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Mammals of Lincoln County: A Checklist

Lincoln National Forest

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Introduction

Lincoln County's diversity of topography and habitat—ranging from above tree line through forests to arid grasslands—provides home for 65 species of mammals. Some mammals range over most of the county and in most habitats (such as coyotes) while others are restricted to specific areas or habitats (such as least chipmunks). Many of these mammals are nocturnal, small, secretive, and rarely seen; others are large and frequently seen by even the most casual observer. All of these animals are wild and should be treated with the respect due any wild creature. The smaller ones do not like to be handled and will bite; the larger ones can inflict serious damage when startled or approached too closely. New Mexico law forbids the feeding of wild mammals.

In this brochure, the mammals will be listed by common name with species names below. Identification of many mammalian species, especially native mice, is difficult and depends upon characteristics seen only in details of teeth, skull, or other parts of the anatomy. However, some effort will be made to aid in recognizing at least the more common mammals.

Vegetation

The vegetation of Lincoln County consists of coniferous forest, woodland, grassland, and riparian areas. White Mountain Wilderness supports small areas of alpine-montane grassland above timberline. These broad categories are subdivided based on types of vegetation and elevation.

Coniferous Forests

Montane Forest

Lower Montane Forest: Exists at elevations generally below 8,500 feet and are relatively warm and dry forests dominated by ponderosa pine, piñon pine, numerous juniper species, and several oaks.

Mixed Coniferous Forest: Occurs at middle elevations (approximately 8,000 to 10,000 feet) and features Douglas-fir, white fir, ponderosa pine, southwestern white pine, and small aspen groves.

Subalpine Forest: Occurs from approximately 9,500 feet elevation to timberline. Subalpine species include corkbark fir and Englemann spruce.

Woodland

Differs from coniferous forests in two ways. Canopies of individual woodland trees do not usually touch or overlap. Also, woodland tree species are smaller in stature than forest tree species. Piñon and juniper species comprise the woodland in Lincoln County.

Grasslands

Desert: Dominated by blue grama grass and red threeawn, and is present at elevations of 6,000 feet and below. In New Mexico when lower grasslands are disturbed, they are invaded by creosote bush, mesquite, and other desert-like plants.

Plains-mesa: The most extensive grassland in the county, where wolftail and blue grama grasses dominate.

Subalpine-montane Grassland: Found primarily at elevations between 8,500 and 11,500 feet. Mountain muhly and Thurber's fescue are predominant at these elevations.

Riparian

Vegetation such as reeds, cattails, sedges and associated hardwoods found along rivers, streams, seeps, ponds, and lakes make up the riparian habitat in the county.



Description of Mammals

Shrews: Nocturnal, rarely seen, and small with sharp noses and small, beady eyes.

Bats: The winged, flying mammals.

Rabbits and Hares: Cottontails are smaller, with shorter legs and ears than the jackrabbit which has very large ears and long legs.



Chipmunks, Squirrels, and Ground Squirrels: Chipmunks are small and stripes extend through the eyes. Ground squirrels are from chipmunk to large squirrel size, striping never extends through the eyes and they are not frequently found in trees. Our tree squirrel, the red squirrel, is small, reddish gray with a bushy tail and is very acrobatic in trees.

Pocket Gophers: Their conical mounds are seen more frequently than the gopher. Short tail, small ears, small eyes, large front paws, and larger incisor teeth identify them.

Pocket Mice and Kangaroo Rats: Fur-lined cheek pouches are most typical and frequently are bulging with food. Kangaroo rats have very large hind legs, long tails, and tend to hop on the hind legs. Pocket mice are smaller and have shorter hind legs.

Rats, Mice, and Voles: Most of our native mice are small and difficult to tell apart. They look like mice. Woodrats are larger and rat-like. Voles have short ears, small eyes, and short tails (confused with pocket gophers but with smaller front paws and incisor teeth).

