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Section 1:



Eastern Wild Turkey Ecology

Eastern Wild Turkey Quick Facts

- There are 5 different subspecies of the wild turkey.
- The eastern wild turkey is the only turkey subspecies found in Maryland.
- Wild turkeys are most abundant in Maryland's western counties. However, they can be found in every county of the state.
- Adult male turkeys are called **gobblers**. Juvenile males are called **jakes**. Gobblers average around 18-22 lbs and can have a wingspan of 5 feet.
- Adult female turkeys are called **hens**. Juvenile females are called **jennies**. Adult females average half the size of male turkeys.
- Gobblers are dark brown to black in color with many feathers that are iridescent, with a metallic green and bronze color. Hens are a dull grey-brown in color.
- During breeding season, the gobbler's head turns various shades of red, white, and blue. Hens have duller plumage and their heads lack bright colors.
- Mature males develop spurs on their legs and a beard up to 12 inches in length.
- Nationally, 10 to 20% of female wild turkeys grow beards.
- Turkeys are generally found in or near forests. They use open areas to feed and use overgrown fields for nesting.
- Turkeys are **omnivores**. Adults eat acorns, leaves, buds, seeds, fruits, waste grains, and insects. Young turkeys mostly rely on protein rich insects.
- Wild turkeys breed from March-May in Maryland.
- Once bred, a female turkey will usually lay 9-12 eggs in a shallow nest. Over 50% of the resulting **poults** will not survive.
- Turkeys use a variety of sounds for communication. The gobble is the most well known. Other calls used are yelps, clucks, purrs, and putts.
- Wild turkeys spend most of the daylight hours on the ground with other turkeys in a **flock**. They spend night hours in trees to stay out of reach of predators (aka **roosting**).
- Turkeys are exceptionally adept at sensing danger. Their color vision is 5 times more acute than human vision, and their hearing is 4 times better.
- Turkeys will almost always run when scared but can fly up to 50 miles per hour for short distances.
- The average lifespan of a wild turkey is 3-5 years.

Eastern Wild Turkey Taxonomy

Taxonomy is the science of identification, naming and classification of living organisms. Taxonomy uses a hierachal structure that classifies organisms from very broad categories to very specific categories. In terms of scientific classification, the broadest categories are Kingdoms while the most specific ones are Species and Subspecies. The following information details the taxonomic classification of the Eastern wild turkey.

Kingdom-Animalia

Phylum-Chordata

Class-Aves

Order-Galliformes

Family- Phasianidae

Subfamily- Meleagridinae

Genus- *Meleagris*

Species- *gallopavo*

Subspecies- *silvestris*

The Order **Galliformes** contains heavy-bodied ground-feeding birds, such as turkey, grouse, chicken, quail, ptarmigan, partridge, pheasant, and the Cracidae family. These birds are commonly called gamefowl or gamebirds, landfowl, gallinaceous birds or galliforms. This group has about 290 species, one or more of which are found in almost every part of the world's continents. They are important as seed dispersers and predators in the ecosystems they inhabit and are often reared as game birds by humans for their meat and eggs and for recreational hunting.

The pheasant family (**Phasianidae**) within Galliformes consists of the pheasants and partridges, junglefowl, chickens, Old and New World quail, and peafowl. The family is a large one, and is occasionally broken up into subfamilies such as the **Meleagridinae** (turkey) subfamily.

The Genus **Meleagris** contains two species- the wild turkey (*Meleagris gallopavo*) and the ocellated turkey (*M. ocellata*). The wild turkey is the only turkey species native to North American forests while the ocellated turkey is native to the forests of the Yucatan Peninsula. The wild turkey's name originates from the European guinea fowl (also called turkey fowl). The first European settlers mistook the bird as a relative to their guinea fowl. Since the guinea fowl was imported from the country, Turkey, the shortened name "turkey" stuck to the North American bird. There are at least 5 subspecies of wild turkey in North America with the eastern wild turkey (*M. gallopavo silvestris*) being the most widely distributed and abundant subspecies. This subspecies can be found in Maryland.

Eastern Wild Turkey Fact Sheet

(*Meleagris gallopavo silvestris*)

Description & Range:

Of the 5 distinct subspecies in North America, only the eastern wild turkey resides within Maryland. Wild turkeys are dark brown to black in color with many feathers that are iridescent, exhibiting a metallic green and bronze color. Male turkeys are called **gobblers** and average 18-22 lbs. During breeding season, their heads turn various shades of red, white, and blue. Female turkeys (aka **hens**) are about half the size of gobblers. Hen plumage is duller, and they lack the bright head colors. Adult gobblers have spurs, which is a sharp, bony spike on the back of each of their legs. They also have a rough, black **beard** (hair-like feathers) that protrudes from its breast. The beard can grow up to 12 inches long. Hens do not have spurs and usually do not have a beard, although bearded hens are not exceptionally rare.

