceae		
	<i>chrysodon</i>			
	<i>conicus</i>			Witch's hat
	<i>marginatus</i> cf.			
	<i>pudorinus</i>			
	<i>speciosus</i>			
<i>Hypomyces</i>	<i>chrysospermum</i>	Hypocreaceae	Sphaeriales	
	<i>hyalinus</i> cf.			
	<i>lactifluorum</i>			Lobster mushroom

Fungi at LANL and Surrounding Areas (cont.)

GENUS	SPECIES	FAMILY	ORDER	COMMON NAME
<i>Hypomyces</i>	<i>luteovirens</i>			
<i>Inocybe</i>	<i>albodisca</i> cf.	Cortinariaceae	Agaricales	
	<i>fastigiata</i>			
	<i>lanuginosa</i>			
	<i>maculata</i> cf.			
	<i>sororia</i>			
<i>Inonotus</i>	<i>tomentosus</i>	Polyporaceae	Aphyllphorales	
<i>Irpex</i>	<i>lacteus</i>			
<i>Laccaria</i>	<i>amethystina</i> cf.	Tricholomataceae	Agaricales	
	<i>bicolor</i>			
	<i>laccata</i>			
<i>Lactarius</i>	<i>barrowsii</i>	Russulaceae		
	<i>controversus</i> cf.			
	<i>deliciosus</i>			
	<i>olivaceoumbrinus</i>			
	<i>rubrilacteus</i>			
	<i>torminosus</i>			
	<i>uvidus</i> cf.			
<i>Leccinum</i>	<i>aurantiacum</i>	Boletaceae		
	<i>insigne</i>			
<i>Lentinellus</i>	<i>omphalodes</i> cf.	Tricholomataceae		
	<i>ursinus</i> cf.			
<i>Lentinus</i>	<i>ponderosus</i>			
<i>Lenzites</i>	<i>betulina</i>	Polyporaceae	Aphyllphorales	
<i>Lepiota</i>	<i>clypeolaria</i>	Lepiotaceae	Agaricales	
	<i>cristata</i>			
	<i>rhacodes</i>			
<i>Leucopaxillus</i>	<i>amarus</i>	Tricholomataceae		
<i>Leucophleps</i>	<i>spinispora</i>	Leucogastraceae	Leucogastrales	
<i>Lycogala</i>	<i>epidendrum</i>	Reticulariaceae	Liceales	Wolf's phart
	<i>flavofuscum</i>			Slime mold
<i>Lycoperdon</i>	<i>americanum</i>	Lycoperdaceae	Lycoperdales	Puffball
	<i>echinatum</i>			Puffball
	<i>perlatum</i>			Puffball
	<i>pyriforme</i>			Puffball
<i>Marasmius</i>	<i>oreades</i>	Tricholomataceae	Agaricales	Fairy ring mushroom
<i>Melanoleuca</i>	spp.			
<i>Morchella</i>	<i>angusticeps</i>	Morchellaceae	Pezizales	Morel
	<i>elata</i>			Morel
	<i>esculenta</i>			Morel
<i>Mycena</i>	<i>haemotopus</i>	Tricholomataceae	Agaricales	
<i>Nidula</i>	<i>candida</i>	Nidulariaceae	Nidulariales	Bird's nest mushroom
<i>Nolanea</i>	spp.	Entolomataceae	Agaricales	
<i>Panaeolus</i>	<i>foenisecii</i>	Coprinaceae		Hay-makers mushroom

Fungi at LANL and Surrounding Areas (cont.)

GENUS	SPECIES	FAMILY	ORDER	COMMON NAME
<i>Panaeolus</i>	<i>retirugis</i> cf.			
<i>Paxillus</i>	<i>atrotomentosis</i>	Paxillaceae		
<i>Peniophora</i>	<i>gigantea</i>	Corticiaceae	Aphyllaphorales	
	<i>rufa</i>			
<i>Peziza</i>	<i>repanda</i>	Pezizaceae	Pezizales	
	<i>succosa</i>			
<i>Phaeolus</i>	<i>schweinitzii</i>	Polyporaceae	Aphyllaphorales	Dye polypore
<i>Phallus</i>	<i>impudicus</i>	Phallaceae	Phallales	Stinkhorn
<i>Phlebia</i>	spp.	Corticiaceae	Aphyllaphorales	
<i>Pholiota</i>	<i>aurivella</i> cf.	Strophariaceae	Agaricales	
	<i>destruens</i>			
	<i>limonella</i> cf.			
	<i>lubrica</i> cf.			
	<i>squarrosa</i>			
<i>Phylloporus</i>	<i>rhodoxanthus</i>	Paxillaceae		Gilled bolete
<i>Phyllotopsis</i>	<i>nidulans</i>	Tricholomataceae		
<i>Pleurotus</i>	<i>ostreatus</i>			
	<i>sapidus</i>			Oyster mushroom
<i>Pluteus</i>	<i>cervinus</i>	Pluteaceae		Fawn mushroom
	<i>cervinus</i> var. <i>alba</i>			
	<i>lutescens</i>			
<i>Polyporus</i>	<i>aricularius</i>	Polyporaceae	Aphyllaphorales	
	<i>badius</i> cf.			
	<i>elegans</i>			
	<i>squamosus</i>			
	<i>varius</i>			
<i>Poria</i>	<i>corticola</i> cf.			
	<i>spissa</i>			
<i>Psathyrella</i>	<i>carbonicola</i>	Coprinaceae	Agaricales	
	<i>velutina</i>			
<i>Pseudohydnum</i>	<i>gelatinosum</i>	Tremellaceae	Tremellales	
<i>Psilocybe</i>	spp.	Strophariaceae	Agaricales	
<i>Pycnoporellus</i>	<i>alboluteus</i>	Polyporaceae	Aphyllaphorales	
<i>Pycnoporus</i>	<i>cinnabarinus</i>			
<i>Ramaria</i>	<i>vinosimaculatus</i> cf.	Clavariaceae		Coral mushroom
<i>Rhizopogon</i>	<i>subsalmonius</i>	Rhizopogonaceae	Hymenogastrales	
<i>Russula</i>	<i>aeruginea</i> cf.	Russulaceae	Agaricales	
	<i>brevipes</i>			
	<i>emetica</i> cf.			
	<i>maculata</i> cf.			
	<i>rosacea</i> cf.			
<i>Sarcoscypha</i>	<i>coccinea</i>	Sarcoscyphaceae	Pezizales	
<i>Scutellinia</i>	<i>erinaceus</i> cf.	Pyronemataceae		Yellow eye-lash

Fungi at LANL and Surrounding Areas (cont.)

GENUS	SPECIES	FAMILY	ORDER	COMMON NAME
<i>Scutellinia</i>	<i>scutellata</i>			Eyelash cup
<i>Sparassis</i>	<i>crispa</i>	Clavariaceae	Aphyllophorales	
	<i>radicata</i>			Cauliflower mushroom
<i>Spathularia</i>	<i>flavida</i>	Geoglossaceae	Helotiales	
<i>Spongipellis</i>	<i>pachyodon</i>	Polyporaceae	Aphyllophorales	
<i>Steccherium</i>	<i>ochraceum</i>	Hydnaceae		
<i>Stemonitis</i>	<i>splendens</i>	Stemonitaceae	Stemonitales	Slime mold
<i>Stereum</i>	<i>complicatum</i>	Stereaceae	Aphyllophorales	
	<i>hirsutum</i> cf.			Parchment fungus
	<i>striatum</i>			
<i>Stropharia</i>	<i>coronilla</i> cf.	Strophariaceae	Agaricales	
	<i>kauffmanii</i>			
<i>Suillus</i>	<i>granulatus</i>	Boletaceae		
	<i>lakei</i>			
	<i>sibiricus</i>			
<i>Tarzetta</i>	<i>cupularis</i>	Pyronemataceae	Pezizales	
<i>Thelephora</i>	<i>terrestris</i>	Thelephoraceae	Aphyllophorales	
<i>Tremella</i>	<i>mesenterica</i> cf.	Tremellaceae	Tremellales	Jelly fungus
<i>Trichaptum</i>	<i>abietinus</i>	Polyporaceae	Aphyllophorales	
	<i>subchartaceum</i>			
<i>Trichia</i>	<i>scabra</i> cf.	Trichiaceae	Trichiales	Slime mold
<i>Tricholoma</i>	spp.	Tricholomataceae	Agaricales	
<i>Tricholomopsis</i>	<i>platyphylla</i>			
	<i>rutilans</i>			
<i>Truncocolumella</i>	<i>citrina</i>	Rhizopogonaceae	Hymenogastres	
<i>Tubifera</i>	spp.	Reticulariaceae	Liceales	Slime mold
<i>Tulostoma</i>	<i>brumale</i> cf.	Tulostomataceae	Tulostomatales	
	<i>simulans</i>			
<i>Tyromyces</i>	<i>guttulatus</i> cf.	Polyporaceae	Aphyllophorales	
<i>Vascellum</i>	<i>lloydianum</i> cf.	Lycoperdaceae	Lycoperdales	
<i>Volvariella</i>	<i>bombycina</i>	Pluteaceae	Agaricales	
<i>Xeromphalina</i>	<i>campanella</i>	Tricholomataceae		
<i>Xerula</i>	<i>americana</i>			
Data for this table were taken from Jarmie and Rogers (1996).				

