

# Tactile Nature Interpreter Volunteer Handbook

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A Guide to “Connect to Nature” Outreaches



1/17/2026 MBH

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## Introduction to the Mammal Study Skins

Welcome to the Five Rivers MetroParks family! You're about to embark on an incredible journey filled with fresh, new experiences. You'll be charged with helping inspire your patrons to connect with nature. Using wildlife furs and bones, you will help them understand the need to protect and care for all habitats for wildlife and plant survivability and sustainability. The animals represented in this kit showcase the many different animals who are wild in our parks and in communities all over Ohio. Their needs are increasing, their habitat decreasing, and their sustainability more difficult. They don't just live within park boundaries, but travel and live in urban areas as their habitat is being impacted by development and chemical pesticides.

In this kit you will learn about the different habitats our parks hold and the animals that can be found in them. You will also learn about different points of interest such as fossils and plant life in the 16,500 acres that Five Rivers MetroParks manages and continues to increase.

We use furs, along with informational brochures and other promotional material, as a way to safely expose these types of animals to the public and attract the public's interest in our outreach efforts. All these furs were ethically sourced through companies outside the MetroParks or were salvaged from animals found already deceased in the wild. **This will be a comprehensive manual covering the furs that Five Rivers MetroParks has in their inventory for educational use but not every fur or other representation of animals in this handbook will be available in the booth supported by the "Connect to Nature" Outreach Bin or by whatever touchable items are provided.**

## American Badger



**Population:** Currently Badgers are non-existent or very uncommon in our parks but occasionally are found in Ohio and have shown up in the Englewood area in the last decades. They once were more common.

**Description:** The American badger is a mid-sized (10 to 11 pounds), burrowing mammal of the weasel family that uses underground burrows for resting, denning, and prey caching. They are well-suited for burrowing and digging. They have large, powerful shoulders; stout front legs and feet; large front claws; and short ears. Their distinctly colored faces sport black patches over a white throat, chin, and cheeks.

**Habitat:** American badgers are generally found in grassland, desert, dry forest, parkland, and agricultural areas. They require soils that allow the excavation of den sites and support burrowing prey species (such as ground squirrels).

**Diet:** American badgers forage underground by digging into the burrow systems of prey species, which commonly include ground squirrels, prairie dogs, marmots, and pocket gophers. Badgers also feed on carrion, insects, reptiles, and birds.

## American Beaver



**Population:** Abundant in the 1800's, Beaver were uncommon prior to the 1970's but have steadily increased in populations and you can now find signs of beaver (dams, lodges and commonly chewed sticks and tree trunks) in most Five Rivers MetroParks that have rivers, creeks or large ponds within them. Possum Creek MetroPark by the smaller series of fishing ponds is an excellent place to see them at sunset.

**Description:** Beavers are the largest living rodents in North America, with adults averaging 40 pounds in weight and measuring more than 3 feet in length, including the tail. These semi-aquatic mammals have webbed hind feet, large incisor teeth, and a broad, flat tail. The tail of a large beaver may be 15 inches long and 6 inches wide. It is covered with leathery scales and sparse, coarse hairs.

**Habitat:** Beavers are found where their preferred foods are in good supply—along rivers, and in small streams, lakes, marshes, and even roadside ditches containing adequate year-round water flow. In areas where deep, calm water is not available, beavers that have enough building material available will create ponds by building dams across creeks or other watercourses and impounding water.

**Diet:** Beavers eat the leaves, inner bark, and twigs of aspen (a favorite food), alder, birch, cottonwood, willow, and other deciduous trees. Beavers also eat shrubs, ferns, aquatic plants, grasses, and crops, including corn and beans.

When the surface of the water is frozen, beavers eat bark and stems from a food “cache” (a safe storage place) they have anchored to the bottom of the waterway for winter use. They also swim out under the ice and retrieve the thick roots and stems of aquatic plants, such as pond lilies and cattails.

## Bobcat



**Population:** Prior to settlement, bobcats were common throughout Ohio but were extirpated from the state by 1850. They began to repopulate Ohio in the Mid-1900s, and sightings became more frequent in the early 2000s. A combination of monitoring and research has revealed that Ohio now supports an established bobcat population in the eastern and southern parts of the state, and the population is continuing to expand into other areas of suitable habitat. They have been spotted here in our own MetroParks through trail cameras.

**Description:** The bobcat's fur is buff to brown, sometimes with a reddish tinge, and marked with spots or stripes of brown and black. The fur on its undersides is lighter in color. Bobcats have facial ruffs, ear tufts, white spots near the tips of their ears and bobbed tails.

They are generally 1.5-2 feet (46-64 centimeters) tall at the shoulder and weigh between 9 and 33 pounds (4 and 15 kilograms).