Wild turkeys can be found in every county of the state thanks, in part, to an intensive trap and translocation effort by the DNR with assistance from the National Wild Turkey Federation. Although it was once thought that turkeys needed expansive tracts of forest to survive, the wild turkey is quite adaptable and some of the highest densities are now found in landscapes composed of a mosaic of agricultural lands and woodlots. Turkeys continue to adapt to human encroachment as well, sometimes taking up residence in suburban areas.



Male wild turkeys (left) have more colorful plumage than females (right); Male turkey photo by Dimus, Wikimedia Commons and Female photo by Dave Kazyak

Habitat:

Wild turkey habitat needs vary depending on the time of year, but generally, turkeys are found in or near forests. Trees provide safe roosting areas and produce much of the food that turkeys depend on such as acorns and other mast. However, turkeys spend many hours in open areas as well. Grassy and weedy fields produce insects that young turkeys (**poults**) need during the summer months. Nesting habitat may be the most limited but is the most important type of habitat turkeys utilize. Wild turkeys typically nest in overgrown fields or other areas with thick vegetation in the form of bushes, vines, and small trees to obscure a predator's vision.

Diet:

Adult turkeys consume a wide variety of foods such as acorns, leaves, buds, seeds, fruits, waste grains, and insects. The primary food of poult for their first few weeks of life is protein-rich insects, but their diet becomes similar to the adult's diet as they get older.

Reproduction:

During the breeding season (March-May), male turkeys display and gobble to attract females and to assert dominance over subordinate males within the flock or their territory. Male turkeys will fight over territory or for dominance over their hens. Once bred, hens will lay about 1 egg per day in a simple nest that is nothing more than a shallow depression in the ground. Incubation of the eggs will begin when the entire clutch is laid (usually about 9-12 eggs). After the 26-28 day incubation period, the eggs will hatch. Wild turkeys are **precocial**, which means they are born with feathers and can fend for themselves quickly. Poult will leave the nest within 24 hours to forage for food with their mothers. Poult have a dull plumage to help camouflage them from predators. The male turkeys have very little to do with raising chicks. Poult are especially vulnerable when young. Typically, over 50% of the poult will die due to cold, wet weather or to predators before they are able to fly and roost in trees.



Hen turkey with poult. Photo by D.Gordon Robertson, (Wikimedia Commons)

Sounds:

Turkeys use a variety of sounds for communication. The gobble is the most well known, but they also use other calls such as yelps, clucks, purrs, and putts to attract mates, signal danger, and communicate with the rest of the flock. A turkey gobble can be heard up to 1 mile away.

Behavior:

Wild turkeys spend most of the daylight hours on the ground with other turkeys. Flocks of up to 100 birds have been seen in fall and winter, but typically they travel in flocks of 10-30. Flocks will break into smaller groups prior to breeding, and it is not uncommon to see single hens or gobblers during the nesting season. Turkeys are exceptionally adept at sensing danger with color vision 5 times more acute than human vision and hearing 4 times better. Turkeys will almost always run when scared but can fly up to 50 miles per hour for short distances.



Small flock of turkeys by Kerry Wisted

Management:

Wild turkeys are managed as game species in Maryland. The two goals of wild turkey management in Maryland are to 1) ensure that healthy turkey populations are maintained statewide, and 2) to maintain high-quality hunting opportunities for those who are interested in hunting turkeys. More information about wild turkey management can be found in Section 2 of this guide.

Wild Turkey Predator-Prey Relationships

Predators are animals that eat other animals (**prey**). Most predator-prey relationships have evolved over thousands of years. Some predators are specialists and have a limited set of prey species. For example, mountain lions are specialist predators that mainly feed on white-tailed deer. Other predators are generalists and will consume whatever is available. Wild turkeys are both predators and prey.

Wild turkeys eat a variety of insects, making them generalist predators. The primary food source for the first few weeks of a poult's life is insects.

Wild turkey predators vary by the life stage of the turkey. For example, wild turkey egg predators include raccoons, skunks, opossums, crows, ravens, dogs, coyotes, weasels, rats and snakes. Once the poult hatch, additional predators include hawks, owls, foxes, cats and eagles. Adult turkey predators include dogs, coyotes, bobcats, foxes, great horned owls and humans.