Birds at LANL and Surrounding Areas

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
GAVIIDAE	<i>Gavia immer</i>	Common loon	8
	<i>G. stellata</i>	Red-throated loon	8
ARDEIDAE	<i>Ardea herodias</i>	Great blue heron	8
CATHARTIDAE	<i>Cathartes aura</i>	Turkey vulture	2, 9
ANATIDAE	<i>Chen caerulescens</i>	Snow goose	8
	<i>Anas platyrhynchos</i>	Mallard	1, 8
	<i>Mergus merganser</i>	Common merganser	8
ACCIPITRIDAE	<i>Accipiter cooperii</i>	Cooper's hawk	1, 3
	<i>A. gentilis</i>	Northern goshawk	1
	<i>A. striatus</i>	Sharp-shinned hawk	1
	<i>Aquila chrysaetos</i>	Golden eagle	2, 8
	<i>Buteo jamaicensis</i>	Red-tailed hawk	1, 2, 4, 9
	<i>B. albonotatus</i>	Zone-tailed hawk	1
	<i>Circus cyaneus</i>	Northern harrier	14
FALCONIDAE	<i>Haliaeetus luecocephalus</i>	Bald eagle	13
	<i>Falco sparverius</i>	American kestrel	1, 2, 9
	<i>F. mexicanus</i>	Prairie falcon	8
	<i>F. peregrinus</i>	Peregrine falcon	10
PHASIANIDAE	<i>Callipepla gambelli</i>	Gambel's quail	1
	<i>Dendragapus obscurus</i>	Blue grouse	1
	<i>Meleagris gallopavo</i>	Wild turkey	1
RALLIDAE	<i>Fulica americana</i>	American coot	8
	<i>Rallus limicola</i>	Virginia rail	12
GRUIDAE	<i>Grus americana</i>	Whooping crane	9
	<i>G. canadensis</i>	Sandhill crane	9
SCOLOPACIDAE	<i>Actitis macularia</i>	Spotted sandpiper	1
COLUMBIDAE	<i>Columba fasciata</i>	Band-tailed pigeon	2
	<i>C. livia</i>	Rock dove	
	<i>Zenaidura macroura</i>	Mourning dove	2, 3
CUCULIDAE	<i>Geococcyx californianus</i>	Greater roadrunner	14
STRIGIDAE	<i>Glaucidium gnoma</i>	Northern pygmy-owl	1
	<i>Aegolius acadicus</i>	Northern saw-whet owl	1
	<i>Bubo virginianus</i>	Great horned owl	1
	<i>Otus flammeolus</i>	Flammulated owl	1, 2
	<i>O. kennicottii</i>	Western screech owl	8
	<i>Strix occidentalis lucida</i>	Mexican spotted owl	1, 2
CAPRIMULGIDAE	<i>Caprimulgus vociferus</i>	Whip-poor-will	8
	<i>Chordeiles minor</i>	Common nighthawk	1
	<i>Phalaenoptilus nuttallii</i>	Common poorwill	1
APODIDAE	<i>Aeronautes saxatalis</i>	White-throated swift	1, 4
TROCHILIDAE	<i>Selasphorus platycercus</i>	Broad-tailed hummingbird	1, 3, 4, 11
	<i>Archilochus alexandri</i>	Black-chinned hummingbird	1, 2
PICIDAE	<i>Colaptes auratus</i>	Northern flicker	1, 2, 3, 9, 11
	<i>Melanerpes lewis</i>	Lewis' woodpecker	2
	<i>M. formicivorus</i>	Acorn woodpecker	1, 2

Birds at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
PICIDAE	<i>Picoides pubescens</i>	Downy woodpecker	1
	<i>P. villosus</i>	Hairy woodpecker	1, 2, 3, 11
	<i>P. tridactylus</i>	Three-toed woodpecker	1, 3
	<i>P. scalaris</i>	Ladder-backed woodpecker	1
	<i>Sphyrapicus nuchalis</i>	Red-naped sapsucker	1
	<i>S. thyroideus</i>	Williamson's sapsucker	1
	<i>S. varius</i>	Yellow-bellied sapsucker	6
TYRANNIDAE	<i>Contopus borealis</i>	Olive-sided flycatcher	1
	<i>C. sordidulus</i>	Western wood-pewee	1, 2, 3
	<i>Empidonax hammondi</i>	Hammond's flycatcher	1, 3
	<i>E. oberholseri</i>	Dusky flycatcher	1
	<i>E. occidentalis</i>	Cordilleran flycatcher	1, 3
	<i>E. trailli extimus</i>	Southwestern willow flycatcher	15
	<i>E. wrightii</i>	Gray flycatcher	1, 2
	<i>Myiarchus cinerascens</i>	Ash-throated flycatcher	1, 3, 4
	<i>Tyrannus vociferans</i>	Cassin's kingbird	1, 2
	<i>Sayornis saya</i>	Say's phoebe	1, 2
	<i>S. nigricans</i>	Black phoebe	1
HIRUNDINIDAE	<i>Tachycineta thalassina</i>	Violet-green swallow	1, 4
	<i>Hirundo pyrrhonota</i>	Cliff swallow	1
CORVIDAE	<i>Aphelocoma coerulescens</i>	Scrub jay	1, 9
	<i>Cyanocitta stelleri</i>	Steller's jay	1, 2, 3, 9
	<i>Gymnorhinus cyanocephalus</i>	Piñon jay	1, 11
	<i>Corvus brachyrhynchos</i>	American crow	1
	<i>Corvus corax</i>	Common raven	1, 2, 9, 11
	<i>Corvus cryptoleucus</i>	Chihuahuan raven	14
	<i>Nucifraga columbiana</i>	Clark's nutcracker	1, 2, 4
	<i>Perisoreus canadensis</i>	Gray jay	1
	<i>Pica pica</i>	Black-billed magpie	1, 2
PARIDAE	<i>Parus gambeli</i>	Mountain chickadee	1, 2, 3
	<i>P. inornatus</i>	Plain titmouse	1, 2
AEGITHALIDAE	<i>Psaltiriparus minimus</i>	Bushtit	1, 5
SITTIDAE	<i>Sitta canadensis</i>	Red-breasted nuthatch	1
	<i>S. carolinensis</i>	White-breasted nuthatch	1, 3, 4
	<i>S. pygmaea</i>	Pygmy nuthatch	1, 2, 3
CERTHIIDAE	<i>Certhia americana</i>	Brown creeper	
TROGLODYTIDAE	<i>Troglodytes aedon</i>	House wren	1, 2, 3
	<i>T. troglodytes</i>	Winter wren	1
TROGLODYTIDAE	<i>Catherpes mexicanus</i>	Canyon wren	1, 3
	<i>Salpinctes obsoletus</i>	Rock wren	1, 3, 4
	<i>Thryomanes bewickii</i>	Bewick's wren	1
CINCLIDAE	<i>Cinclus mexicanus</i>	American dipper	1
MUSCICAPIDAE	<i>Catharus guttatus</i>	Hermit thrush	1, 3
	<i>Myadestes townsendi</i>	Townsend's solitaire	1, 3, 11
	<i>Poliophtila caerulea</i>	Blue-grey gnatcatcher	1, 3