**Habitat:** Bobcats are very adaptable and can live in a wide variety of habitats, including boreal coniferous and mixed forests in the north, bottomland hardwood forests and coastal swamps in the southeast, and desert and scrublands in the southwest.

**Diet:** Bobcats mostly eat rabbits and hares. They may also eat rodents, such as squirrels and mice, or hunt small deer, snakes, lizards and domestic animals, such as dogs, cats, sheep, goats and poultry.

## Coyote



**Population:** Historically, coyotes were found in the open deserts and prairies of the West, but as land was cleared for agriculture and larger carnivores were removed from the landscape coyotes started to expand eastward. By the 1930s coyotes were present in Ohio and they were distributed statewide by 1988. As its presence across a variety of landscapes in Ohio shows, this versatile animal can make a home almost anywhere. Coyotes have been spotted in many of our park systems both rural and urban.

**Description:** The coyote is generally a slender animal, very similar in appearance to a medium-sized dog and much smaller than a wolf. Most coyotes are gray, though some show rusty, brown or off-white coloration. It has a bushy tail which is usually tipped with black. Coyotes are most active at dawn and dusk but may be seen frequently throughout the day. The coyote stands about one and one half to two feet tall and is between 41 to 53 inches in length. Males of this species are larger than the females and weigh anywhere from 20 to 50 pounds.

**Habitat:** Usually, we associate the coyote with the open, deserted lands of the west. As its presence in Ohio shows, this versatile animal can make a home almost anywhere.

The coyote's strength is that it can adapt and exploit almost any habitat to its advantage. While most wildlife species have avoided developed areas and often declined as a result of man's expansion, the coyote seems to have thrived.

**Diet:** The coyote is a nocturnal animal, active during the nighttime hours. However, when it is less threatened by man, it will hunt and move from place to place during the day. The coyote will hunt in unrelated (non-family) pairs or large groups. Coyotes are omnivorous and typical foods include small mammals (voles, shrews, rabbits, mice), vegetables, nuts, and carrion. Unchecked, they will eat livestock, particularly sheep and chickens.

## Eastern Cottontail Rabbit



**Population:** The Eastern cottontail rabbit (*Sylvilagus floridanus*) is one of the most common wildlife species in the state of Ohio. Although native to the state it was not as nearly widespread prior to European settlement. These spritely animals can be found in every one of our MetroParks.

**Description:** The Eastern cottontail rabbit is a small mammal with a brownish-gray body, long ears, and a small white tuft of a tail that resembles a cotton ball -- the feature it derives a part of its name from. There is also a rusty colored patch of fur on the nape of the neck. The feet can be whitish.

**Habitat:** As with several other species of wildlife, the Eastern cottontail was a beneficiary of settlement; the clearing of wood lands and the establishment of more open areas along wooded borders provided an ideal environment.

Eastern cottontail rabbits are year-round residents prefer open areas bordered by thickets or brush areas. Preferably the open area is an old field with tall grass. Open woods with nearby brush piles or near fields are also used. Still rabbits are found inhabiting suburbs and cities using lawns and nearby borders of shrubbery and other boundary plantings for food and cover.

**Diet:** They typically eat clover, dandelion, plantain, lamb's-quarter, and ragweed. Winter foods may include ear corn, dry hay, and bark of tree saplings, raspberry, blackberry, and multiflora rose.

## Gray Fox



**Population:** Four species of foxes live in North America. Two of these species, the red fox and the gray fox, live in Ohio. Gray foxes are found in wooded, brushy, or rocky areas with limited human disturbance. Their range extends from southern Canada south to the northern edge of South America. As more forests are cleared for development, gray foxes have less habitat available. This habitat loss has made more room for red foxes, which tend to be more adaptable than gray foxes. They are a species of concern in Ohio and are in decline. Gray Fox could be found in our larger MetroParks such as Germantown, Twin Creek and Englewood.

**Description:** The gray fox's coat color is salt and pepper gray. A black stripe runs from the base of the tail and ends in a black tip. Another black stripe crosses its face from the nose to the eye and then to the side of the head. Like the red fox its cheek and throat area are white, and this color extends on the gray fox to the lower jaw. There is a reddish patch on the side of its head below its ear. Its belly is white and a reddish band separates it from the gray sides. The legs and back of the ears are an orange color while the feet are gray.

**Habitat:** Wooded areas and partially open brush land with little human presence are the preferred habitat for gray foxes in Ohio.

**Diet:** Gray foxes are nocturnal creatures, meaning they are most active at night, feeding and moving from place to place. Typical foods include mice, rats, rabbits, and other small mammals, as well as birds, insects, eggs, fruits, and acorns. Gray foxes have a reputation as excellent mousers.