Coyotes and Foxes: Coyotes are medium large dog size. Gray foxes are smaller with a black ridge of hair running down the top of the tail and a black tail tip. Kit foxes are smaller still with larger ears and no tail stripe or black tip.

Ringtails and Raccoons: Ringtails are cat-size with a long, bushy, ringed tail. Raccoons are larger and have a distinctive face mask.

Weasels, Badgers, and Skunks: Weasels are long and slender. Badgers are large, squat with a distinctive mid-face stripe and large front claws. Striped skunks have a black body, white stripe on the forehead, broad white on the nape and usually two stripes on the back. Hog-nosed skunks have the entire back and tail white and a hog-like snout.

Bobcat: Large cat size with a short tail.

Mountain Lion: Mountain lions are found in most parts of New Mexico—wherever there is an abundance of prey, rough terrain, and adequate vegetation to provide hunting cover. Adult males may be more than 8 feet long and can weight 150 pounds or more.

Pronghorn: The horns with the forward spur, two large white throat patches, and large white rump patch distinguish this unique, goat-sized mammal.

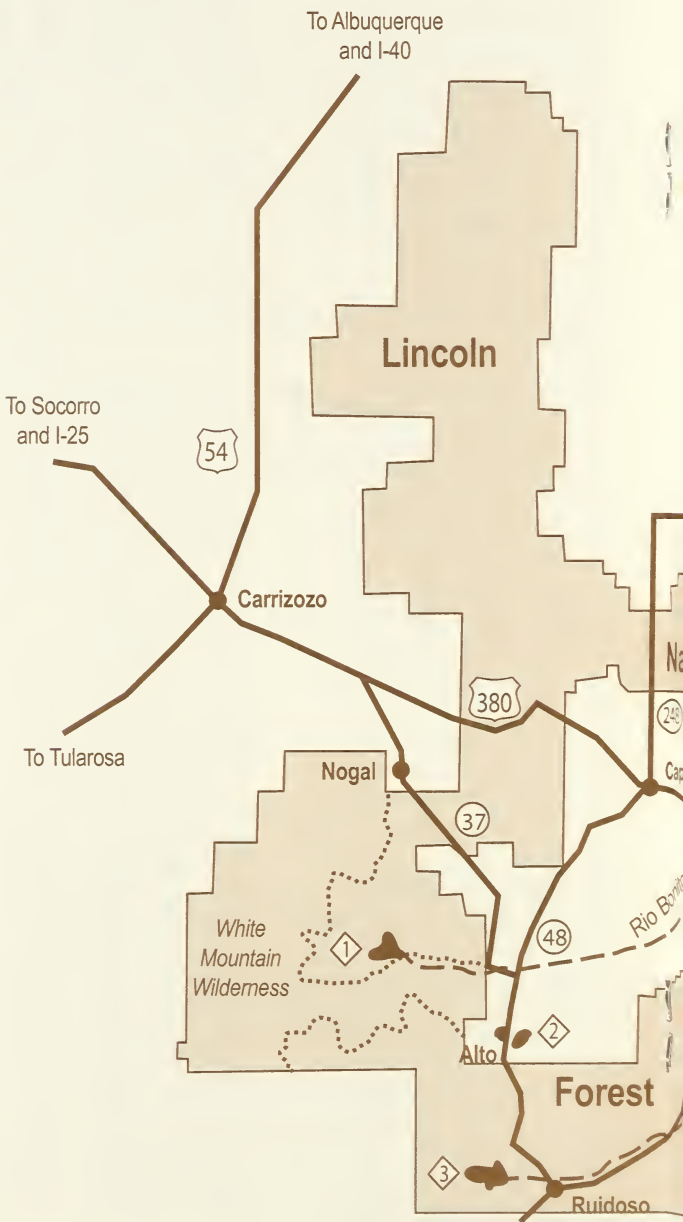
Elk and Deer: Mule deer have narrow tails, large mule-like ears, and bound with a stiff-legged gait, tail held down. White-tailed deer have broad white tails, small dainty ears and move with a graceful lope, the flag-like tail held erect. Elk (Wapiti) have a yellowish patch on the rump around a small tail. They generally are light tan with a contrasting darker mane of hair around the shoulders. Elk are the largest of these three.