Bobcat eating a wild turkey by Sue Miseo



Coyotes are also wild turkey predators by Jethro Taylor, Flickr

Wild Turkey Lifecycle

Egg



Adult

Hatchling



Poult



Wild Turkey Adaptations

Adaptations are traits that help organisms survive and reproduce in their ecological niche or habitat. Adaptations occur over many years and can be physical, behavioral or physiological.

A **physical (anatomical) adaptation** is one that entails a physical feature like the shape or color of an animal. Camouflage is an excellent example of a physical adaptation. Other examples of physical adaptations include the well developed carnassial teeth on mustelids (weasels) that help them shear flesh or the clear eyelids that beavers have to be able to see underwater.

Behavioral adaptations are adaptations that have been learned or inherited. Language, swarming and use of tools are all examples of behavioral adaptations.

Physiological adaptations permit the organism to perform special functions. An example of this would be the production of venom by timber rattlesnakes. Another physiological adaptation is the process of **estivation** or when some animals enter a state of inactivity during prolonged periods of drought or high temperatures.

The following pages list physical adaptations of wild turkeys such as their feathers, skeleton, senses, tracks and sexual dimorphism .



Photo by: Robert Barber/Painet Inc.

Long-tailed weasels have well-developed carnassials

Eastern Wild Turkey Feathers

Eastern wild turkeys are dark brown to black in color with many feathers that are iridescent, exhibiting a metallic green and bronze color. There are approximately 5,500 feathers on an adult wild turkey including 18 tail feathers that make up the male's distinct fan. During the mating season, the gobblers' head will become vibrant colors of red, white, and blue. The exhibition of colors helps attract potential mates. Female turkeys do not produce the bright colors during mating season. In general, hens have duller plumage and lack of

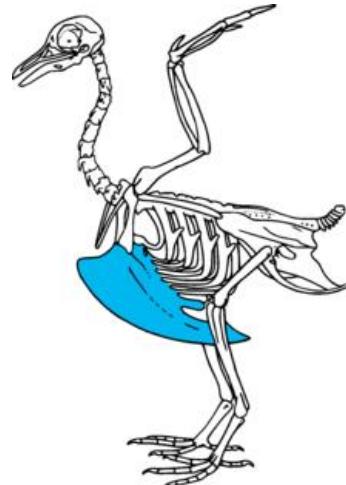
iridescence in their feathers. Poult have feathers resembling a hen. Poult feathers are drab with grey and brown coloring. The feather color of hens and poult creates excellent camouflage. This adaptation allows hens to stay hidden from predators while sitting on its nest. The camouflage also protects poult from predation while they are too young to defend themselves.



Iridescence of feathers, Photo by (National Wild Turkey Federation)

Eastern Wild Turkey Skeleton

The eastern wild turkey skeleton is highly adapted for flight. The skeleton is extremely lightweight, but strong enough to withstand the stresses of taking off, flying, and landing. A majority of the turkey's bones are hollow with crisscrossing sections for structural strength. This adaptation allows large birds, such as the turkey, the ability to fly. Another adaptation of the wild turkey's skeleton is its keeled sternum. A **keel** is an extension of the sternum (breastbone), which runs axially along the midline of the sternum and extends outward, perpendicular to the plane of the ribs. The keel provides an anchor to which a bird's wing muscles attach, thereby providing proper leverage for flight.



Eastern Wild Turkey Senses

Wild turkeys have color vision which is 5 times better than human vision. Their eyes are located on the sides of their head, giving them a 270-degree field of vision. The wild turkey is capable of seeing very well during the day, but their vision is poor at night.

The wild turkey can hear 4 times better than a human. Turkeys do not have external ear structures; instead, they have small holes located behind the eyes. Turkeys have a keen sense of sound and can pinpoint noises from as far as a mile away.

Turkeys also are highly sensitive to touch in areas such as the beak and feet. This sensitivity is useful for obtaining and maneuvering food.

Turkeys do not have a highly developed sense of smell or taste. The region of the brain that controls these senses is relatively small. Turkeys have fewer taste buds than [mammals](#), but can detect salty, sweet, acidic and bitter tastes.



Turkeys have eyes located on the side of their head. Photo by (Sasha Kopf, Wikimedia Commons)

Eastern Wild Turkey Feet

The tracks of wild turkey are a classic game bird track. There are three toes pointing forward with one small toe in back. Wild turkey tracks are impressively large, with 3 long, bulbous toes and a shorter back toe, which usually only registers as a claw impression. The tracks measure around 3.5 - 4.5 inches long by 4 - 5 inches wide. Turkeys use their large toes to scratch the ground to find seeds and dig up insects. Skilled trackers are able to determine the size of the bird, whether it is male or female, and how quick it was moving just from its tracks.