## Mink



**Population:** The mink (*Mustela vison*) was probably common in Ohio before settlement and today it occurs in every county in Ohio. Because of its preference for small streams cluttered with vegetation or wooded banks, the highest population densities occur in eastern and southeastern Ohio.

**Description:** This sleek furbearer is weasel-like or ferret-like in appearance possessing a long, narrow body, but is considerably larger with a bushier tail. It has small, rounded ears, beady eyes, short legs, and sharp claws. The mink's fur is usually a rich chocolate brown but can look almost black. **A white chest or chin patch** with spots scattered on the underparts of the body is also characteristic. The coat is lustrous, durable and one of the most beautiful in the world. Adults weigh 1.25-3 pounds and are 12-17 inches long.

**Habitat:** The mink is almost invariably found near water - both running waters of streams and rivers and the standing waters of marshes and lakes. Minks are especially drawn to areas that are wooded or brushy. Because of its preference for small streams cluttered with vegetation or wooded banks, the highest population densities occur in eastern and southeastern Ohio. Mink can be found in many of our MetroParks with larger rivers and creeks or wetlands.

**Diet:** They typically eat small mammals, preferably muskrats, as well as birds, frogs, eggs, fish and crayfish.

## Muskrat



**Population:** Muskrats can be found throughout Ohio where there is water. Their population has shown signs of decline in Ohio due in part to exposure to toxins and heavy metal and is under investigation.

**Description:** Muskrats (*Ondatra zibethicus*) are large freshwater rodents that look very much like a beaver but are actually related to mice and rats. This is where they get the second part of their name, because their tail looks like that of a rat. The first part of their name comes from the strong-smelling odor, or musk, that the muskrat produces during mating season and to mark its territory. Muskrats have had many names given to them over the years: marsh rabbit, mud cat, mud beaver, and the Algonquin Indian tribe called it musquash.

They have two coats of hair. The thick fur undercoat keeps the muskrats warm in winter, and the outer coat is made up of long, shiny waterproof hairs. The muskrat's fur is a dark brown that gets lighter around its throat. The tail is long, flattened, and nearly hairless, making it a perfect rudder for swimming.

**Habitat:** They can be found in ponds, marshes, and swamps. They do not like waters that are deep, instead they prefer shallower areas. Muskrats can be found in many of our MetroParks with larger rivers and creeks or wetlands and ponds. Like beavers, muskrats also build lodges. However, their lodges consist of more aquatic vegetation than sticks. Sometimes they even make their own feeding stations to protect themselves from predators while they are eating. Their private dining rooms are made from weeds and plants and are built on top of floating rafts of reeds. The muskrat lodges usually have one nesting chamber and several underwater entrances for quick escape routes.

**Diet:** They typically eat aquatic vegetation, a few terrestrial plants, clams, frogs, crayfish, and fish.

# Raccoon



**Population:** Raccoons (*Procyon lotor*) are found in all parts of Ohio. For many years our raccoon population has been growing. They can be found in all our MetroParks.

**Description:** Raccoons are normally gray or black in color with pale gray coloring underneath. They can also be red or blonde in color, although not as common. Their black mask is rimmed on top and bottom with white. The raccoon's tail has four to six black or dark brown rings.

**Habitat:** The raccoon prefers to live in wooded areas with big trees and lots of water close by. They have moved into towns and cities and can live almost any place where there is food for them to eat and a den to serve as shelter. Many of them live, temporarily at least, in drain tiles and sewer systems.

**Diet:** Raccoons are omnivorous and prefer to eat berries, acorns, baby birds, frogs and fish. There is little wonder why they are plump, as raccoons will sample anything that even remotely resembles food.

