Mammals of Pheasant Branch Conservancy

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Andy Adams

View of Pheasant Branch Conservancy from near the springs. The various habitats found in the conservancy support diverse plant and animal communities.

Cover photo: Herb Lange
Cover fox track: ©2000 Zachery Zdinak

Jack Bartholmai

Discovering
Pheasant Branch Conservancy

Pheasant Branch Conservancy, a regionally significant natural area, is located on the northwest side of Lake Mendota in central Dane County. Pheasant Branch Creek, a Lake Mendota tributary, meanders through the conservancy, which contains a marsh with open water, natural springs and seeps, prairies, sedge meadows, lowland forests, and wooded hills. These habitats support a wide variety of plants and animals, including rare, threatened, and endangered species. Although surrounded on three sides by urban development, this easily accessible 500+ acre conservancy provides a quiet refuge for bird-watchers, hikers, and other nature enthusiasts.

The Dane County Parks Department owns the northern portion of the conservancy. The city of Middleton's Public Lands Department owns the southern portion, including a corridor that extends along Pheasant Branch Creek's South Branch. The city and county cooperatively manage the conservancy as a single ecological and recreational unit.

Using This Booklet

This booklet provides a general guide to wild mammals you might encounter while visiting Pheasant Branch Conservancy. The 32 species listed in the checklist have all been observed in the area by local residents, naturalists, or professional biologists. You can use the information in this booklet to better understand these animals and help identify the signs of species you encounter.

The distribution and abundance of these species in the conservancy varies seasonally and from year to year. Some mammal species occur more commonly than others. For example, you can observe eastern gray squirrels and cottontail rabbits on nearly every visit to Pheasant Branch Conservancy, but it likely will take many hours of quiet observation to see an ermine or gray fox in the area. Some species, like the big brown bat and little brown bat, regularly visit the conservancy to feed, but probably seek shelter outside the conservancy (these species live in colonies, often inside human-built structures). Others have secretive lifestyles that make them more difficult to observe. Moles, shrews, voles, and mice, for example, spend much of their time in their burrows and nests and thus can be overlooked easily. In addition, many wild mammals become active principally after dark. Some remain active year-round, while others hibernate or are otherwise dormant during winter. To help readers more fully appreciate some of the nuances of mammal behavior, I have indicated some general activity patterns in the checklist using various symbols:

N primarily nocturnal
V non-resident conservancy visitor
H hibernates in winter
WD winter dormant
U active primarily underground
M migrates for winter
S subnivean (active under snow cover)

In order for a species to occupy a particular area, or habitat, its physical surroundings must be appropriate for its survival. All mammals require habitats that provide food, water, and cover for protection from predators and the weather. Suitable mammal habitats also require space for movement. Using various symbols, I have indicated in the checklist the general habitat types that each mammal species occupies within Pheasant Branch Conservancy:

SP oak savanna-prairie
ST shrub thicket
OW oak woodland
SM sedge meadow
OM open marsh
WF wetland forest

It is possible that you might observe a species in a habitat other than what I have indicated. While some species are habitat specialists that remain in a specific habitat type, others are generalists that occupy a wider range of habitats. The interconnected nature of the conservancy's ecological communities allows mammals to move easily between habitats.

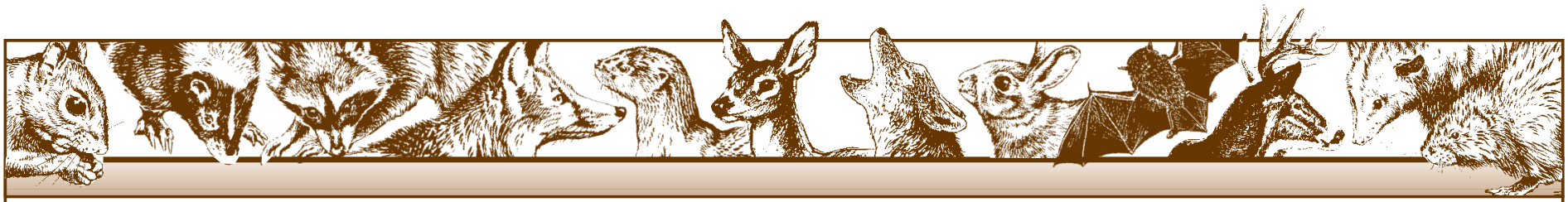
Mammals consume a variety of foods. Understanding their feeding behaviors can help one appreciate the interconnected nature of the conservancy's diverse wildlife populations. Along these lines, I indicate the primary feeding habits of each species in the checklist. **Carnivores** feed primarily on other vertebrates, while **insectivores** consume mostly insects and other small invertebrates. **Herbivores** feed primarily on vegetation and **omnivores** regularly consume both plant and animal matter.