Birds at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
MUSCICAPIDAE	<i>Regulus calendula</i>	Ruby-crowned kinglet	1
	<i>R. satrapa</i>	Golden-crowned kinglet	5
	<i>Sialia currucoides</i>	Mountain bluebird	1, 2, 4
	<i>S. mexicana</i>	Western bluebird	1, 2, 4
	<i>Turdus migratorius</i>	American robin	1, 2, 3
MIMIDAE	<i>Mimus polyglottos</i>	Northern mockingbird	1
STURNIDAE	<i>Sturnus vulgaris</i>	European starling	2
VIREONIDAE	<i>Vireo gilvus</i>	Warbling vireo	1, 3
	<i>V. solitarius</i>	Solitary vireo	1, 2, 3
EMBERIZIDAE	<i>Vermivora celata</i>	Orange-crowned warbler	1, 11
	<i>V. virginiae</i>	Virginia's warbler	1, 11
	<i>Dendroica petechia</i>	Yellow warbler	2
	<i>D. caerulescens</i>	Black-throated blue warbler	1, 5
	<i>D. coronata</i>	Yellow-rumped warbler	1, 2, 3
	<i>D. nigrescens</i>	Black-throated grey warbler	1
	<i>D. graciae</i>	Grace's warbler	1, 3
	<i>Oporornis tolmiei</i>	MacGillivray's warbler	1
	<i>Wilsonia pusilla</i>	Wilson's warbler	8
	<i>Piranga flava</i>	Hepatic tanager	1
	<i>P. ludoviciana</i>	Western tanager	1, 2
	<i>P. rubra</i>	Summer tanager	14
	<i>Guiraca caerulea</i>	Blue grosbeak	1
	<i>Pheucticus melanocephalus</i>	Black-headed grosbeak	1, 2
	<i>Passerina amoena</i>	Lazuli bunting	1
	<i>P. cyanea</i>	Indigo bunting	1
	<i>Pipilo chlorurus</i>	Green-tailed towhee	1, 4
	<i>Psaltirparus fuscus</i>	Canyon towhee	1, 5
	<i>P. maculatus</i>	Spotted towhee	1, 2
	<i>Aimophila ruficeps</i>	Rufous-crowned sparrow	1
	<i>Melospiza lincolni</i>	Lincoln's sparrow	1
	<i>M. melodia</i>	Song sparrow	1
	<i>Poocetes gramineus</i>	Vesper sparrow	1
	<i>Spizella passerina</i>	Chipping sparrow	1, 2, 4
	<i>S. atrogularis</i>	Black-chinned sparrow	8, 9
	<i>Junco hyemalis</i>	Dark-eyed junco	1, 2
	<i>Sturnella neglecta</i>	Western meadowlark	1
	<i>Agelaius phoeniceus</i>	Red-winged blackbird	1
	<i>Euphagus cyanocephalus</i>	Brewer's blackbird	1
	<i>Molothrus ater</i>	Brown-headed cowbird	1
	<i>Chondestes grammacus</i>	Lark sparrow	1, 2, 3
	<i>Icterus bullockii</i>	Bulluck's oriole	1
	<i>I. parisorum</i>	Scott's oriole	1
	<i>Zonotrichia leucophrys</i>	White-crowned sparrow	2
FRINGILLIDAE	<i>Carduelis pinus</i>	Pine siskin	1, 3
	<i>C. psaltria</i>	Lesser goldfinch	1, 3, 4
	<i>Carpodacus cassinii</i>	Cassin's finch	3

Birds at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
	<i>Catherpes mexicanus</i>	House finch	3, 9
	<i>Coccothraustes vespertinus</i>	Evening grosbeak	1
	<i>Loxia curvirostra</i>	Red crossbill	1, 2, 3
PASSERIDAE	<i>Passer domesticus</i>	House sparrow	1
1 = Travis (1992); 2 = BT observation sheets; 3 = Wauer and Johnson (1981); 4 = Moeur and Guthrie (1981); 5 = Kent and Hickman (1986); 6 = Morrison (1990); 7 = Wenzel and Kent (1986); 8 = Guthrie (1975); 9 = Lochner (1990); 10 = Johnson (1988); 11 = Foxx and Tierney (1987); 12 = Biggs (1996a); 13 = Biggs (1995); 14 = New Mexico Birding (1997); 15 = Keller (1997)			

Mammals at LANL and Surrounding Areas

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
CANIDAE	<i>Canis latrans</i>	Coyote	1, 6, 11
	<i>Vulpes vulpes</i>	Red fox	1
	<i>Urocyon cinereoargenteus</i>	Gray fox	6, 11
CERVIDAE	<i>Cervus elaphus</i> subsp. <i>nelsoni</i>	Elk	1, 6
	<i>Odocoileus hemionus</i>	Mule deer	1, 6
EQUIDAE	<i>Equus asinus</i>	Feral ass	6
ERETHIZONTIDAE	<i>Erithizon dorsatum</i>	Porcupine	1
FELIDAE	<i>Felis rufus</i>	Bobcat	1, 11
	<i>Felis concolor</i>	Mountain lion	1
GEOMYIDAE	<i>Thomomys bottae</i>	Bottae's pocket gopher	1, 9
HETEROMYIDAE	<i>Perognathus flavus</i>	Silky pocket mouse	1, 3
	<i>P. flavescens</i>	Plains pocket mouse	12
	<i>P. intermedius</i>	Rock pocket mouse	12
LEPORIDAE	<i>Sylvilagus audubonii</i>	Desert cottontail	1, 6
	<i>S. nuttallii</i>	Nuttall's cottontail	14
MOLOSSIDAE	<i>Nyctinomops macrotis</i>	Big free-tailed bat	15
	<i>Tadarida brasiliensis</i>	Brazilian free-tailed bat	7
MURIDAE	<i>Clethrionomys gapperi</i>	Boreal red-backed vole	14
	<i>Mus musculus</i>	House mouse	10
	<i>Microtus longicaudus</i>	Long-tailed vole	3, 5, 6
	<i>M. montanus</i>	Montane vole	1, 2, 3, 4
	<i>Neotoma albigula</i>	White-throated woodrat	10
	<i>N. cinerea</i>	Bushy-tailed woodrat	16
	<i>N. mexicana</i>	Mexican woodrat	1, 9, 10
	<i>Peromyscus boylii</i>	Brush mouse	3, 5, 10
	<i>P. leucopus</i>	White-footed mouse	5, 6, 10
	<i>P. maniculatus</i>	Deer mouse	1, 2, 3, 4
	<i>P. nastutus</i>	Rock mouse	16
	<i>P. truei</i>	Piñon mouse	1, 2, 3
	<i>Reithrodontomys megalotis</i>	Western harvest mouse	1, 8, 10
	<i>Sigmodon hispidus</i>	Cotton rat	14
MUSTELIDAE	<i>Mustela erminea</i>	Ermine weasel	6, 16
	<i>M. frenata</i>	Long-tailed weasel	1
	<i>Taxidea taxus</i>	Badger	1