A turkey's stride is dependent on its speed. Their stride is usually 8-14 inches long. Some turkeys can run up to 19 miles per hour!



Eastern Wild Turkey Sexual Dimorphism

Sexual dimorphism is a phenotypic (physical) difference between males and females of a given species. These differences can vary from size, color, ornamentation and even behavior between the sexes. Not all bird species exhibit sexual dimorphism, but turkeys do have distinct differences between males and females.

In terms of coloration, male turkeys are much more colorful and more iridescent than females. This color difference is partially due to the fact that wild turkeys nest on the ground, so females have drab coloring used for camouflage.

Male wild turkeys also have a structure known as a **snood**. The snood is a fleshy appendage that attaches just above the beak. When gobbler (aka tom) relaxes, the snood is short – maybe half an inch long. However, when the gobbler struts, the snood engorges with blood and extends to hang down over the beak.

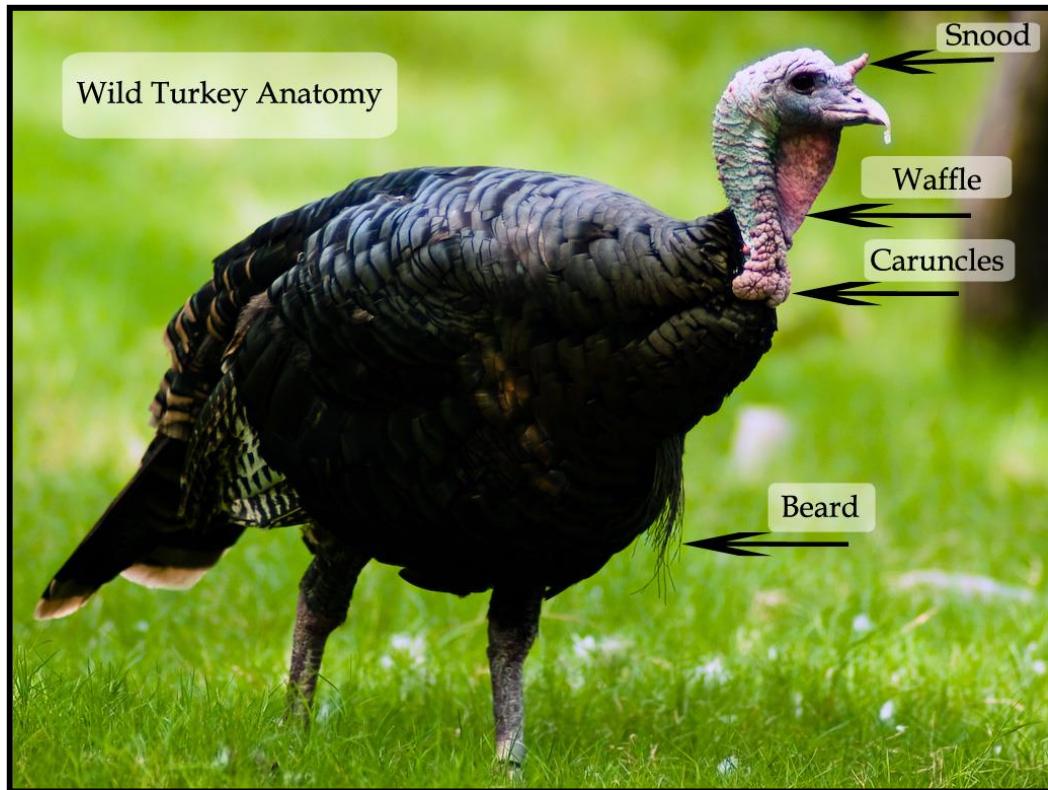


Photo by Malcolm, Wikimedia Commons

Wild turkeys also have dewlap (AKA wattle). This structure is a large patch of skin that hangs between their beak and neck. While both males and female turkeys have a dewlap, the structure is much more pronounced in male turkeys. In addition, a gobbler's dewlap and head are able to quickly change colors as their emotions change.