Because knowledge of Pheasant Branch Conservancy's fauna is always changing and additional species continue to be added to the list of the area's fauna, the checklist included here must be considered provisional. For example, some additional mammal species likely occurred around Pheasant Branch Conservancy in the past and may periodically turn up in the area. These include the Arctic shrew (*Sorex arcticus*), pygmy shrew (*Sorex hoyi*), American badger (*Taxidea taxus*), river otter (*Lontra canadensis*), and American black bear (*Ursus americanus*). These species, however, have not been observed in the immediate area in the recent past. Your observations and discoveries can help fill in the gaps in our knowledge. Please report new observations to the nonprofit organization Friends of Pheasant Branch (**www.pheasantbranch.org**) or the author (**Dreux.Watermolen@wisconsin.gov**).

SPECIES	ACTIVITY NOTES	HABITAT NOTES	FEEDING HABITS
OPOSSUMS			
❑ **Virginia Opossum** *(Didelphis virginiana)*	**N**	**WF, ST**	Omnivore
SHREWS			
❑ **Northern Short-tailed Shrew** *(Blarina brevicauda)*	**U, S**	**WF, SM, OM**	Insectivore
❑ **Masked Shrew** *(Sorex cinereus)*	**S**	**WF**	Insectivore
MOLES			
❑ **Eastern Mole** *(Scalopus aquaticus)*	**U**	**OW, WF, SP**	Insectivore
BATS			
❑ **Big Brown Bat** *(Eptesicus fuscus)*	**N, V, M**	**SP, SM**	Insectivore
❑ **Silver-haired Bat** *(Lasionycteris noctivagans)*	**N, M**	**WF**	Insectivore
❑ **Red Bat** *(Lasiurus borealis)*	**N, M**	**WF**	Insectivore
❑ **Hoary Bat** *(Lasiurus cinereus)*	**N, M**	**WF**	Insectivore
❑ **Little Brown Bat** *(Myotis lucifugus)*	**N, V, H**	**OM, SM**	Insectivore
❑ **Northern Myotis** *(Myotis septentrionalis)*	**N, H**	**WF**	Insectivore
❑ **Eastern Pipistrelle** *(Pipistrellus subflavus)*	**N, H**	**SM, WF edges**	Insectivore
CANIDS			
❑ **Coyote** *(Canis latrans)*		**SM**	Carnivore
❑ **Gray Fox** *(Urocyon cinereoargenteus)*		**WF**	Carnivore
❑ **Red Fox** *(Vulpes vulpes)*		**SP, ST**	Carnivore
RACCOONS			
❑ **Common Raccoon** *(Procyon lotor)*	**N**	**WF, ST**	Omnivore
WEASELS			
❑ **Ermine** *(Mustela erminea)*	**S**	**SM, WF**	Carnivore

Weasels continued on next page.