Mammals at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
MUSTELIDAE	<i>Mephitis mephitis</i>	Striped skunk	13
OCHOTONIDAE	<i>Ochotona princeps nigrescens</i>	Goat Peak pika	16
PROCYONIDAE	<i>Bassariscus astutus</i>	Ringtail cat	6
	<i>Procyon lotor</i>	Raccoon	6
SCIURIDAE	<i>Eutamias minimus</i>	Least chipmunk	3, 6, 10
	<i>Eutamias quadrivittatus</i>	Colorado chipmunk	1, 3, 4, 5
	<i>Sciurus aberti</i>	Abert's squirrel	1, 6
	<i>S. spilosoma</i>	Spotted ground squirrel	6
SCIURIDAE	<i>Spermophilus lateralis</i>	Golden-mantled ground squirrel	14
	<i>S. variegatus</i>	Rock squirrel	6, 9, 10
	<i>Tamiasciurus hudsonicus</i>	Red squirrel	14
SORICIDAE	<i>Sorex vagrans</i>	Vagrant shrew	3
	<i>S. nanus</i>	Dwarf shrew	14
	<i>S. palustris</i>	Northern water shrew	14
URSIDAE	<i>Ursus americanus</i>	Black bear	5, 6, 11
VERSPER- TILIONIDAE	<i>Antrozous pallidus</i>	Pallid bat	1, 7, 15
	<i>Eptesicus fuscus</i>	Big brown bat	1, 6, 7, 15
	<i>Eudema maculatum</i>	Spotted bat	15
	<i>Lasionycteris noctivagans</i>	Silver-haired bat	1, 6, 7, 15
	<i>Lasiurus cinereus</i>	Hoary bat	1, 6, 7, 15
	<i>Myotis californicus</i>	California myotis	1, 7, 15
	<i>M. ciliolabrum</i>	Western small-footed myotis	15
	<i>M. evotis</i>	Long-eared myotis	1, 6, 7, 15
	<i>M. leibii</i>	Small-footed myotis	7
	<i>M. thysanodes</i>	Fringed myotis	1, 7, 15
	<i>M. yumanensis</i>	Yuma myotis	7, 15
	<i>M. volans</i>	Long-legged myotis	1, 6, 7, 15
	<i>Plecotus townsendii</i>	Townsend's big-eared bat	7, 15
	<i>Pipistrellus hesperus</i>	Western pipistrelle	7, 15

1 = Guthrie and Large (1980); 2 = Wright (1981); 3 = Guthrie (1981); 4 = Moeur and Guthrie (1981); 5 = Kent (1981); 6 = BT observations (1991); 7 = Tyrell and Brack (1992); 8 = Felthausen (1980); 9 = Morrison (1986); 10 = Raymer and Biggs (1994); 11 = Foxx (1985); 12 = Kent (1986); 13 = Edeskuty, Foxx, and Raymer (1992); 14 = Biggs (1996a); 15 = Bogan et al. (1996); 16 = NM Species List (1997).

Reptiles and Amphibians at LANL and Surrounding Areas

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
Reptiles			
COLUBRIDAE	<i>Diadophis punctatus</i>	Ringneck snake	1, 2, 4
	<i>Elphae guttata</i>	Corn snake	1
	<i>Hypsiglena torquata</i>	Night snake	2
	<i>Masticophis taeniatus</i>	Striped whipsnake	1, 3
	<i>M. flagellum</i>	Coachwhip snake	3
	<i>Pituophis melanoleucus</i>	Gopher snake	2, 3
	<i>Salvadora grahamiae</i>	Mountain patch-nosed snake	1, 4
	<i>Thamnophis cyrtopsis</i>	Black-headed garter snake	2
	<i>Thamnophis elegans</i>	Western terrestrial garter snake	1, 2, 3
	<i>Opheodrys vernalis</i>	Smooth green snake	2
	<i>Pituophis melaonleucus sayi</i>	Bull snake	2
VIPERIDAE	<i>Crotalus atrox</i>	Western diamondback rattlesnake	2
	<i>Crotalus viridis</i> sub. <i>viridis</i>	Prairie rattlesnake	1, 2, 3
IGUANIDAE	<i>Crotophytus collaris</i>	Collared lizard	2, 3
	<i>Phrynosoma douglassi</i>	Short-horned lizard	1, 2, 3
	<i>Sceloporus undulatus</i>	Eastern fence lizard	1, 2, 3
	<i>Sceloporus undulatus tristichus</i>	Southern plateau lizard	1
	<i>Urosaurus ornatus</i>	Tree lizard	2
SCINCIDAE	<i>Eumeces multivirgatus</i>	Many-lined skink	2, 3
	<i>Eumeces obsoletus</i>	Great Plains skink	2
TEIIDAE	<i>Cnemidophorus exanguis</i>	Chihuahuan spotted whiptail	2, 3
	<i>C. inoranatus</i>	Little striped whiptail	2
	<i>C. neomexicanus</i>	New Mexico whiptail	3
	<i>Cnemidophorus velox</i>	Plateau striped whiptail	1, 2, 3
Amphibians			
AMBYSTOMATIDAE	<i>Ambystoma tigrinum</i>	Tiger salamander	1, 2
	<i>Plethodon neomexicanus</i>	Jemez Mountains salamander	2
BUFONIDAE	<i>Bufo woodhousei</i>	Woodhouse's toad	1, 2, 3
	<i>Bufo punctatus</i>	Red spotted toad	1, 2

Reptiles and Amphibians at LANL and Surrounding Areas (cont.)

FAMILY	SCIENTIFIC NAME	COMMON NAME	SOURCE
Amphibians			
HYLIDAE	<i>Pseudacris triseriata</i>	Western chorus frog	1, 2
	<i>Hyla arenicolor</i>	Canyon tree frog	1, 2
PELOBATIDAE	<i>Scaphiopus couchi</i>	Couch's spadefoot toad	2
	<i>S. multiplicatus</i>	New Mexican spadefoot toad	1, 2
1 = Bogart 1978; 2 = BT observations; 3 = Biggs and Cross 1995; 4 = Guthrie 1975			

Ant Species List from MacKay et al. (1986)

SUBFAMILY	SCIENTIFIC NAME	HABITAT TYPE	AUTHORITY
DOLICHODERINAE	<i>Acanthomyops interjectus</i>	Ponderosa	Mayr
	<i>A. latipes</i>	Ponderosa-riparian	Walsh
	<i>Brachymyrmex depilis</i>	Ponderosa	Emery
	<i>Camponotus herculeanus</i>	Aspen, spruce and riparian	Linnaeus
	<i>C. laevigatus</i>	Ponderosa-riparian	F. Smith
	<i>C. sansabeanus</i>	Ponderosa	Buckley
	<i>C. vicinus</i>	Ponderosa and ponderosa-riparian	Mayr
	<i>Formica altipetens</i>	Disturbed	Wheeler
	<i>F. argentea</i>	Disturbed and ponderosa-riparian	Wheeler
	<i>F. densiventris</i>	Ponderosa-riparian	Viereck
	<i>F. fusca</i>	Ponderosa-riparian	Linnaeus
	<i>F. hewitti</i>	Ponderosa-grass, ponderosa-riparian, riparian and aspen	Wheeler
	<i>F. lasioides</i>	Ponderosa-riparian	Emery
	<i>F. limata</i>	Ponderosa-riparian	Wheeler
	<i>F. microgyna</i>	Aspen	Wheeler
	<i>F. neogagates</i>	Disturbed	Emery
	<i>F. neorufibarbis</i>	Riparian, spruce and aspen	Emery
	<i>F. obscuripes obscuripes</i>	Ponderosa-riparian	Forel
	<i>F. obscuriventris clivia</i>	Ponderosa-riparian	Creighton
	<i>F. obtusopilosa</i>	Aspen	Emery
	<i>F. occulta</i>	Ponderosa-riparian and aspen	Francoeur
	<i>F. pergandei</i>	Disturbed and aspen	Emery
	<i>F. planipilis</i>	Ponderosa-riparian	Creighton
	<i>F. podzolica</i>	Disturbed, riparian, spruce and aspen	Francoeur
	<i>F. subnuda</i>	Ponderosa	Emery
	<i>Lasius alienus</i>	Ponderosa-riparian	Foerster
	<i>L. crypticus</i>	Ponderosa-riparian	Wilson
	<i>L. flavus</i>	Ponderosa-riparian	Fabricius
	<i>L. neoniger</i>	Ponderosa-riparian	Emery
	<i>L. niger</i>	Ponderosa-riparian	Linnaeus
	<i>L. pallitarsis</i>	Ponderosa and Ponderosa-riparian	Provancher

Ant Species List (cont.)