Black Bears: This medium-sized bear is usually black with a brown muzzle, lacks a shoulder hump, and often has a white patch on the chest. Although black is the predominant color, chocolate and cinnamon brown phases are also common, which often results in people confusing them with brown bears. Black bears are widely distributed throughout the forested areas of New Mexico. Black bears vary considerably in size, depending on the quality of food available. Adult male black bears range from 150 to 500 pounds. Females weigh 100 to 300 pounds.



	Desert Grassland	Plains-Mesa Grassland	Woodland	Lower Montane Forest	Mixed Coniferous Forest	Subalpine Forest	Subalpine-Montane Grassland	Riparian
___ Western Red Bat <i>Lasiurus blossevillii</i>	●	●	●	●				●
___ Townsend's Big-eared <i>Corynorhinus townsendii</i>	●	●	●	●	●	●	●	●
___ Western Small-footed Myotis <i>Myotis ciliolabrum</i>	●	●	●	●	●	●	●	●
___ Yuma Myotis <i>Myotis yumanensis</i>	●	●	●					●
Rabbits and Hares								
___ Eastern Cottontail <i>Sylvilagus floridanus cognatus</i>				●	●	●		
___ Desert Cottontail <i>Sylvilagus audubonii cedrophilus;</i> <i>minor; neomexicana</i>	●	●	●					
___ Black-tailed Jack Rabbit <i>Lepus californicus melanotis;</i> <i>texianus</i>	●	●	●	●				
Chipmunks, Squirrels, and Ground Squirrels								
___ Colorado, Oscura Mountains <i>Neotamias quadrivittatus</i> <i>oscuraensis</i>			●	●	●			
___ Eastern Fox Squirrel <i>Sciurus niger</i>	●	●	●					
___ Penasco Least Chipmunk, <i>Neotamias minimus atristriatus</i>					●	●		
___ Gray-footed Chipmunk <i>Neotamias canipes canipes</i>	●	●	●	●	●			
___ Texas Antelope Squirrel <i>Ammospermophilus interpres</i>	●	●	●					
___ Thirteen-lined Ground Squirrel <i>Spermophilus tridecemlineatus</i> <i>arenicola; blanca; hollisteri</i>	●	●	●					
___ Spotted Ground Squirrel <i>Spermophilus spilosoma</i> <i>canescens; cryptospilotus;</i> <i>marginatus</i>	●	●						
___ Rock Squirrel <i>Spermophilus variegatus</i>	●	●	●	●	●			●

Northern Sacramento Mountains Lincoln National Forest



Legend

- ① Bonito Lake
- ② Alto Lake
- ③ Grindstone Lake



	Desert Grassland	Plains-Mesa Grassland	Woodland	Lower Montane Forest	Mixed Coniferous Forest	Subalpine Forest	Subalpine-Montane Grassland	Riparian
___ Red Squirrel <i>Tamiasciurus hudsonicus fremonti; mogollouensis</i>			●	●	●	●		
Pocket Gophers								
___ Botta's Pocket Gopher <i>Thomomys bottae</i>	●	●	●	●	●	●	●	●
___ Desert Pocket Gopher <i>Geomys arenarius brevirostris</i>	●	●						
___ Yellow-faced Pocket Gopher <i>Cratogeomys castanops castanops; hirtus, parviceps</i>		●						
Pocket Mice and Kangaroo Rats								
___ Silky Pocket Mouse <i>Perognathus flavus flavus; hopiensis</i>	●	●	●					
___ Rock Pocket Mouse <i>Chaetodipus intermedius ater</i>	●	●	●	●				●
___ Ord's Kangaroo Rat <i>Dipodomys ordii longipes; medius; montanus; ordii; richardsoni</i>	●	●	●					
___ Banner-tailed Kangaroo Rat <i>Dipodomys spectabilis baileyi</i>	●	●						
___ Merriam's Kangaroo Rat <i>Dipodomys merriami ambiquus; olivaceus</i>	●	●						
Beaver								
___ American Beaver <i>Castor canadensis frondator; mexicanus; concisor; missouriensis</i>								●
Rats, Mice, and Voles								
___ Plains Harvest Mouse <i>Reithrodontomys montanus montanus; griseus</i>		●	●	●				
___ Western Harvest Mouse <i>Reithrodontomys megalotis megalotis; aztecus</i>	●	●	●					