SPECIES	ACTIVITY NOTES	HABITAT NOTES	FEEDING HABITS
❑ **Long-tailed Weasel** *(Mustela frenata)*		SM, OM	Carnivore
❑ **Least Weasel** *(Mustela nivalis)*	S	WF, ST	Carnivore
❑ **American Mink** *(Mustela vison)*	N	OM, SM	Carnivore
SKUNKS			
❑ **Striped Skunk** *(Mephitis mephitis)*	N, WD	SP, ST	Omnivore
SQUIRRELS			
❑ **Woodchuck** *(Marmota monax)*	H	SP	Herbivore
❑ **Eastern Gray Squirrel** *(Sciurus carolinensis)*		WF OW	Herbivore
❑ **Thirteen-lined Ground Squirrel** *(Spermophilus tridecemlineatus)*	H	SP	Herbivore
❑ **Eastern Chipmunk** *(Tamias striatus)*		WF	Herbivore
BEAVERS			
❑ **American Beaver** *(Castor canadensis)*		OM, WF	Herbivore
MICE AND VOLES			
❑ **Muskrat** *(Ondatra zibethicus)*		OM	Herbivore
❑ **Meadow Vole** *(Microtus pennsylvanicus)*		SM, SP, OM	Herbivore
❑ **White-footed Mouse** *(Peromyscus leucopus)*	N	WF	Omnivore
❑ **Deer Mouse** *(Peromyscus maniculatus)*	S	SP, ST	Omnivore
JUMPING MICE			
❑ **Meadow Jumping Mouse** *(Zapus hudsonius)*	N, H	SP, ST	Herbivore
DEER			
❑ **White-tailed Deer** *(Odocoileus virginianus)*		WF, ST	Herbivore
RABBITS			
❑ **Eastern Cottontail** *(Sylvilagus floridanus)*		SP, ST	Herbivore



Mammal Tracks in Pheasant Branch Conservancy

Many mammals are shy and avoid contact with people. Some are primarily active after dark. Observing these species can be difficult, but they often leave telltale signs of their presence. The following tables and drawings provide a guide to mammal tracks that you might observe in Pheasant Branch Conservancy. Be aware that tracks show considerable variation depending on the conditions of the ground (mud, snow, dust, sand, etc.) and movement of the animal.

ALTERNATING TRACK PATTERN

SHORT BODIED

tiny prints, <0.5 inch long (tail sometimes leaves mark)

Voles
Shrews

4 toes on front feet; 5 toes on hind feet (claws usually visible)

Muskrat

Woodchuck

5 toes on each foot

Skunk (claws usually prominent)

Opossum (hind foot with opposable "big toe" without claw)

LONG BODIED

paired hoof/toe prints

Deer

4 toes on each foot; claws prominent

Dogs

4 toes on each foot; claws absent

Cats

Note: Feral cats are occasionally observed in Pheasant Branch Conservancy.

TWO-PRINT TRACK PATTERN

APPROXIMATELY SAME SIZED TRACKS

5 toes on each foot (sometimes only 4 visible in print); claws usually prominent; about 1.5 inches long

Weasels
Mink

tiny prints, <0.5 inch long

Mice
Shrews
Voles

NOTICEABLY DIFFERENT SIZED TRACKS

4 toes on front feet; 5 toes on hind feet

Squirrels

5 toes on each foot

Raccoon

Opossum
(hind foot with opposable "big toe" without claw)

FOUR-PRINT TRACK PATTERN

SMALL TRACKS (<0.5 inch)

Mice
Shrews

Voles

MEDIUM TRACKS (1-1.5 inches)

4 toes on front feet; 5 toes on hind feet

Chipmunks

LARGE TRACKS (2+ inches)

4 toes on front feet; 5 toes on hind feet

Woodchuck

DIFFERENT SIZED TRACKS

4 toes on each foot

Cottontail
Rabbit

Please note that track illustrations are not to scale or proportionate to each other.

Mammal Homes in Pheasant Branch Conservancy

While some mammal species are adaptable in their habits, others exhibit decided preferences for particular types of homes. Some mammals construct their own homes, while some may take up residence in the abandoned homes of another species. For example, a red fox may inhabit a woodchuck burrow or a mink might occupy a muskrat lodge. Whether high in the treetops or close underfoot, these dwellings can be useful indicators of the species present in an area. The location of a burrow or nest, the number and size of the entrance holes, and the manner in which excess dirt is deposited are often indicative of the kind of mammal living in a particular abode. The following descriptions provide a guide to mammal homes you might observe in Pheasant Branch Conservancy.

Burrows

- **Diameter less than 2 inches –** mice, voles, and shrews; occasionally weasels.
- **Diameter 2 to 4 inches –** moles (often with associated tunnels), chipmunks (often with multiple entrances), and ground squirrels (with multiple entrances, in grassy areas, often with a flat bare area to one side of the entrance).
- **Diameter 4 to 12 inches –** woodchucks, striped skunks, and red foxes (often with feathers or rabbit remains); also common raccoons, mink, and Virginia opossums when they take over some other mammal's burrow.
- **Diameter greater than 12 inches –** coyote (a single entrance, often with a mound of dirt in front).