SUBFAMILY	SCIENTIFIC NAME	HABITAT TYPE	AUTHORITY
DOLICHODERINAE	<i>L. sitiens</i>	Ponderosa	Wilson
	<i>L. subumbratus</i>	Ponderosa-riparian	Viereck
	<i>Liometopum apiculatum</i>	Ponderosa-riparian	Mayr
	<i>L. luctuosum</i>	Ponderosa-riparian	Wheeler
	<i>Polyergus breviceps</i>	Ponderosa	Emery
	<i>Tapinoma sessile</i>	Ponderosa-riparian	Mayr
MYRMICINAE	<i>Crematogaster cerasi</i>	Ponderosa and riparian	Fitch
	<i>C. colei</i>	Disturbed	Buren
	<i>Leptothorax crassipilis</i>	Ponderosa-riparian	Wheeler
	<i>L. muscorum</i>	Ponderosa and ponderosa-riparian	Nylander
	<i>L. nitens</i>	Disturbed and ponderosa-riparian	Emery
	<i>L. obliquicanthus</i>	Disturbed	Cole
	<i>L. provacheri</i>	Riparian	Emery
	<i>L. texanus texanus</i>	Ponderosa-riparian	Wheeler
	<i>L. tricarinatus</i>	Ponderosa-riparian	Emery
	<i>Monomorium cyaneum</i>	Disturbed	Wheeler
	<i>M. minimum</i>	Ponderosa-riparian	Buckley
	<i>Myrmecina americana</i>	Ponderosa-riparian	Emery
	<i>Myrmica brevispinosa</i>	Riparian	Wheeler
	<i>M. emeryana</i>	Ponderosa-riparian	Forel
	<i>M. hamulata</i>	Ponderosa-riparian	Weber
	<i>M. incompleta</i>	Riparian and aspen	Provancher
	<i>Pheidole ceres</i>	Ponderosa, disturbed, burned ponderosa and ponderosa-riparian	Wheeler
	<i>P. soritis</i>	Disturbed	Wheeler
	<i>P. wheelerorum</i>	Disturbed and ponderosa-riparian	MacKay
	<i>Pogonomyrmex occidentalis</i>	Ponderosa and ponderosa-riparian	Cresson
	<i>Solenopsis molesta</i>	Disturbed, ponderosa-riparian and riparian	Say
	<i>Stenamma occidentale</i>	Ponderosa-riparian	M. R. Smith

Terrestrial Insects at LANL and Surrounding Areas

ORDER	FAMILY	COMMON NAME
Thysanura (Bristletails)	Lepismatidae	Silverfish
	Machilidae	Jumping bristletail
Collembola (Springtails)	Sminthuridae	Globular springtail
	Entomobryidae	Slender springtail
	Isotomidae	Smooth springtail
	Hypogastruridae	Elongate-bodied springtail
Odonata (Dragon and damselflies)	Aeshnidae	Darner
	Libellulidae	Common skimmer
	Coenagrionidae	Narrow-winged damselfly
	Gomphidae	Clubtail
Orthoptera (Grasshoppers and crickets)	Acrididae	Short-horned grasshopper
	Gryllacrididae	Camel cricket
	Gryllidae	True cricket
Phasmida (Walkingsticks)	Heteronemiidae	Common walkingstick
Plecoptera (Stoneflies)	Perlidae	Common stonefly
Dermaptera (Earwigs)	Forficulidae	Common earwig
Thysanoptera (Thrips)	Thripidae	Common thrip
Hemiptera (True bugs)	Belostomatidae	Giant water bug
	Miridae	Plant bug
	Reduviidae	Assassin bug
	Phymatidae	Ambush bug
	Lygaeidae	Seed bug
	Cydnidae	Burrower bug
	Scutelleridae	Shield-backed bug
	Pentatomidae	Stink bug
	Anthocoridae	Minute pirate bug
	Coreidae	Squash bug
	Nabidae	Damsel bug
Homoptera (Cicadas and kin)	Cicadidae	Cicada
	Aphididae	Aphids
	Cercopidae	Spittlebugs
	Cicadellidae	Leafhoppers
	Coccidae	Soft scales
	Delphacidae	Planthoppers
	Eriosomatidae	Gall-making aphids
	Psyllidae	Jumping plantlice
Neuroptera (Net-veined insects)	Myrmeleontidae	Antlion
	Hemerobiidae	Brown lacewings
	Raphidiidae	Snakefly
Coleoptera (Beetles)	Cicindelidae	Tiger beetle
	Carabidae	Ground beetle
	Silphidae	Carrion beetle
	Lampyridae	Firefly

Terrestrial Insects at LANL and Surrounding Areas (cont.)

ORDER	FAMILY	COMMON NAME
Coleoptera (Beetles)	Cantharidae	Soldier beetle
	Lycidae	Net-winged beetle
	Buprestidae	Metallic wood-boring beetle
	Staphylinidae	Rove beetle
	Erotylidae	Pleasing fungus beetle
	Nitidulidae	Sap beetle
	Coccinellidae	Ladybird beetle
	Tenebrionidae	Darkling beetle
	Meloidae	Blister beetle
	Cerambycidae	Long-horned beetle
	Lucanidae	Stag beetle
	Scarabaeidae	Scarab beetle
	Chrysomelidae	Leaf beetle
	Curulionidae	Weevil
	Dermestidae	Dermestid beetle
Lepidoptera (Butterflies, moths)	Papilionidae	Swallowtail
	Lycaenidae	Copper
	Hesperiidae	Skipper
	Pieridae	White, sulphur, and orange
	Nymphalidae	Brush-footed butterfly
	Satyridae	Satyr, nymph, and artie
	Noctuidae	Noctuid moth
	Sphingidae	Sphinx moth
	Saturniidae	Giant silkworm moth
	Gelechiidae	Gelechiid moth
	Geometridae	Measuring worms
	Pterophoridae	Plume moth
Diptera (Flies)	Tabanidae	Horse and deer flies
	Therevidae	Stiletto fly
	Asilidae	Robber fly
	Bombyliidae	Bee fly
	Syrphidae	Hover fly
	Tachinidae	Tachinid fly
Hymenoptera (Bees, ants, wasps)	Ichneumonidae	Ichneumonid wasp
	Cynipidae	Gall wasp
	Mutillidae	Velvet ant
	Scoliidae	Scoliid wasp
	Formicidae	Ant

Terrestrial Insects at LANL and Surrounding Areas (cont.)

ORDER	FAMILY	COMMON NAME
Hymenoptera (Bees, ants, wasps)	Pompilidae	Spider wasp
	Eumenidae	Euminid wasp
	Vespidae	Vespid wasp
	Sphecidae	Sphecid wasp
	Halictidae	Metallic wasp
	Megachilidae	Leafcutting bee
	Apidae	Honey and bumble bees

Non-Insect Terrestrial Arthropods

Class/Order	Family
Chilopoda (centipedes)	Geophilidae
	Lithobiidae
Diplopoda (millipedes)	Julidae
Arachnida/Acarina (spiders/mites)	Anystis
	Ascidae
	Bdellidae
	Bryobiidae
	Calligonellidae
	Cryptognathidae
	Cunaxidae
	Erythraeidae
	Eupodidae
	Gymnodamaeidae
	Laelapidae
	Nanorchestidae
	Paratydaeidae
	Phytoseiidae
	Rhagidiidae
	Rhaphignathidae
	Scutacaridae
	Stigmaeidae
	Tenuipalpidae
	Terpnacaridae
	Trombidiidae
	Tydeidae
	Tarsonemidae
	Zerconidae
Arachnida/Araneida	Agelenidae
	Amaurobiidae
	Anyphaenidae
	Araneidae
	Clubionidae
	Dictynidae
	Gnaphosidae
	Hahniidae
	Linyphiidae
	Lycosidae
	Micryphantidae
	Miryphantidae
	Oonopidae
	Pholcidae
	Tetragnathidae
	Salticidae
	Theridiidae
	Thomisidae
Arachnida/Opiliones	Phalangidae