## River otter



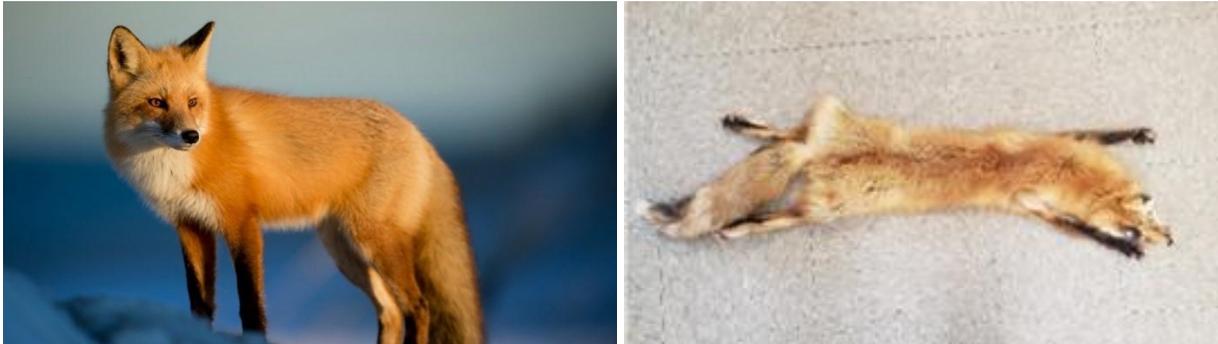
**Population:** North American river otters (*Lontra canadensis*) are semi-aquatic mammals that were historically distributed throughout much of North America. Otters are native to Ohio but were extirpated by the early 1900s. In 1986, the Ohio Division of Wildlife began a seven-year project to reintroduce the species to the state. Over this period, 123 otters were captured in Arkansas and Louisiana using modern foothold traps and were released in the Grand River, Killbuck Creek, Little Muskingum River, and Stillwater Creek watersheds. Since then, river otter presence has been confirmed in 75 watersheds throughout the state. River Otters have been observed in the Mad River by Eastwood and Deeds Point MetroParks.

**Description:** Otters are highly adapted for swimming, possessing a long, tapered body with sleek, short, dense fur. Its small head widens to the neck and shoulders. There are long, stiff and highly sensitive facial whiskers behind and below the nose that aid the otter in finding and capturing prey. Their teeth are like those of other carnivores--adapted for grasping, grinding, shearing, and crushing. Their large feet are completely webbed. The tail is flattened and is well muscled; the tail is important in the animal's swimming ability and makes up about 50 percent of its total body length. Maximum length is reached at three to four years of age. Adult weights range from 11 to 33 pounds.

**Habitat:** Otters live in aquatic habitats--rivers, lakes, and marshes. Otters can live in both marine and freshwater environments. They prefer tributaries of major, unpolluted drainages where there is minimal human disturbance. Log jams and submerged trees provide resting and feeding habitat.

**Diet:** They typically eat fish, aquatic insects, crayfish, snakes, frogs, and, to a lesser extent, waterfowl and mammals.

## Red Fox



**Population:** The statewide population has exhibited a declining trend over the past 10 years. As such, viewing and harvest opportunities are below the long-term average. Research and development of Best Management Practices has identified traps and trapping systems that allow for the safe, selective, and efficient capture of red foxes, while maintaining high animal welfare standards.

**Description:** Although it can have several color variations, the red fox takes its name from its most common color phase: a rusty-red or reddish yellow coat from its face down its back and sides. Its undersides, throat area, and cheeks are white. The legs, feet, and outside of the ears are black; its long, bushy tail has black hairs mixed with the red and **ends in a white tip**. This feature can be used to help identify it; the gray fox's tail has a black tip. The tail of the red fox is usually between 14 and 16 inches long.

**Habitat:** Red Foxes occur throughout the state in farmland and mixed pasture or woodland habitats, with the majority being found in the central and northwestern portions of Ohio. Red Fox can be found in our larger MetroParks.

**Diet:** They typically eat mice, rats, rabbits, groundhogs, and other small mammals; also birds, fruits, and some grasses.

## Striped Skunk



**Population:** Skunks are known to everyone by sight, smell, and reputation. They are found in every county of Ohio as well as throughout the United States. Pioneers found the striped skunk (*Mephitis mephitis*) when they came to Ohio, although skunk numbers are far greater now. They are common throughout Five Rivers MetroParks.

**Description:** The striped skunk is about the size of a house cat, with a large deep body, small head, and short legs. The hair is long and black, with a broad patch of white on its head and shoulders. Two white lines forming a “V” from the shoulder area may extend part way or all the way to the base of the bushy tail. Color variations include brown, white, cream, black, and, occasionally, albino. Males and females are colored alike with males being slightly larger in size. Each foot has five slightly webbed toes with the forefeet having long, curved claws designed for digging. The rear feet have shorter, straighter claws.

Skunks are known for their ability to spray musk when threatened. They can spray with great accuracy up to 15 feet.

**Habitat:** Striped skunks are highly adaptable and occupy a wide variety of habitats in Ohio from rural areas to the suburbs. Skunks are most abundant in rural Ohio where there are farms with fencerows, forest edges and old fields. They are also found in urban areas.

**Diet:** They are omnivorous, but their favorite foods include insects, small mammals, fish, crustaceans, fruits, grasses, leaves, buds, grains, nuts, and carrion.

## Virginia Opossum



**Population:** The opossum (*Didelphis virginiana*) is North America's only marsupial (a mammal that carries its underdeveloped young in a pouch until they are capable of living independently). It is also one of the oldest and most primitive species of mammal in North America. This animal is little changed from its ancestors 70 million years ago.