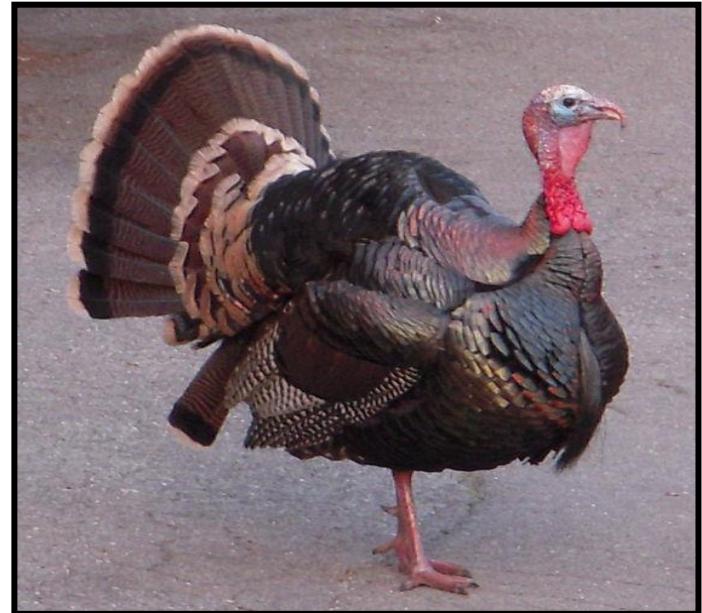
When it is breeding season, the gobbler's head will become more bright and vibrant in color. This feature is a tool used to impress hens.

On both the sexes, the **caruncles** are fleshy, bulbous bumps that grow over the head and neck. Even though they are less pronounced on females, the caruncles on a male turkey grow large and are especially pronounced on the lower portion of the neck. Usually pale in color, the caruncles engorge with blood and turn to bright red when the turkey struts or becomes aggressive.

One of the most noticeable gobbler features is its **beard**. Around 11 weeks of age, males will begin growing their beard. The beard is a rough, black, hair-like feather that grows from the bird's breast. Scientists call the "hairs" of the beard "bristles" or "mesofiloplumes". Young turkeys will usually have shorter beards than mature gobblers. Beards grow continuously but usually their maximum length is about 11-12 inches because they drag on the ground and wear off. However, some birds have grown beards as much as 18 inches in length! Across the United States, 10-20 percent of female turkeys grow beards. In addition, some turkeys can grow multiple beards.

Male turkeys also have prominent tail fans. Made up of 18 tail feathers 12 to 15 inches long, tails fans are used by toms to attract females during the breeding season. Jakes (juvenile males) have middle tail feathers that are longer than the rest of the tail feathers. In contrast, adult males have tail feathers uniform in length. The tail feathers that make up the fan also aid in identifying the subspecies of turkey. On eastern wild turkeys, the tail feathers have brown tips while the tips of Rio Grande turkeys' tails are buff-colored.

Gobblers also have spurs which protrude from the back of their legs. The spur is a hard bony structure that is



Rio Grande Gobbler photo (note beard & uniform tail feather length as well as buff-tipped tail feathers) courtesy of Freezo, Wikimedia Commons



Eastern wild turkey jake tail fan as evidenced by uneven tail feather length and brown tips on feathers

used in fighting between turkeys. Gobbler's spurs are also used to determine the age of the bird. A jake, up to one year old, will have short, nub-like spurs up to $\frac{1}{2}$ inch in length. A two year old will have straight spurs $\frac{1}{2}$ to 1 inch in length. Gobblers 3 years and older will have spurs 1 inch in length and longer. Gobbler's spurs are also much sharper and have a slight curve to them. Hens lack spurs on their legs.



Hen



Jake



Gobbler

Glossary

Adaptation- traits that help an organism survive

Beard- rough, black hair-like feather that grows from the breast of male wild turkeys

Caruncles- fleshy, bulbous bumps that grow over the head and neck

Dewlap aka wattle- patch of skin between head and neck of a wild turkey

Flock- a group of turkeys assembled together

Estivation- when animals enter a state of inactivity during prolonged periods of drought or high temperatures.

