

# MAMMALS OF FORT McCOY, MONROE COUNTY, WISCONSIN

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## INTRODUCTION

This study was initiated by the author during the summers of 1976 and 1977 to inventory the species of mammals present in Fort McCoy. Information on fur bearers and some of the larger game mammals was provided by Kim Mello, biologist at Fort McCoy, from data collected during the winters of 1979 and 1980.

## MATERIAL AND METHODS

The fort grounds were sampled randomly with snap traps, live box traps and mist nets. Records from trappers were used when available. Trapping was conducted both diurnally and nocturnally. Allocations of specimens to subspecies followed Hall (1981). Specimens were verified by Dr. Herschel Garner. All specimens are on deposit in the mammal collection of Tarleton State University, Stephenville, Texas.

## STUDY AREA

Fort McCoy is located on 59,778 acres in Monroe County, in the unglaciated area of southwest Wisconsin (Martin 1916). The undeveloped habitat suitable for wild mammals consists of 261 acres in streams, ponds, and flowages, 51.1 miles of trout streams and 57,767 acres of varied terrestrial habitats. The altitude ranges from 850 to about 1,450 feet above sea level. The topography is nearly level to very steep with intermittent areas of rolling terrain. The La Crosse River and its tributaries drain most of the fort. Silver Creek drains the extreme south part and merges with the La Crosse River outside the fort boundary at Angelo, Wisconsin. Sparta, Stillwell and Tarr Creeks drain the south central part. All three merge southwest of the troop billeting area then

join the La Crosse River. Squaw Creek and the La Crosse River proper drain the central and north-central area. The north end is drained by Clear Creek (Crispin, *et al.* 1976).

The soils of Fort McCoy are predominantly sands or rough stony land of little agricultural value. Only a few scattered areas of loam or silt loam exist. There are at least five different major soil types.

The average length of the growth season varies from 125 days on low-land to 140 on the uplands. The average killing frost date in the spring is April 25, and for the fall is October 16 (Whitson and Baker 1912). Records from the weather recording station indicate the mean annual precipitation for the fort is 31.16 inches; mean annual temperature is 46.29°F.

This region of Wisconsin consists principally of forest cover with some grassy openings. The native climax grasses are mainly big bluestem (*Andropogon gerardi*) and little bluestem (*Andropogon scoparius*). The principal species of native trees are jack pine (*Pinus banksiana*), white pine (*Pinus strobus*), paper birch (*Betula papyrifera*), red oak (*Quercus rubra*), black oak (*Quercus velutina*), white oak (*Quercus alba*), red maple (*Acer rubrum*), box elder (*Acer negundo*), northern pin oak (*Quercus ellipsoidalis*), and quaking aspen (*Populus tremuloides*).

## SYNOPSIS OF SPECIES

*Didelphis virginiana virginiana* (Kerr)  
Common Opossum. Uncommon throughout the fort limits. Occasionally observed meandering around the buildings after dark, but primarily inhabitants of the deciduous woods. After the harsh winter of 1978, the number of opossums on post declined.

*Sorex cinereus cinereus* (Kerr) Masked Shrew. Uncommon. These shrews were found among the leaf litter of the deciduous or coniferous woods on post. Their greatest period of activity was during the crepuscular hours and at night. This shrew was difficult to catch using snap traps; it might prove to be more common if "pit fall" traps are used.

*Blarina brevicauda brevicauda* (Say) Shorttailed Shrew. Uncommon. Several were caught under log piles near the deciduous woods and in dense grass on the sides of the creeks. They are active primarily after sunset.

*Scalopus aquaticus machrinus* (Rafinesque) Eastern Mole. Very common. Mole workings occurred alongside the fort roads and in the grassy areas near the buildings. They were also common along the edges of the woods. Captures occurred during all hours of the day and night.

*Myotis lucifugus lucifugus* (Le Conte) Little Brown Bat. Very common. They are early flyers which were often seen coming from the attics of some of the buildings on post at twilight.

*Eptesicus fuscus fuscus* (Beauvois) Big Brown Bat. Very commonly seen flying around street lights at night. Many were found in the seldom-used halls of the old hospital. They were swift flyers, usually staying higher than 20 feet.