Opossums were probably rare in the vast forests of unsettled Ohio but began to take hold as the land was cleared for agriculture. Today they are found in every county of the state, and slightly more abundant in southern Ohio.

**Description:** An adult opossum is about the size of a large house cat, with coarse, grizzled grayish fur. It has a long, scaly tail, ears without fur, and a long, pointed snout that ends in a pink nose.

**Habitat:** Opossums are quite adaptable and can also be found in suburbia and the city. Their ideal habitat, however, is an area interspersed with woods, wetlands, and farmland. The den is usually situated in a wooded area near water.

**Diet:** They are omnivorous and will eat carrion, insects, fish, reptiles, eggs, fruits, vegetables, and nuts.

## White Tailed Deer



**Population:** Deer are very common in all our parks and often are found in suburban areas as well. When Ohio was covered with forest in the 1700's deer were rarer but as the land was cleared deer populations increased as did hunting of them. By 1904 all the deer were gone in Ohio and were reintroduced around 1924 with hunting regulations and are now quite abundant. FRMP has controlled bow hunting programs to help keep the population healthy and balanced with the rest of the habitat.

**Description:** The whitetail has two seasonal coats. The spring/summer coat is reddish tan and relatively short, with thin and wiry hair texture. The winter coat is more grayish or even bluish tan with heavy, long guard hairs and a thick undercoat that provides excellent insulation. White patches are found around the eyes, on the throat, belly, tail (underside) and insides of the legs. When in flight, the large white tail or flag, flipped up in the air can be the easiest way to spot the deer.

**Habitat:** It is seen in the state's wildlife areas, parks and nature preserves as well as in the backyards of rural and suburban residents but prefer open woods, farms, old fields, anywhere along rivers and other water sources.

**Diet:** Deer in Ohio eat a wide variety of items; among them are: wild crabapple, corn, sumac, Japanese honeysuckle, grasses, greenbrier, clover, soybeans, jewelweed, acorns, dogwoods, and miscellaneous woody plants.

## Non-fur items

### Resin beaver skull



- Beavers have twenty teeth in total, including four incisors at the front – two upper and two lower. The roots of the lower incisors are extended into the jaw.
- The rear of these incisors is made from dentin which, although tough, isn't as tough as the front teeth which contain iron compounds. This is the reason that they are rust colored orange. These iron compounds make their teeth super strong, durable and less likely to suffer any cracks or chips.
- The iron in their teeth means that beavers are capable of gnawing through tough wood really fast without any tooth problems. In fact, they're so strong that a beaver can fell an eight-foot tree (about 3 inch wide) in only five minutes!
- Incredibly, these same iron compounds also make beaver's teeth stronger and resistant to harmful acids that can cause tooth decay.

## Eastern Box Turtle Shell:



**Population:** Eastern Box Turtle populations in Ohio are declining due to various factors, including habitat loss, traffic collisions, and other threats. While they are still found in many areas, especially woodlands, they are considered a species of concern in the state and require a state permit for possession. It is illegal to have them as pets.

**Description** The box turtle (*Terrapene carolina*) gets its name from its centrally hinged plastron (lower shell), which enables both front and rear portions of the plastron to be drawn up tightly against the carapace (upper shell). This "boxes in" the turtle for protection.

The high-domed carapace of the box turtle may carry a wide variety of markings. Usually it is dark brown or black, accented with some combination of yellow streaks or blotches. Males usually have red eyes and a longer tail than females. Eastern box turtles typically grow to 10 centimeters by 15 centimeters (4 inches by 6 inches).

**Habitat:** Eastern box turtles are predominantly terrestrial and live in a variety of vegetative areas, including shrubby grasslands, marshy meadows, open woodlands and field forest edges. They are often found near streams or ponds, or areas that have experienced heavy rainfall.

**Diet:** Juvenile eastern box turtles feed mostly on animal material, such as slugs, worms, insects and larvae. As adults, they eat mainly plant material, such as seeds, fruits, roots, fungi and grasses. Adults are also known to feed on carrion (flesh of dead animals), fish, amphibians and eggs.

## Juvenile Black Bear Skull



**Population:** Although black bears (*Ursus americanus*) inhabited Ohio prior to settlement of the region, unregulated hunting and the extensive deforestation that occurred by the mid-1800s as farms, towns, and industry were established resulted in a sizable reduction in the number of bears residing within the state's borders. Those bears that remained following this drastic change in habitat were either shot or trapped to protect livestock and crops from depredation. By the 1850s, black bears were considered extirpated from Ohio. However, occasional reports of their presence, particularly in south-central and southeastern Ohio, persisted and, in 1973, included a report of a sow (female) with cubs (offspring).