Galliformes- heavy-bodied ground-feeding birds, such as turkey, grouse, chicken, quail, ptarmigan, partridge, pheasant, and the Cracidae family

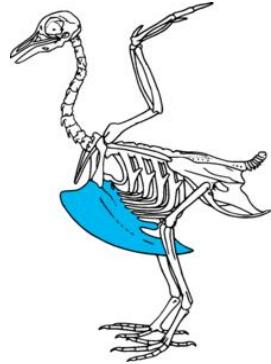
Gobbler- an adult male turkey; over 1 year of age

Hen- an adult female turkey; over 1 year of age

Jake- a juvenile male turkey; less than 1 year of age

Jennie- a juvenile female turkey; less than 1 year of age

Keel- is an extension of the sternum (breastbone), which runs axially along the midline of the sternum and extends outward, perpendicular to the plane of the ribs



Meleagridinae- (turkey) subfamily of Phasianidae

Meleagris- Genus which contains two species- the wild turkey and the ocellated turkey

Omnivore- An animal or organism that feeds on both animal and plant matter

Phasianidae- pheasants and partridges, including the junglefowl (including chicken), old world quail, francolins, monals and peafowl

Poult- a young turkey that has recently hatched

Precocial- young that are relatively mature and mobile from the moment of birth or hatching

Predator- an animal that eats another animal

Roost- the place where birds rest or sleep; wild turkeys roost in treetops

Sexual dimorphism- phenotypic differences between male and females of a given species

Snood- a fleshy appendage that attaches just above the beak on a wild turkey

Taxonomy- the science of identification, naming and classification of living organisms

Section 2:



Eastern Wild Turkey Management

Wild Turkey Timeline

- **1.8-5 million years ago-** Wild turkeys evolved
- **800 & 200 BC-** Turkeys domesticated by Aztecs and Pueblos
- **Early 1500s -** Spanish conquistadors import wild turkey to Europe
- **Early 1600s -** Settlers bring forms of domesticated turkey to back North America
- **1626-** Plymouth Colony passes first conservation law limiting timber harvest
- **1708-** Colony of New York passes first wild turkey hunting regulation
- **1813-** Wild turkey extirpated from Connecticut
- **Early 1900's -** Very few of Maryland's wild turkey flock remain
- **1919 -** State Game Warden F. Lee LeCompte said, "Wild turkeys, outside of a few sections in the Western counties of our State, are practically extinct"
- **1920-** Wild turkey extirpated from 18 states
- **1920-1933 -** Turkey hunting prohibited in Garrett County
- **1925 -** Maryland initiated a program of buying and releasing pen-raised turkeys
- **1930-1971 -** Maryland establishes its own game farm raising and releasing over 33,000 turkeys into the wild
- **1950's -** Rocket net developed and perfected
- **1960's -** Turkey populations increase in Fredrick and Montgomery Counties
- **1967 -** Rocket net used for the first time to capture wild turkeys in Garrett County to release in Fredrick County
- **1971 -** Raise and release program abandoned over trap and transplant program
- **1973 -** Estimated 2,000 wild turkeys remained in Maryland
- **1978 -** Wild Turkey Advisory Committee established
- **1979-2001 -** 1,129 wild turkeys captured by rocket nets were released at 63 sites throughout the state
- **2001 -** Self-sustaining wild turkey populations are seen throughout Maryland. Trap and transplant program suspended
- **2003-Present -** Approximate population of wild turkey in Maryland is over 30,000 birds; turkey management includes: population surveys, habitat management, and hunting regulations



History of Wild Turkey Management

Pre-Colonial Era

It is believed that the wild turkey evolved from pheasant-like birds that became isolated in North America. Fossil records date the presence of the earliest wild turkeys species to 1.8-5 million years ago in the late Pliocene Epoch.

The wild turkey was used by some Native American cultures as a food and textile resource. At the time, wild turkeys were less wary of humans and were easily captured. Some Native Americans were able to use nets, pens, and snares to capture the birds, but shooting them or capturing them by hand on the roost were the easiest forms of collection. Due to their ease of capture, some Native American tribes, such as the Cherokee and Chickasaw, allowed children to hunt turkey with an early form of a blow gun known as a **sarbacane**.

Many tribes throughout North America relied heavily on the wild turkey as a food source. Archaeological evidence has shown the wild turkey was used extensively for food in many Native American tribes and was only second to deer as a food source. Other Native American tribes had religious customs against eating certain wildlife species. The Apache would not eat wild turkey, quail, and dove while the Cheyenne believed that consuming wild turkey would make them cowards. Other tribes did not hunt the bird because they found turkeys to be “careless and foolish”.

Native Americans utilized the wild turkey not only for food but also for clothing and tools. The turkey's feathers were used to make blankets, quilts, dresses, and coats. Native American women would weave turkey feathers into cord made from hemp, yucca, or basswood to create the various forms of clothing. The Native Americans also developed tools out of turkey bones to assist with everyday activities. Spoons and awls were made out of hollow turkey bones, and the earliest forms of game calls were made from turkey bones combined together. Native American hunters used turkey spurs for arrow tips and feathers for fletchings.