Arboreal Nests

- **Hollows in trees –** common raccoons, Virginia opossums, eastern gray squirrels, and bats.
- **Large exposed, leafy nests; high in trees –** eastern gray squirrels.
- **Small nests low in shrubs or herbaceous vegetation –** mice and voles.

Brush Piles and the Like

- **Aquatic lodges –** muskrats; occasionally a mink will take one over from a muskrat it has preyed on.
- **Brush piles, hollow logs –** striped skunks, eastern cottontails, weasels, and chipmunks.

Mammal Watching Etiquette

As with all popular recreational pursuits, there are some etiquette fundamentals that make for more rewarding experiences. Please follow these basic rules of courtesy and common sense as you explore Pheasant Branch Conservancy.

Protect the welfare of mammals and other wildlife:

- Observe and photograph mammals without disturbing them or their habitats. Watch mammals from a distance that *they* consider safe. Use binoculars, telescopes, and cameras with telephoto lenses for close-up viewing.
- Avoid nesting areas and respect resting periods. Never chase or repeatedly "flush" a mammal. Startled animals may waste energy searching for a new "safe" area.
- Avoid approaching baby animals. Your actions may scare away parents and expose the young to predators or induce unneeded stress.

Protect Pheasant Branch Conservancy:

- Stay on existing trails and pathways to avoid disturbing fragile habitats.
- Walk carefully to avoid trampling plants that might be food sources or cover for wildlife.
- Take only photographs. Leave only footprints. Pick up litter and carry out trash.

Respect the rights of others:

- Observe all laws, rules, and regulations, especially those posted on conservancy signs.
- Be considerate of others visiting the conservancy.
- Unleashed dogs can disturb mammals, other wildlife, and other conservancy visitors.

Photos: Jack Bartholmai

Learning More about Mammals

The following books provide additional information on the natural history, ecology, and behavior of the mammal species found in Pheasant Branch Conservancy. You should be able to obtain these references through local book sellers or your public library.

General References

Mammals of Wisconsin by Hartley H.T. Jackson. University of Wisconsin Press, Madison, WI (1961).

Mammals of the Great Lakes Region by Allen Kurta. University of Michigan Press, Ann Arbor, MI (1995).

Handbook of Mammals of the North-Central States by J. Knox Jones, Jr. and Elmer C. Birney. University of Minnesota Press, Minneapolis, MN (1988).

The Smithsonian Book of North American Mammals by Don E. Wilson and Sue Ruff (eds.). Smithsonian Institution Press, Washington, DC (1999).

Opossums

Possums by Carl G. Hartman. University of Texas Press, Austin, TX (1952).

The World of the Opossum by Jamie F. Keefe. J.B. Lippencott and Co., Philadelphia, PA (1967).

Shrews and Moles

The Natural History of Shrews by Sara Churchfield. Comstock Pub. Associates, Ithaca, NY (1990).

The Natural History of Moles by Martyn L. Gorman and R. David Stone. Comstock Pub. Associates, Ithaca, NY (1990).

Bats

America's Neighborhood Bats by Merlin D. Tuttle. University of Texas Press, Austin, TX (1988).

Bats of the United States by Michael J. Harvey, J. Scott Altenbach, and Troy L. Best. Arkansas Game and Fish Commission, Little Rock, AR and U.S. Fish and Wildlife Service, Asheville, NC (1999).

Bats in Question: The Smithsonian Institution Answer Book by Don E. Wilson. Smithsonian Institution Press, Washington, DC (1997).

The World of Bats by Klaus Richarz and Alfred Limbrunner. TFH Publications, Neptune City, NJ (1993).

Wild Dogs

Wild Fox: A Complete Study of the Red Fox by Roger Burrows. David and Charles, Newton Abbott (1968).

Track of the Coyote by Todd Wilkinson. NorthWord Press, Minocqua, WI (1995).

The Coyote: Defiant Songdog of the West by Francois Leydet. University of Oklahoma Press, Norman, OK (1988).