**Description:** This species appears in a range of color phases that include black, chocolate brown, cinnamon brown, blue-black, and even white. Its face, in profile, can be straight or Roman-nosed, a distinguishing characteristic that helps differentiate it from the dish-faced grizzly and Alaskan brown bears.

An adult black bear can weigh anywhere between 150 and 700 pounds. Males average 300 pounds while the smaller females average around 175. Males, when standing upright, measure between five and six feet tall; females, typical of mammals, are smaller, measuring four to five feet. On all fours, most adult black bears are between 2 1/2 and 3 feet at the shoulder.

**Habitat:** Black bears can be found from coast to coast throughout North America in a wide variety of the more heavily wooded habitats, ranging from swamps and wetlands to dry upland hardwood and coniferous forests, from the Yukon and Northwest Territory in Canada to the northern portions of Mexico. Although they will utilize open areas, bears prefer wooded cover with a dense understory.

**Diet:** Bears are omnivores; they will eat a variety of foods from fruits and grasses to meat. Grasses, forbs, berries, mast from oak, hickory, and beech trees, carrion, and insects are typical foods. Bears will also utilize agricultural crops, if available.

## Resin Coyote Skull:



Coyotes have a total of 42 teeth. Teeth patterns can be used to identify animals and coyotes are noted for having three incisors, one canine, four premolars, and two to three molars in each quadrant, which creates the dental formula of incisors 3/3, canines 1/1, premolars 4/4, molars 2/3 = 42.

Coyotes are omnivores, and they are equipped with teeth that can aid them in grabbing, stabbing, and tearing their prey's flesh. In that sense, coyote canine teeth are just sharp enough to pierce through animal meat and tear tough flesh apart. Coyote canines also provide a tight grip on their hunt and are broad, pointed, and circular, followed by hefty cheek teeth capable of crushing bone materials. Coyotes have forward facing eyes used in judging the distance away from its prey.

## Snapping Turtle Shell:



**Population:** Snapping turtles are abundant in Ohio, though they aren't as frequently seen as other turtles because they don't bask in the sun as much.

**Description:** The common snapping turtle (*Chelydra serpentina*) is the largest turtle in Ohio. Large specimens may weigh more than 35 pounds and have a carapace (shell) more than 14 inches long. **The shell has three rows of keels that serrate towards the back.**

**Habitat:** Their preferred habitat is fresh or brackish water with muddy bottoms and abundant vegetation.

**Diet:** Snapping turtles feed on invertebrates, carrion, aquatic plants, fish, birds, and small mammals.

## White Tailed Deer Antlers:



Antlers are bone formations that develop from the pedicle on the frontal bone of the skull of male deer

Deer grow and shed antlers every year, requiring large amounts of nutrients and energy. Typically, only male deer grow antlers.

The size and formation of antlers vary widely among deer in general. Antler growth depends on an individual deer's access to quality nutrition, age, and genetics.

Because they are grown by male deer, antlers are thought to serve as a visual cue signaling health and genetic quality to female deer.

During the breeding season, male deer use their antlers to fight and establish dominance over other male deer. Male deer will often lock antlers and push one another to determine which individual is stronger, therefore establishing a dominance hierarchy between individual animals

Deer grow and shed antlers annually. Males typically begin growing a new set of antlers in late spring. Timing of antler-drop may vary, but in an average season, some males shed their antlers in late December, and most have shed them by early March

As males mature, their antlers become heavier and better developed. On average, males increase their antler size until 6-1/2 years of age, when antler growth is maximized

## Fossils:



### Fossil Collecting in MetroParks

Collecting a limited number of fossils by the general public is permitted with the following restrictions:

- Fossils cannot be collected with the use of tools (e.g. hammers, picks, etc.).
- No more than 3 fossils per day per person may be collected from a MetroParks facility.
- Collected fossils can be no larger than the palm of your hand.
- Fossils cannot be collected from MetroParks for sale.
- No climbing is permitted on rock ledges or outcroppings.
- Fossils can only be collected from designated fossil collection areas OR under the direction of a MetroParks interpreter leading a public program.
- Those wishing to conduct scientific research that does not comply with these restrictions may apply to the MetroParks office for a research permit.

Fossil collection areas are:

- Below Germantown Dam at Germantown MetroPark
- Below Englewood Dam at Englewood MetroPark
- Near steppingstones across Sugar Creek at Sugarcreek MetroPark

### Clues to the Mystery of Our Past

Fossils are the remains of past life. They can include a wide variety of things like plant parts (leaves, tree trunks and seeds), animal parts (bones and shells) and even footprints. Under special conditions, an imprint left by a plant or animal may also become fossilized. Fossils are the only clues we have to the nature of life in Montgomery County millions of years ago. Different layers of rock contain different types and ages of fossils and reveal an Ohio startlingly different from the one we live in today.