	Desert Grassland	Plains-Mesa Grassland	Woodland	Lower Montane Forest	Mixed Coniferous Forest	Subalpine Forest	Subalpine-Montane Grassland	Riparian
— Cactus Mouse <i>Peromyscus eremicus anthonyi</i> ; <i>eremicus</i>	●	●						
— Deer Mouse <i>Peromyscus maniculatus blandus</i> ; <i>rafinus</i>	●	●	●	●	●	●	●	●
— House Mouse <i>Mus musculus</i>	●	●	●	●	●			●
— White-footed Mouse <i>Peromyscus leucopus arizonae</i> ; <i>tornillo</i>	●	●	●	●	●			
— Brush Mouse <i>Peromyscus boylii rowleyi</i>			●	●	●			●
— Pinyon Mouse <i>Peromyscus truei truei</i>			●	●	●			
— Mearn's Grasshopper Mouse <i>Onychomys arenicola</i>	●	●	●	●	●			
— Northern Grasshopper Mouse <i>Onychomys leucogaster arcticeps</i> ; <i>pallescens</i> ; <i>ruidosae</i>	●	●						
— Northern Rock Mouse <i>Peromyscus nasutus nasutus</i> ; <i>penicillatus</i>	●	●	●	●	●			●
— White-ankled Mouse <i>Peromyscus pectoralis laceianus</i>	●	●	●	●				
— Hispid Cotton Rat <i>Sigmodon hispidus berlandieri</i> ; <i>confinis</i>	●	●						●
— Southern Plains Woodrat <i>Neotoma micropus canescens</i>	●	●	●					
— White-throated Woodrat <i>Neotoma albigula albigula</i> ; <i>laplataensis</i> ; <i>warreni</i> ; <i>mearnsi</i> ; <i>venusta</i>	●	●	●	●	●			
— Mexican Woodrat <i>Neotoma mexicana mexicana</i> ; <i>inopinata</i> ; <i>pinetorum</i> ; <i>scopulorum</i>	●	●	●	●	●			
— Mogollon Vole <i>Microtus mogollonensis</i> <i>guadalupensis</i> ; <i>mogollonensis</i>		●	●	●	●	●	●	●

	Desert Grassland	Plains-Mesa Grassland	Woodland	Lower Montane Forest	Mixed Coniferous Forest	Subalpine Forest	Subalpine-Montane Grassland	Riparian
___ Long-tailed Vole <i>Microtus longicaudus longicaudus;</i> <i>alticola; baileyi; mordax</i>		•	•	•	•	•	•	•
___ Pecos River Muskrat <i>Ondatra zibethicus ripensis</i>								•
Porcupine								
___ Common Porcupine <i>Erethizon dorsatum couesi;</i> <i>epixanthum</i>	•	•	•	•	•	•		•
Nutria								
___ Nutria <i>Myocastor coypus</i>								•
Coyotes and Foxes								
___ Coyote <i>Canis latrans lestes; mearnsi;</i> <i>texensis</i>	•	•	•	•	•	•	•	•
___ Kit Fox <i>Vulpes macrotis neomexicanus;</i> <i>macrotis</i>	•	•						
___ Common Gray Fox <i>Urocyon cinereoargenteus scottii</i>	•	•	•	•	•			•
___ Red Fox <i>Vulpes vulpes fulva; macroura</i>	•	•	•	•	•	•		•
Pig								
___ Feral <i>Sus scrofa</i>	•	•	•	•				•
Sheep								
___ Barbary <i>Ammotragus Lervia</i>	•	•	•					
Bear								
___ Black Bear <i>Ursus americanus amblyceps</i>			•	•	•	•	•	•
Ringtail and Raccoon								
___ Ringtail <i>Bassariscus astutus arizonensis;</i> <i>flavus; yumanensis; nevadensis</i>		•	•	•	•			
___ Common Raccoon <i>Procyon lotor hirtus; mexicanus;</i> <i>pallidus</i>	•	•	•	•	•			•