Wild turkeys also were used in ceremonies by some tribes. Beards and vibrant feathers were used to decorate prayer sticks. In Virginia, men would hang turkey legs from their pierced ears, and pieces of bones were used by some to create ornaments and decorative beads.



Native American feather neck ornament composed of wild turkey feathers. Photo by: Dr. Frank G. Speck (Wikimedia Commons)

At least two separate groups domesticated wild turkeys between 800 and 200 B.C. The Aztecs and Pueblos both had domesticated forms of the wild turkey which were allowed to roam around the villages and in some cases, were in pens. Motolinia, a Franciscan priest, estimated that over 8,000 turkeys were sold every 5 days in Tepeyac, a city in Mexico. The early domestication of the wild turkey was due, in part, to the Native American's use of the turkey's feathers for rituals and ceremonies. Around 1100 A.D., the Anasazi (ancient Puebloans) utilized the domesticated turkeys as a food source. Many eastern Native American tribes followed the Pueblo in using the turkey for its meat as well as its feathers although they did not domesticate it.

After the arrival of the Spanish conquistadors in the early 1500s, the wild turkey was imported to Europe and further domesticated. The presence of the turkey quickly spread throughout all of Europe. During the 1600s, the settlers brought the domesticated turkeys back to North America from Europe. Interestingly enough, domesticated turkeys today can be traced back to the Aztec turkeys. The domesticated turkey can now be found in captivity world wide.

Colonial Era

At the time the first European settlers arrived in North America, wild turkeys were abundant throughout the eastern United States and Mexico (Figure 1). The early pioneers relied on the wild turkey as an important source of food. Turkeys were hunted year round with no game laws (hunting regulations). With a growing nation and a demand for lumber, large tracts of forest were cleared for farmland, buildings, and villages as well as to create a border between villages. This extensive deforestation destroyed much of the wild turkey's natural habitat.



Unregulated hunting coupled with mass deforestation led to the first noticeable decline of the wild turkey population in the 1600s. In **1626**, the Plymouth Colony passed the first conservation law limiting the cutting and sale of colonial lumber. Later in **1708**, the Colony of New York passed the first wild turkey regulation prohibiting the hunting of wild turkeys during nesting and brood rearing seasons. Soon after, many other colonies established hunting regulations for wild turkeys. Even with forest and hunting conservation laws in effect, the need for land, lumber, and food continued to devastate the population of wild turkeys. With the wild turkey's habitat quickly declining, and the pressure on hunters to feed the growing number of colonists (4 million by 1790), the wild turkey began to disappear. Connecticut lost its wild turkeys by **1813**. In **1842**, wild turkeys were **extirpated** from Vermont. Other states quickly followed. By **1920**, the wild turkey had been extirpated from 18 of the original 39 states and Ontario, Canada (Figure 2).