*Lasiurus borealis borealis* (Müller) Red Bat. Common. Red bats were seen flying up and down the creeks and around street lights shortly after dark. They are swift flyers and usually fly at a height of about twenty feet first, then at a height of about eight feet.

*Marmota monax monax* (Linnaeus) Woodchuck. Abundant. Woodchucks were found in the grassy areas between the buildings, in culverts under the roads, and along edges of the woods. They were especially active in early morning and late afternoon.

*Spermophilus tridecemlineatus tridecemlineatus* (Mitchell) Thirteen-Lined Ground Squirrel. Abundant in the short dry grassy meadow and along the sides of the roads in

the cantonment area. They seem to prefer the sandy soils. All specimens were trapped diurnally.

*Tamias striatus griseus* (Mearns) Eastern Chipmunk. Common in the woods and at the post recreation area by the lake during the day.

*Eutamias minimus neglectus* (J. A. Allen) Least Chipmunk. Rare. Several were observed at the post recreation area. They prefer the coniferous woods. They were active throughout the day, but their greatest activity was in early morning and later afternoon.

*Sciurus carolinensis hypophaeus* (Merriam) Eastern Gray Squirrel. Abundant in the deciduous woods.

*Sciurus niger rufiventer* (Geoffroy-Saint-Hilare) Fox Squirrel. Abundant in the deciduous woods.

*Tamiasciurus hudsonicus minnesota* (Allen) Red Squirrel. Abundant in the deciduous woods. A nest with four baby squirrels was found inside a rotten stump four feet above ground.

*Glaucomys volans volans* (Linnaeus) Southern Flying Squirrel. Flying squirrels were common in the deciduous woods, but due to their nocturnal habits, they were seldom encountered.

*Geomys bursarius wisconsinensis* (Jackson) Plains Pocket Gopher. Gophers were common in open areas with loam or sandy soils. Some mounds were observed along the edges of woods.

*Castor canadensis michiganensis* (Bailey) Beaver. Common. Colonies of beavers use the lakes on post and their dams have impounded water in several places. The beaver population has been estimated to be 130 using data from a biological survey. Sixty-three were trapped in 1981 by trappers.

*Peromyscus leucopus noveboracensis* (Fisher) Northern Whitefooted Mouse. These mice were very abundant in the wooded areas. Most were caught near tree stumps and fallen logs. Several were caught beside piles of limbs that had been stacked. All were trapped after dark.

*Clethrionomys gapperi gapperi* (Vigors) boreal Red-Backed Vole. Red-backed voles were very abundant among the fallen logs and tree stumps. This record is a range extension of 13 miles south from Millston, Jackson County and 22 miles southwest from Mather, Juneau County (Jackson, 1961). Six adults were caught in the same runway beneath a decaying stump, indicating that the red-backed vole could live in colonies and be gregarious. Manville (1949) concluded that the red-backed vole does not form colonies and is not gregarious. Two specimens were caught during the day, the others were caught at night.

*Microtus pennsylvanicus pennsylvanicus* (Ord) Meadow vole. Meadow voles were very abundant between buildings and tall grassy fields. Some were trapped inside buildings. The meadow vole was the most common microtine trapped on the post. These voles were active all day, but most were trapped at night.

*Ondatra zibethicus zibethicus* (Linnaeus) Muskrat. Common. Several colonies have become established on the lakes within the fort boundaries. In 1981, 94 muskrats were trapped by fur hunters. The estimated population is 1,000.

*Rattus norvegicus* (Berkenhout) Norway Rat. Uncommon. They are found under the barracks and also near the messhalls. None were trapped very far from areas frequently used by humans.

*Mus musculus domesticus* (Rutty) House Mouse. Common. They are found around buildings and under piles of decaying logs where timber had been cleared.

*Zapus hudsonius intermedius* (Zimmerman) Meadow Jumping Mouse. Common. Many jumping mice were trapped along the creeks with tall grass along their banks. All specimens were trapped between midnight and dawn.

*Erethizon dorsatum dorsatum* (Linnaeus) Canada Porcupine. Rare. Only a few have been seen in the wooded areas on the northern part of the post limits.

*Lepus americanus phaeonotus* (J. A.