Raccoons

Raccoons: A Natural History by Samuel I. Zeveloff. Smithsonian Institution Press, Washington, DC (2002).

Weasels and Skunks

The Natural History of Weasels and Stoats by Carolyn M. King. Comstock Pub. Associates, Ithaca, NY (1989).

Sleek and Savage: North America's Weasel Family by Delphine Haley. Pacific Search Books, Seattle, WA (1975).

Squirrels

Squirrels: The Animal Answer Guide by Richard W. Thorington, Jr. and Katie E. Ferrell. Johns Hopkins University Press, Baltimore, MD (2006).

North American Tree Squirrels by Michael A. Steele and John L. Koprowski. Smithsonian Institution Press, Washington, DC (2001).

Beavers

The Beaver: Natural History of a Wetlands Engineer by Dietland Müller-Schwarze and Lixing Sun. Comstock Pub. Associates, Ithaca, NY (2003).

The American Beaver: A Classic of Natural History and Ecology by Lewis H. Morgan. Dover Publications, New York (1986). Originally published by J.P. Lippincott & Co., Philadelphia, PA (1868).

Beavers: A Wildlife Handbook by Kim Long. Johnson Books, Boulder, CO (2000).

Beavers: Water, Wildlife, and History by Earl L. Hilfiker. Windswept Press, Interlaken, NY (1990).

Muskrats

Muskrats and Marsh Management by Paul L. Errington. University of Nebraska Press, Lincoln NE (1978).

Deer

The White-tailed Deer by Ilo Hiller. Texas A&M University, College Station, TX (1996).

The Natural History of Deer by Rory Putman. Comstock Pub. Associates, Ithaca, NY (1989).

Accessing Pheasant Branch Conservancy

From Highway 12:

Take Highway 12 to the city of Middleton. Turn east on Century Avenue (County Hwy M). Take Century Avenue to Pheasant Branch Road, then turn north (left) on Pheasant Branch Road.

From the City of Madison:

Take University Avenue west to Middleton. Turn north (right) on Allen Boulevard. Take Allen Boulevard to Century Avenue. Turn west (left) on Century Avenue. Take Century Avenue to Pheasant Branch Road, then turn north (right) on Pheasant Branch Road.

City and county parking lots are located on the east side of Pheasant Branch Road. The city parking lot is 0.6 miles north of Century Avenue. The county parking lot is 1.2 miles north of Century Avenue. A pedestrian trail leads from the parking lot at the park in Middleton's Orchid Heights neighborhood into the county property. The city of Middleton maintains pedestrian entrances on Century Avenue near Branch Street. From the Century Avenue entrances, you can access hiking trails into the marsh or along the South Branch of Pheasant Branch Creek.

Conservancy hours are 5:00 a.m. to 10:00 p.m.

Notes and Sketches

WI DNR Archives

About the Author

Dreux Watermolen is an ecologist who has lived adjacent Pheasant Branch Conservancy for the past 17 years. He currently serves as the Chief of Science Information Services for the Wisconsin DNR and is interested in the zoogeography, life history, and taxonomy of Wisconsin's rich biological diversity.

Production

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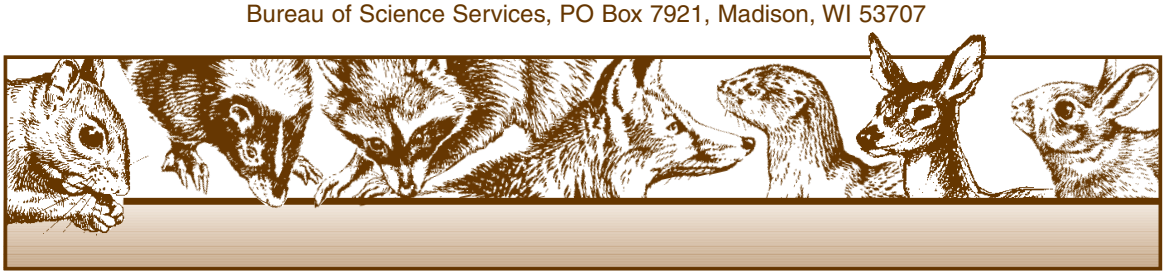

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