How are Fossils Formed?

Normally, only plants or animals with hard parts are preserved as fossils. When a plant or animal dies, it must be buried quickly to prevent damage and must remain undisturbed during the long process of fossilization. Often, hard parts are replaced by minerals such as lime, silica or pyrite. Sometimes this replacement preserves the detail of the original plant or animal. In other cases, just the general form is preserved. Because very special conditions are necessary for fossilization to occur, complete fossils of animals or plants are rare.

#### Where are Fossils Found?

Southwestern Ohio's counties are littered with fossils. They are in the stone in our driveways and the walls of the State House in Columbus. They are abundant along stream beds and in exposed rock. Today, scientists and collectors from around the world search for remains of life in the rich fossil beds located here. The fossils found in MetroParks come from the Ordovician Period (450 million years ago) and the Silurian Period (425 million years ago). These include brachiopods, bryozoans, trilobites, horn corals, cephalopods, crinoids and gastropods.

### **Log with beaver bite marks**



Beavers are not equipped to climb trees to reach the delicious green leaves. So, they bring the food to them. They gnaw on trees with their large teeth until the tree falls. Then they have access to the leaves and small branches in the tops of the trees. Beavers also eat the bark from trees and the soft wood under the bark. But they don't really eat the wood. They use the dead trees for their dams and as places for other vegetation to grow. They will gather this vegetation and store it in their lodges.

Beavers are creative when it comes to storing food for the winter. Their lodges are built on the water, and they spend the winter in their lodges. So, in the fall, before the water freezes, they line the bottom of their lodge with fresh tree branches. When the temperatures dip below freezing the water freezes over top of the branches. When they need something to eat they swim out of their lodge and under the ice to find their branches.

#### Other Objects

Shelf fungus: This polypore fungus (look at the small holes on the flat side where the spores fall out) are typically found on black locust trees. Watch them in our woodlands.

Snakeskin: Snakes shed their skin in large patches or even an entire whole sheet of skin. They have new skin underneath, and these sheds indicate the presence of snakes in the area. Feel it and decide if you like it.

## **Interacting with the Public**

### **Receiving incorrect information:**

There are two types of incorrect information that you may encounter while giving a program. The first being misinformation and the second disinformation.

The American Psychological Association defines misinformation as incorrect information being spread through lack of knowledge. Disinformation is defined as incorrect information being spread purposefully with intent to mislead.

Examples of misinformation are incorrect statements made about an animal or their environment. Myths that have been passed down or incorrect assumptions.

Examples of Disinformation can be things like “climate change is not real”, “the earth is flat”, evolution is not real” Usually stated as a challenge and to create division.

**Ways to handle misinformation:** When someone shares something they’ve learned, even if that something is incorrect, they are sharing a part of themselves. They are looking to make a connection and how we handle giving correct information in the face of incorrect information could mean the difference between making that connection and someone walking away without it. Acknowledge what they’ve shared then share the right information. Ex “I’ve heard that too! What actually happens is...” “that’s an interesting question, \*enter correct information here\*” Our goal is to impart the correct information without making the person to feel bad so we can still make that connection.

**Ways to handle disinformation:** Five Rivers MetroParks is a science-based organization and the information we work with and talk about has been established through multiple studies and scientific observation. We understand that Climate Change is happening and is caused by human interaction with the world. We teach evolution and all its bits and pieces. We work off the truth that the Earth is round. You may come across people that do not believe what we are teaching. Your first step when challenged will be to direct them to staff lead on site. If you are by yourself, the important thing to remember is to not challenge their right to believe these things. Tell them they have the right to believe what they believe, restate our stance then invite them to contact Five Rivers MetroParks if they would like to discuss the information further then move on. We do not want to engage them in an argument. Redirect and agree to disagree.

**Dealing with fear:** you will come across people of all ages that fear the animals and furs you are working with. The first thing to keep in mind is not to judge that fear. Sometimes their fear stems from misinformation, sometimes it stems from a negative experience and sometimes it’s

just because it is something they've never experienced before. Patience, kindness and understanding are your friends in this situation. Speak calmly and give them time to acclimate to the object they are afraid of. Share what YOU like about the animal/fur. This helps them see a positive interaction with the animal/fur. Learning about something can help to relieve the fear and bring about curiosity. Curiosity is the opposite of fear and leads to empathy. Always celebrate the overcoming of fear no matter how small. Never force an interaction. Allow the person to control how close or in depth the interaction is. They don't have to touch the objects to have a connection to nature experience.