	Desert Grassland	Plains-Mesa Grassland	Woodland	Lower Montane Forest	Mixed Coniferous Forest	Subalpine Forest	Subalpine-Montane Grassland	Riparian
Weasel, Badger, and Skunks								
___ Long-tailed Weasel <i>Mustela frenata arizonensis;</i> <i>neomexicana; nevadensis</i>	•	•	•	•	•	•	•	•
___ American Badger <i>Taxidea taxus berlandieri</i>		•	•	•	•			
___ Spotted Western Skunk <i>Spilogale gracilis</i>		•	•	•	•			
___ Striped Skunk <i>Mephitis mephitis estor;</i> <i>hudsonica; varians</i>	•	•	•	•	•	•		•
___ Common Hog-nosed Skunk <i>Conepatus leuconotus mearnsi;</i> <i>venaticus</i>	•	•	•	•				•
Mountain Lion and Bobcat								
___ Mountain Lion <i>Puma concolor azteca;</i> <i>kaibabensis; stanleyana</i>	•	•	•	•	•	•		•
___ Bobcat <i>Lynx rufus baileyi</i>		•	•	•	•	•		•
Pronghorn								
___ Pronghorn <i>Antilocapra americana americana</i>	•	•	•					
Elk and Deer								
___ Elk <i>Cervus elaphus nelsoni</i>			•	•	•	•	•	•
___ Mule Deer <i>Odocoileus hemionus hemionus;</i> <i>crooki</i>	•	•	•	•	•	•	•	•
___ Texas White-tailed Deer <i>Odocoileus virginianus texana</i>		•	•	•	•			•
Prairie Dogs								
___ Black-tailed Prairie Dog <i>Cynomys ludovicianus</i> <i>ludovicianus</i>		•	•	•				
Oryx								
___ Oryx <i>Oryx gazella</i>	•	•						

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Additional Reading

Burt, W.H. and R.P. Grossenheider. 1964. "A Field Guide to the Mammals." Houghton Mifflin Co. Boston. 284 pp. One of the Peterson Field Guide Series. Has pictures of mammals, their tracks, and range maps.

Cockrum, E.L. 1982. "Mammals of the Southwest." The University of Arizona Press. Tucson. AZ. 176 pp. A popular account of the mammals of the Southwest with excellent pen and ink illustrations. Includes identifying features, habitat, life habits, and range maps.

Findley, J.S. 1987. "The Natural History of New Mexican Mammals." University of New Mexico Press. Albuquerque. 164 pp. A good, popular account of New Mexico's mammals with an excellent section on bats, their habits, habitats, and distribution.

Hoffmeister, Donald. 1986. "Mammals of Arizona." University of Arizona Press, 602 pp.

New Mexico Department of Game and Fish. <http://www.bison-m.org/>

Tuttle, M.D. 1988. "America's Neighborhood Bats." University of Texas Press. Austin. 96 pages. An excellent layman's introduction to American bats, covering a wide range of issues from public health and nuisance concerns to economic importance and conservation. Keys, photographs, and natural history information of common North American bats are provided. The bibliography will guide the interested reader to additional information about these fascinating mammals.



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