Aquatic Invertebrates at LANL and Adjacent Areas

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Collembola (Springtails)				
Plecoptera (Stoneflies)	Capniidae	<i>Capnia</i>		F
	Capniidae			F, L
	Chloroperlidae	<i>Chloroperla</i>		F
	Chloroperlidae	<i>Paraperla</i>	<i>frontalis</i>	G, L
	Chloroperlidae	<i>Paraperla</i>		F
	Chloroperlidae	<i>Sweltsa</i>	<i>coloradensis</i>	F
	Chloroperlidae	<i>Sweltsa a</i>	<i>lamba</i>	F
	Chloroperlidae			F, G, L, P, SG
	Chloroperlidae	<i>Suwallia</i>		G, L
	Leuctridae	<i>Despoxia</i>		G
	Leuctridae	<i>Paraleuctra</i>	<i>vershina</i>	F
	Nemouridae	<i>Amphinemura</i>		F, G
	Nemouridae	<i>Amphinemura</i>	<i>banksi</i>	F, G, L, P, SG
	Nemouridae	<i>Malenka</i>	<i>coloradensis</i>	F
	Nemouridae	<i>Malenka</i>		G, L
	Nemouridae	<i>Nemoura</i>		F, G
	Nemouridae	<i>Podmosta</i>	<i>delicatula</i>	G, L, S
	Nemouridae	<i>Zapada</i>	<i>cinctipes</i>	F, L
	Nemouridae	<i>Zapada</i>	<i>frigida</i>	L
	Perlidae	<i>Acroneuria</i>	<i>abnormis</i>	F
	Perlidae	<i>Hesperoperla</i>	<i>pacifica</i>	F, L, SG
	Perlodidae	<i>Cultus</i>	<i>aestivalis</i>	G, L
	Perlodidae	<i>Isoperla</i>	<i>fulva</i>	F
	Perlodidae	<i>Isoperla</i>	<i>quinquepunctata</i>	F
	Perlodidae	<i>Isoperla</i>		F, G, L, S
	Perlodidae	<i>Kogotus</i>	<i>modestus</i>	G, L
	Perlodidae	<i>Skwala</i>	<i>parallela</i>	G
	Pteronarcyidae	<i>Pteronarcella</i>	<i>badia</i>	F, G
	Pteronarcyidae	<i>Pteronarcella</i>		F
	Pteronarcyidae	<i>Pteronarcys</i>	<i>californica</i>	G
	Pteronarcyidae	<i>Pteronarcys</i>		G
	Taeniopterygidae	<i>Taenionema</i>		F
Ephemeroptera (Mayflies)	Baetidae	<i>Acentrella</i>	<i>insignificans</i>	F
	Baetidae	<i>Baetis</i>	<i>bicaudatus</i>	F
	Baetidae	<i>Baetis</i>	<i>tricaudatus</i>	A, D, F, G, L, PS, RS, S
		<i>Baetis</i>		A, C, F, G, H, L, P, PS, S, SG, 128

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
	Baetidae	<i>Callibaetis</i>		G, L, P, PS, S, RS, 48
	Ephemerellidae	<i>Drunella</i>	<i>coloradensis</i>	G, L
	Ephemerellidae	<i>Drunella</i>	<i>doddsi</i>	F, G
	Ephemerellidae	<i>Drunella</i>	<i>grandis</i>	F, G
	Ephemerellidae	<i>Ephemerella</i>	<i>doddsi</i>	G
	Ephemerellidae	<i>Ephemerella</i>	<i>inermis</i>	F, G, L
	Ephemerellidae	<i>Ephemerella</i>	<i>infrequens</i>	F, G
	Ephemerellidae	<i>Ephemerella</i>		F
	Heptageniidae	<i>Cinygmula</i>		G, L
	Heptageniidae	<i>Epeorus</i>	<i>longimanus</i>	F, G, L
	Heptageniidae	<i>Epeorus</i>		F, G, L
	Heptageniidae	<i>Heptagenia</i>		G
	Heptageniidae	<i>Nixe</i>	<i>simplicoides</i>	L
	Heptageniidae	<i>Rhithrogena</i>		F, G
	Leptophlebiidae	<i>Paraleptophlebia</i>		F, G, L
	Siphonuridae	<i>Ameletus</i>		F, G, L, S, SG
	Siphonuridae	<i>Siphonurus</i>	<i>occidentalis</i>	F, L
	Siphonuridae	<i>Siphonurus</i>		F
	Tricorythidae	<i>Tricorythodes</i>	<i>minutus</i>	S
Odonata				
suborder Anisoptera (Dragonflies)	Aeshnidae	<i>Aeshna</i>		A, C, F, I, S
	Aeshnidae	<i>Anax</i>		H, P, S, 48
	Aeshnidae	<i>Boyeria</i>		L, S
	Cordulegastriidae	<i>Cordulegaster</i>		F, S
	Corduliidae	<i>Belonia</i>		A, C, P
	Corduliidae	<i>Neurocordulia</i>		RS
	Gomphidae			L, P
	Libellulidae	<i>Leucorrhinia</i>		I
	Libellulidae	<i>Libellula</i>		
	Libellulidae	<i>Pantala</i>		A, C
	Libellulidae	<i>Platyhemis</i>		P
	Libellulidae	<i>Sympetrum</i>		PS
	Libellulidae			A, F, PS
suborder Zygoptera (Damselflies)	Agriidae	<i>Argion</i>		A
	Agriidae	<i>Hetaerina</i>		A, PS, RS
	Coenagriidae	<i>Argia</i>		A, C, F, P, RS, S, PS
	Coenagriidae	<i>Enallagma</i>		I, S
	Coenagriidae	<i>Hyponeura</i>		F
	Coenagriidae	<i>Ishnura</i>	<i>perparua</i>	F
	Coenagriidae	<i>Ishmura</i>		H, S
	Coenagriidae	<i>Zoniagrion</i>		S

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
suborder Zygoptera (Damselflies)	Lestidae	<i>Archilestes</i>		PS, RS, S
	Lestidae	<i>Lestes</i>		A, C, S
Hemiptera (True bugs)	Corixidae	<i>Corisella</i>		F
	Corixidae	<i>Sigara</i>		F
	Corixidae	<i>Trichocorixa</i>		A, P, S
	Gerridae	<i>Gerris</i>	<i>marginatus</i>	F
	Gerridae	<i>Gerris</i>	<i>notabilis</i>	F
	Gerridae	<i>Gerris</i>		A, D, F, G, H, I, L, PS, RS, S
	Gerridae	<i>Metrobates</i>		PS
	Gerridae	<i>Trepobates</i>		H, S
	Naucoridae	<i>Ambrysus</i>	<i>mormon</i>	A, C, PS, RS
	Notonectidae	<i>Notonecta</i>	<i>undulata</i>	F
	Notonectidae	<i>Notonecta</i>		C, S
	Salididae			RS
	Veliidae	<i>Microvelia</i>		A, F, G, L
	Veliidae	<i>Rhagovelia</i>		A, S
	Veliidae			A, PS
Trichoptera (Caddisflies)	Brachycentridae	<i>Amiocentrus</i>		F
	Brachycentridae	<i>Brachycentrus</i>	<i>americanus</i>	F
	Brachycentridae	<i>Brachycentrus</i>		F
	Brachycentridae	<i>Micrasema</i>		F, G, L
	Brachycentridae pupae	<i>Micrasema</i>		G
	Calamoceratidae	<i>Phylloicus</i>		F
	Glossosomatidae	<i>Agapetus</i>		G
	Glossosomatidae	<i>Anagapetus</i>		G
	Glossosomatidae	<i>Glossosoma</i>		F, G, L
	Glossosomatidae pupae	<i>Glossosoma</i>		G
	Helicosychidae	<i>Helicopsyche</i>	<i>borealis</i>	A, F, G, L, PS, R, S
	Helicosychidae	<i>Helicopsyche</i>		F
	Hydropsychidae	<i>Arctopsyche</i>	<i>grandis</i>	A, F, G, L, S, PS
	Hydropsychidae	<i>Cheumatopsyche</i>		G, PS, RS
	Hydropsychidae	<i>Hydropsyche</i>	<i>occidentalis</i>	PS
	Hydropsychidae	<i>Hydropsyche</i>	<i>oslari</i>	A, F, RS, S
	Hydroptilidae	<i>Alisotrichia</i>		PS
	Hydroptilidae	<i>Hydroptila</i>		A, P, PS, RS, S
	Hydroptilidae	<i>Leucotrichia</i>		PS