**When you're corrected:** Sometimes we get things wrong, mixed up, or forget something. It happens to everyone. Acknowledge the correctly given information and thank them then move on. It's not a big deal even though it may feel like one. "You're right! \*restate correct fact\* Box turtles DO use their claws to dig. \*move on\* Did you also know they use them to climb?"

**When you don't know the answer/When you get a question without an answer**  
The answer to both is, it's okay to say you don't know. We are not expected to know everything about everything. A good response for this situation is to say "I don't know. What do you think?"

**When a person does something potentially harmful for themselves or the furs/bone:** A gentle reminder that these items are fragile and need to last for a long time. Show the person how to safely handle the object and direct their attention to talking about it. We usually have this problem with people trying to use the furs or skulls to try and scare their friend or play with it as a puppet. It is ok to remove objects from the display and put them back in their tub if they are causing too much of a distraction or you are not able to monitor them well. An example is the bear and coyote skulls are often picked up by youth to play chomp things. Sometimes holding the object and allowing youth to touch them helps calm the situation especially if many youth are exploring the table at once.

**When someone tells you they have a native animal as a pet illegally:** Everyone wants to connect with the experiences they know and you will get all kinds of stories about animals they have and things they may have done as a child. Some of those stories will be about having illegal animals. Kids have no control over what animals are kept in their home. Telling a 5 year old that they have an illegal animal in their home will scare them. They hear 'illegal' and think jail. In the case of a child it is better to acknowledge what they've said then move on. Adults are a different story. We still need to be gentle and calm, but this is a good opportunity to talk about permits and what to do with an animal you are caring for without a permit. (i.e. don't release them back into the wild if you've had them more than a month or if they were never in the wild) Five Rivers MetroPark has the appropriate Ohio and Federal permits for all of our Wild Ambassador Wildlife (ie the hawks, owls, turtles, snakes and any salvaged bird bodies, feathers, eggs or nests in our teaching collection.)

**Predators concern for domesticated animals:** We will sometimes get concerns expressed about our predators and how they can care for the domesticated animals they might attack. When feeding cats and dogs outside it is best to take the leftover food back inside to keep wildlife from coming in close to the home to eat it. And small dogs and cats should be kept inside or under observation to avoid predation by coyotes. Hawks and owls can kill and eat chickens and turkeys, sometimes only eating their heads. Proper pen management is advised. It is illegal to shoot hawks and owls. Sometimes a sympathetic ear hearing their story is a good thing, the predators are not “bad;”) they are just surviving. Our trick is to learn to live with them and we understand that they help keep the balance in nature.

**When someone asks if “Did you kill these animals?” or some version of this question.:** For many people, seeing animal furs for the first time can be jarring. They’ve not had experience handling the bits and pieces of animals that were once alive and so you will receive a myriad of reactions ranging from fascination to curiosity to fear to disgust and even outrage. The question above is one of the most common questions we receive and it can be a touchy subject. It is best to start with a statement that is positive and compassionate. For example “That is a very good question!” and/or “I love how you’re thinking about ethics and animals!”. Then we can move on to the answer “no, we did not kill them, we bought them or salvaged them to use when teaching. It can be hard to see them this way but humans have always used animal products and furs as tools and clothing. We still do today in many of the same ways like using leather in our clothing or bones in our art or tools. This is just another way we’re using them. By bringing in these pelts and photos for you and others to touch and see, people can get to know wildlife better and we hope people will support saving habitat for these animals to have a place to live.” Then end with a question that draws them towards curiosity “which one do you think feels the softest?”, “is there one that you think is warmer than the others?”, “have you seen any of these animals out in the wild?” or “do you have a favorite?”

## **Day of the Event**

In most cases, the fur tub and your engagements with the public will be in the context of a Wildlife Ambassador Booth or a Marketing Department Booth. These will be a stationary table-based site often under a canopy. Staff will direct you to the area to display the furs (if space is limited a smaller selection of furs can be displayed). Until you are trained separately with Wildlife Ambassadors, you will not be asked or permitted to handle live wildlife. Staff will have arranged for the fur tub to be present at the event.

## **Where to Find Opportunities**

All opportunities helping the Marketing Department or the Outdoor Education Team with “Connect to Nature” Outreach Interpretation at booths will be posted on Get Connected under **Ambassador** Opportunities, some may pop under Programming from time to time. For training purposes, “Shadow Experiences” for Tactile Nature Interpreter opportunities utilizing the “Connect to Nature” outreach bin will also be posted for volunteers-in-training to gain experience with the tub and public interactions alongside MetroParks staff and/or qualified volunteers.