Allen) Snowshoe hare. Rare. Only one has been taken by a hunter in 1979 in the brushy woodlands area of the northern post limits.

*Sylvilagus floridanus mearnsii* (J. A. Allen) Eastern Cottontail. Cottontails were abundant throughout the post. They are very common around the buildings. The cottontails prefer thickets or dense brush. Most were sighted in the early morning hours and shortly before sunset. The biological survey estimated the cottontail population to be over 1,000.

*Canis latrans thamnos* (Jackson) Coyote. Uncommon. However, coyotes were found roaming brushy habitats of the impact area and outlying training areas. Only two were trapped by trappers in 1980.

*Vulpes fulva fulva* (Desmarest) Red Fox. Common around the creek bottoms with good concealment. Thirty-six were trapped in 1981 by fur hunters.

*Urocyon cinereoargenteus ocythous* (Bangs) Gray Fox. Gray foxes are common in the brushy areas, usually along streams. They were found in the woods more often than the Red Fox. Eighteen were trapped in 1981 by fur hunters.

*Procyon lotor hirtus* (Nelson and Goldman) Raccoon. Raccoons were very common in the deciduous woods, usually along streams. They frequently came into the cantonment area at night in search of food. Seventy were trapped by hunters in 1981.

*Mustela rixosa allegheniensis* (Rhoads) Least Weasel. Rare. They were sighted near streams in grassy fields. They were seldom found in the woods. Only one was captured on the post limits.

*Mustela frenata noveboracensis* (Emmons) Longtailed Weasel. Rare. The one Longtailed Weasel observed was in woodlands near streams.

*Mustela vison letifera* (Hollister) Mink. Common. Mink were found in wooded areas along streams and lakes. The biological surveys estimate a population of 200. Fur hunters trapped 2 minks in 1981.

*Taxidea taxus jacksoni* (Schantz) Badger. Common in the impact and training areas.

*Mephitis mephitis hudsonica* (Richardson) Striped Skunk. Skunks were commonly seen roaming at night throughout the post. More common in open wooded areas. Sixty-two were trapped by fur hunters in 1980.

*Lutra canadensis canadensis* (Schreber) Otter. Uncommon. Only a few sightings of otters on post have been documented. These sightings were along streams that were away from the normal areas used for training. A biological survey estimated a population of only 10 otters on the post.

*Lynx rufus superiorensis* (Peterson and Downing) Bobcat. Rare. Very few observations have been reported to biologists on post. These were in the heavily wooded area at higher elevation.

*Odocoileus virginianus borealis* (Miller) Whitetailed Deer. Deer were very common in the woods on post. They were seen roaming throughout the post limits in mornings and evenings. The 1981 deer census conducted on the post has estimated the deer population to be between 1800-2100. The number killed by hunters in 1981 was 839.

#### CONCLUSION

Although Fort McCoy is used as a training area for several thousand military personnel the environment is still inhabited by a total of thirty-nine mammal species, which were recorded on the post reservation; eleven of these species had not previously been offi-

cially recorded in Monroe County (Table 1). Most of these are fairly common to this part of Wisconsin but six represent species that are either at or approaching their distributional limits. (Jackson, H. T., 1961)

No records were obtained for four species which are believed to be present. *Spermophilus franklini*, *Peromyscus maniculatus*, *Synaptomys cooperi*, and *Microtus ochrogaster*. They are within the known ranges (Jackson 1961); with more intensive collecting, these species should be obtained.

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TABLE 1. New Records of Mammals from Monroe County, Wisconsin.

<i>Myotis l. lucifugus</i>	
<i>Eptesicus f. fuscus</i>	Northeastern limit
<i>Lasiurus b. borealis</i>	
<i>Tamias striatus griseus</i>	Southern limit
<i>Eutamias minimus neglectus</i>	Southern limit
<i>Glaucomys v. volans</i>	
<i>Geomys bursarius wisconsinensis</i>	Eastern limit
<i>Clethrionomys g. gapperi*</i>	Southwestern limit
<i>Zapus hudsonius intermedius</i>	Southwestern limit
<i>Mustela frenata noveboracensis</i>	
<i>Lutra c. canadensis</i>	

\* Species representing small range extension.