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Trichoptera (Caddisflies)	Hydroptilidae	<i>Ochrotrichia</i>		S
	Hydroptilidae	<i>Stactobiella</i>		A, L, PS, RS
	Lepidostomatidae	<i>Lepidostoma</i>		F, G, L, S, SG
	Lepidostomatidae			G
	Leptoceridae	<i>Oecetis</i> ?		G, L, P, S
	Limnephilidae	<i>Dicosmoecus</i>		F
	Limnephilidae	<i>Hesperophylax</i>		G, L, P, RS, S, SG
	Limnephilidae pupae	<i>Hesperophylax</i>		G, L
	Limnephilidae	<i>Limnephilus</i>		F, G, L, PW, RS, S
	Limnephilidae	<i>Oligophlebodes</i>		F, G, L, PS
	Limnephilidae pupae	<i>Oligophlebodes</i>		G
	Limnephilidae	<i>Psychoronia</i>		F, G
	Odontoceridae	<i>Namamyia</i>		G
	Philopotamidae	<i>Chimarra</i>		A, PS, RS
	Philopotamidae	<i>Dolophilodes</i>	<i>aequalis</i>	F
	Philopotamidae	<i>Dolophilodes</i>	<i>sortosa</i>	F, G
	Philopotamidae	<i>Dolophilodes</i>		G, L
	Philopotamidae	<i>Wormaldia</i>		F, PS, RS
	Polycentropidae	<i>Polycentropus</i>		F, RS
	Rhyacophilidae	<i>Atopsyche</i>		L
	Rhyacophilidae	<i>Rhyacophila</i>	<i>acropedes</i>	F, G
	Rhyacophilidae	<i>Rhyacophila</i>	<i>brunea</i> complex	F, G, L
	Rhyacophilidae	<i>Rhyacophila</i>	<i>coloradensis</i>	F
	Rhyacophilidae	<i>Rhyacophila</i>	<i>hyalinata</i>	F, G
	Rhyacophilidae	<i>Rhyacophila</i>	<i>valuma</i>	F, G
	Rhyacophilidae	<i>Rhyacophila</i>		F
	Rhyacophilidae	<i>Rhyacophila</i>	Type A	A
	Sericostomatidae	<i>Gumaga</i>		RS
Megaloptera (Nerve-wings)	Corydalidae	<i>Neohermes</i> ?		G, L
Lepidoptera (Butterflies, moths)	Noctuidae			G, L, PS
	Pyalidae			G, S
	Pyalidae	<i>Paraponyx</i>		PS
	Pyalidae	<i>Paragyraetis</i>	<i>kearfottalis</i>	F, PS
	Pyalidae	<i>Petrophila</i>		PS, RS, S
Coleoptera (Beetles)	Amphizoidae	<i>Amphizoa</i>		G
	Curculionidae	<i>Phytonomus</i>		G, L, S
	Curculionidae			D, F

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Coleoptera (Beetles)	Curculionidae adult			G
	Dryopidae	<i>Helichus</i>	<i>suturalis</i>	F
	Dryopidae	<i>Helichus</i>	<i>striatus</i>	F
	Dryopidae adult	<i>Helichus</i>		F, G, L, S, P, PS, RS
	Dytiscidae	<i>Agabus</i>		A, C, D, L, P, RS, S
	Dytiscidae	<i>Agabus</i>	<i>cordatus</i>	F
	Dytiscidae	<i>Agabus</i>	<i>tristus</i>	F
	Dytiscidae	<i>Deronectes</i>	<i>striatellus</i>	F
	Dytiscidae	<i>Deronectes</i>		L
	Dytiscidae	<i>Dytiscus</i>		F
	Dytiscidae	<i>Hydroporus</i>	<i>vilis</i>	F
	Dytiscidae	<i>Hydroporus</i>		S
	Dytiscidae	<i>Hygrotus</i>		S
	Dytiscidae	<i>Rhantus</i>		RS
	Dytiscidae			L, RS, S
	Dytiscidae adult			G, L, PS, S
	Dytiscidae adult		Type A	M, S
	Dytiscidae adult		Type B	M, S
	Dytiscidae adult		Type C	S
	Dytiscidae adult	<i>Hydaticus</i>		G, L, PS, S
	Elmidae	<i>Cleptelmis</i>	<i>addenda</i>	F
	Elmidae	<i>Cylloepus</i>		F
	Elmidae	<i>Dubiraphia</i>		G
	Elmidae	<i>Heterelmis</i>		A, RS
	Elmidae	<i>Heterolimnius</i>	<i>corpulentis</i>	F, G, L, PS, RS, S, SG
	Elmidae adult	<i>Heterolimnius</i>	<i>corpulentis</i>	G, L, PS, SG
	Elmidae	<i>Microcylloepus</i>		PS, RS
	Elmidae	<i>Narpus</i>	<i>concolor</i>	F
	Elmidae	<i>Narpus</i>		F, G, L
	Elmidae adult	<i>Narpus</i>		G, L
	Elmidae	<i>Optioservus</i>	<i>castanipennis</i>	F
	Elmidae	<i>Optioservus</i>	<i>divergens</i>	F
	Elmidae	<i>Optioservus</i>		D, F, L, PS, S
	Elmidae	<i>Rhizelmis</i>		F
	Elmidae	<i>Zaitzevia</i>	<i>parvula</i>	D, F, L
	Elmidae adult	<i>Zaitzevia</i>		C, G, L, S
	Elmidae			G, L, S

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Coleoptera (Beetles)	Elmidae adult			G, L, S
	Gyrinidae	<i>Gyrinus</i>		A, F, S, PS, RS
	Haliplidae	<i>Haliphus</i>		IC
	Haliplidae	<i>Pelodytes</i>		G
	Helodidae	<i>Prionocyphon</i>		G
	Hydrophilidae	<i>Ametor</i>	<i>scabrosus</i>	F
	Hydrophilidae	<i>Ametor</i>		A, C, G, L, S
	Hydrophilidae adult	<i>Ametor</i>		G
	Hydrophilidae	<i>Berosus</i>	<i>styliferous</i>	F
	Hydrophilidae	<i>Crenitis</i>		F
	Hydrophilidae	<i>Cymbiodyta</i>	<i>dorsalis</i>	F
	Hydrophilidae	<i>Enochrus</i> ?		G
	Hydrophilidae	<i>Helphorus</i>		L
	Hydrophilidae	<i>Hydrobius</i>		L
	Hydrophilidae	<i>Hydrochus</i>		G
	Hydrophilidae adult	<i>Hydrochus</i>		G
	Hydrophilidae			G, L, P, RS, S
	Hydrophilidae adult			G
	Psephenidae	<i>Psphenus</i> ?		C, P, 48
	Psephenidae			G
Diptera (Flies)	Blephariceridae			F
	Ceratopogonidae (Heleidae)	<i>Bezzia</i>		G, L, RS, S
	Ceratopogonidae (Heleidae)	<i>Culicoides</i> ?		RS
	Ceratopogonidae (Heleidae)			F, G, P, S, PS
	Chironomidae	<i>Ablabesmyia</i>		F, RS
	Chironomidae	<i>Brillia</i>		F, G, L, S
	Chironomidae	<i>Cardiocladius</i>		F, G, S
	Chironomidae	<i>Chaetocladius</i>		S
	Chironomidae	<i>Chironomus</i>		F
	Chironomidae	<i>Corynoneura</i>		A, G, L, PS, RS
	Chironomidae	<i>Cricotopus</i>		F, RS
	Chironomidae	<i>Chironomus</i>		F
	Chironomidae	<i>Corynoneura</i>		A, G, L, PS, RS
	Chironomidae	<i>Cricotopus</i>		A, F, G, PS, RS, S
	Chironomidae	<i>Cryptochironomus</i>		F

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Diptera (Flies)	Chironomidae	<i>Cryptotendipes</i>		A
	Chironomidae	<i>Diamesa</i>		S
	Chironomidae	<i>Eukiefferiella</i>		A, F, G, L, S
	Chironomidae	<i>Labrundinia</i>		RS
	Chironomidae	<i>Micropsectra</i>		A, F, L, RS, PS
	Chironomidae	<i>Microtendipes</i>		D, F
	Chironomidae	<i>Nanocladius</i>		F
	Chironomidae	<i>Nostocladius</i>		A, F, G, PS
	Chironomidae	<i>Nostococladius</i>		A, F, G, PS
	Chironomidae	<i>Orthocladius</i>		A, F, PS, RS, S
	Chironomidae	<i>Pagastia</i>		L, S
	Chironomidae	<i>Parametriocnemus</i>		L, RS, S
	Chironomidae	<i>Paraphaenocladius</i>		S
	Chironomidae	<i>Phaenopsectra ?</i>		RS
	Chironomidae	<i>Polypedilum</i>		A, F
	Chironomidae	<i>Procladius</i>		F, RS
	Chironomidae	<i>Pseudochironomus</i>		A, RS
	Chironomidae	<i>Pseudosmittia</i>		G
	Chironomidae	<i>Rheotanytarsus</i>		A, F, PS, RS
	Chironomidae	<i>Stempellina</i>		G
	Chironomidae	<i>Stempellinaella ?</i>		L
	Chironomidae	<i>Thienemannimyia</i>		A, L, RS, S
	Chironomidae	<i>Thienemanniella</i>		A
	Chironomidae	<i>Tvetenia</i>		F, L, PS, S
	Chironomidae	<i>Zavrelia</i>		F
	Chironomidae	<i>Zavrelimyia</i>		RS
	Chironomidae, Macropelopini			L, RS
	Chironomidae, Orthoclaadiinae			A, L, PS, RS
	Chironomidae		Type A	C, G, H, L, P, PS, S, SG, 128
	Chironomidae		Type B	G, L, P, S, PS
	Chironomidae		Type C	G, H, L, P, S, 128
	Chironomidae		Type D	G, L, P, S, PS
	Chironomidae		Type E	G, L, PS
	Chironomidae		Type F	G, L, S
	Chironomidae		Type G	A, C, G, H, L, P, PS, S

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Diptera (Flies)	Chironomidae pupae		Type G	G
	Chironomidae		Type H	L, S
	Chironomidae		Type I	SG
	Chironomidae		Type M	RS
	Chironomidae		Type P	G
	Chironomidae		Type R	L
	Chironomidae pupae			C, G, I, L, S
	Chironomidae		Type PA	G, L
	Chironomidae		Type PB	S
	Chironomidae pupae		Type PC	S
	Culicidae	<i>Aedes</i>		F
	Culicidae	<i>Chaoborus</i>		I, 48
	Culicidae	<i>Culex</i>		F, H, RS, 128
	Culicidae	<i>Culiseta</i>		D, H, M, 48, 128
	Dixidae	<i>Dixa</i>		F, G, L, PS, RS
	Dixidae	<i>Dixa</i>	<i>californica</i>	F
	Dixidae		Type A	G, L, P, PS
	Dixidae			F, G, L, PS, RS
	Empididae	<i>Chelifera</i>		F, G, L, RS, S
	Empididae	<i>Oreogeton</i>		C, F, G, L, P, S
	Empididae			A, H
	Empididae pupae	<i>Hemerodromia</i>		G, S
	Ephydriidae	<i>Brachydeutera</i>		S
	Ephydriidae pupae			S
	Heleidae			C, P
	Muscidae	<i>Limnophora</i>	<i>aequifrons</i>	F
	Muscidae	<i>Limnophora</i>		A, D, L, S, SG
	Muscidae			RS, S
	Psychodidae	<i>Maruina</i>		G, L, PS, RS, S
	Psychodidae	<i>Pericome</i>		F, G, L
	Psychodidae pupae			S
	Ptychopteridae	<i>Bittocomorpha</i>		A, G, L, S
	Ptychopteridae			G

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

INSECTS				
ORDER (COMMON NAME)	FAMILY	GENUS	SPECIES	LOCATION
Diptera (Flies)	Simulidae			D, F, G, L, S, SG
	Simulidae			A, F, G, L, S
	Simulidae			A, F, G, L, PS, RS, S
	Simulidae pupae			G, L, S
	Simulidae pupae		Type PA	G
	Stratiomyidae			F
	Stratiomyidae			G,PS,S
	Syrphidae		<i>bastardii</i>	F
	Tabanidae			F, G, L, S
	Tabanidae			H, M
	Tabanidae			PW, S, 128
	Tanyderidae			F
	Tipulidae			G, L, S
	Tipulidae		<i>monticola</i>	F, G
	Tipulidae			F, G, L, PS, S, SG
	Tipulidae			F, L, RS
	Tipulidae		<i>grandis</i>	F
	Tipulidae			RS
	Tipulidae			F, RS, S
	Tipulidae			F, L
	Tipulidae			D, F, G, L, PS, RS, S
	Tipulidae		Type B	G, L, RS, S
	Tipulidae			G, RS
NON-INSECTS				
PHYLUM or SUBPHYLUM (COMMON NAME)	CLASS, ETC.	COMMON NAME	LOCATION	
Annelida (Segmented worms)	Hirudinea	Leech	A, F	
	Megadrilli		RS	
	Oligochaeta, Lumbriculidae <i>Eiseniella tetraedra</i>	Aquatic earthworms	F	
	Oligochaeta, Lumbriculidae	Aquatic earthworms	A, F, G, L, PS, RS, S, SG	
	Oligochaeta B, Lumbriculidae	Aquatic earthworms	G	
	Oligochaeta, Naididae	Coil worms	F, G, L, RS, S	
	Oligochaeta, Tubificidae	Tubifex worms	RS, S	

Aquatic Invertebrates at LANL and Adjacent Areas (cont.)

PHYLUM or SUBPHYLUM (COMMON NAME)	CLASS, ETC.	COMMON NAME	LOCATION
Arthropoda, Arachnodea (spiders, ticks, and mites)	family Hydracarina	Water mites	C, F, G, L, PS, S
Aschelminthes (round worms and hairworms)	Nematomorpha	Horsehair worm	C, F, G, L, P, S
	Nematomorpha, Gordioidea, Gordiidae, <i>Gordius</i>	Horsehair worm	F, G
Crustacea (crustaceans)	Amphipoda, Gammaridae, <i>Gammarus</i>	Scuds	RS
	Amphipoda, Talitridae, <i>Hyatella azteca</i>	Scuds	A, C, PS, RS
	Cladocera	Water fleas	O
	Copepoda	Copepods	S
	Ostracoda	Seed shrimp	C, RS, S, SG
Mollusca (mollusks)	Lymnaeidae, <i>Lymnaea</i>	Snails	A, G, L, P, RS, S
	Physidae, <i>Physella gyrina</i>	Snails	A, F, RS
	Physidae, <i>Physella</i>	Snails	A
	Physidae, <i>Physa</i>	Snails	F, S
	Planorbidae, <i>Gyrulus parvus</i>	Snails	G, IC, S
	Sphaeriidae, <i>Pisidium casertanum</i>	Clams	F, G, L, PS, RS
	Sphaeriidae, <i>Pisidium compressa</i>	Clams	H
	Gastropoda	Snails	SG
	Gastropoda, Type A	Snails	G, L
Nematoda (round worms)		Free-living roundworm	F, G, L, PS, RS
Platyhelminthes (flat worms)	Turbellaria	Planaria	A, C, F, G, L, PS, RS, S, SG

All specimens are larvae unless otherwise noted. Locations: A = Ancho Canyon, C = Chaquehui Canyon, D = DP Canyon, F = Rio Frijoles and Frijoles Canyon, G = Guaje Canyon, H = High explosives wastewater stream, I = Ice house pond off West Jemez Road, L = Los Alamos Canyon, O = Otowi firestation pond, M = Mortandad Canyon, PW = Pajarito Wetlands, PS = Pajarito Springs, RS = Rio Springs, S = Sandia Canyon, SG = Starmer's Gulch, 48 = TA-48 pond, 128 = outfall 128

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