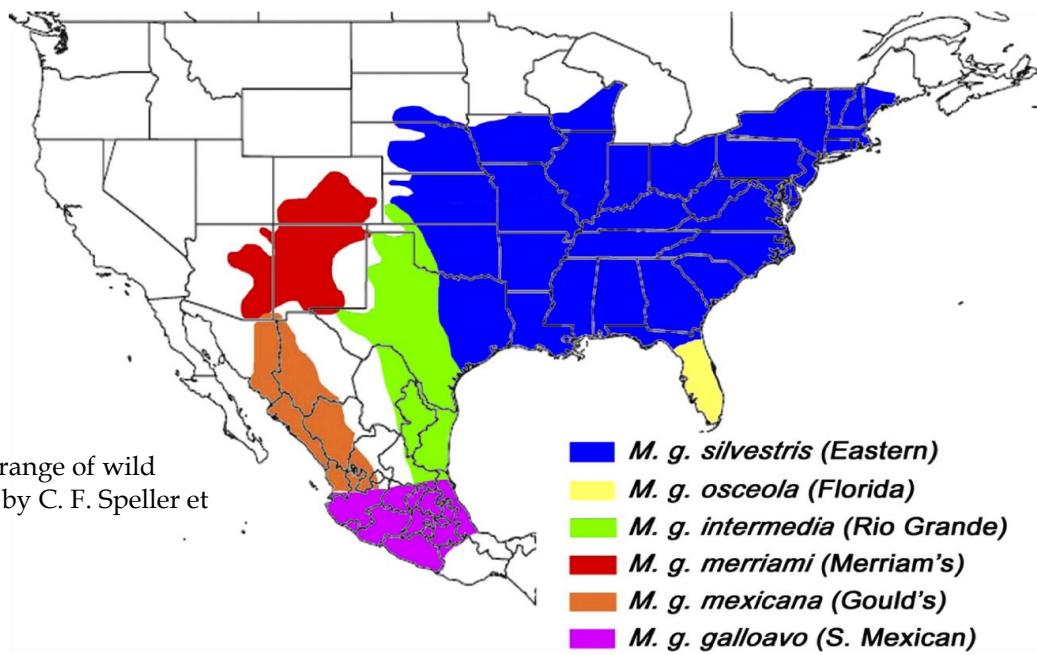
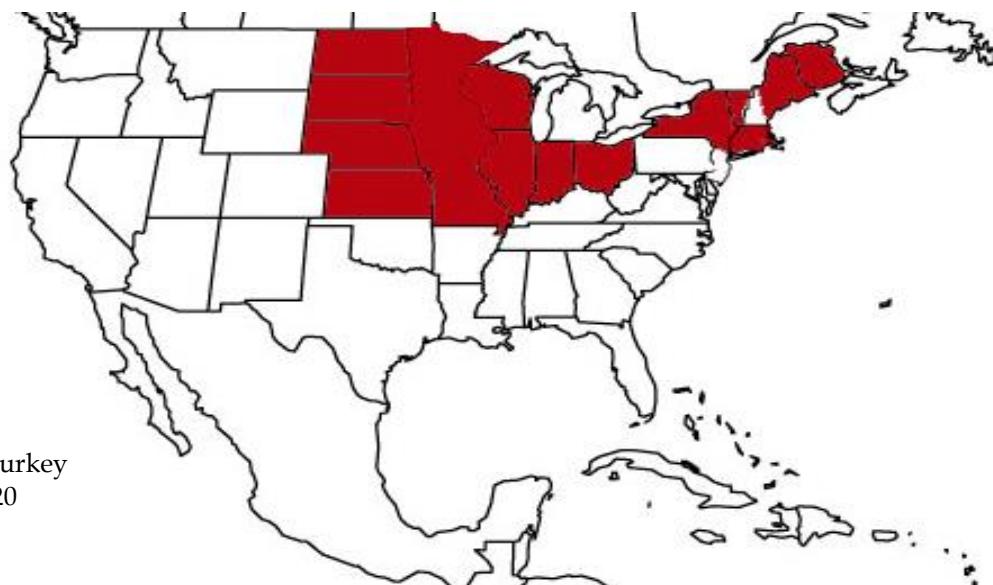


Figure 2: States wild turkey extirpated from in 1920



Modern Wild Turkey Management in Maryland

By the turn of the 20th Century, only a remnant of Maryland's once abundant wild turkey flock remained. Concern over low turkey populations resulted in a prohibition on turkey hunting in Garrett County from **1920** to **1933**. In **1925**, Maryland initiated a program to restore wild turkeys by buying and releasing pen-raised turkeys into the wild. In **1930**, the State established its own turkey farm. Between **1930** and **1971**, nearly 33,000 turkeys were raised on the farm and were released into the wild. Various techniques were tried in hopes of producing pen-reared birds that exhibited characteristics of a truly wild turkey. For example, wing clipped hens were mated with wild gobblers in an effort to instill wild qualities in the offspring. Despite these and other efforts, game farm releases were not successful in establishing wild turkey flocks as farm raised birds did not have the natural instincts of wild turkeys. The game farm turkeys lacked instincts for foraging, breeding, and avoiding predation. In **1971**, the expensive and ineffective game farm program was abandoned in favor of a trap and transplant approach.



Trap and Transplant Program

In the late 1950s, the **rocket net** was developed and perfected. The net was designed to capture wildlife and is propelled by explosive charges placed at one end of the net. This invention easily allowed biologists to safely capture live animals. Often, sites are pre-baited to attract foraging animals. The development of the rocket net allowed for easy capture of wild turkeys and was vital to the successful restoration of their populations.

The **trap and transplant program** consisted of trapping wild turkeys in high population density areas (such as Western MD) and then transplanting them into areas with little or no turkey populations (such as Southern and Eastern MD). The trap and transplant program was conducted as a joint effort between the Maryland Department of Natural Resources and the National Wild Turkey Federation.



Wild Turkeys being trapped in a rocket net. Photo By: Bob Eriksen, National Wild Turkey Federation

When the trap and transplant program began, wild turkeys were found only in Garrett, Allegany and Washington counties. The rocket net was used for the first time in Maryland in **1967** to capture wild turkeys in Garrett County for release in Frederick County. This original transplant was successful in establishing a wild turkey population in northwestern Frederick County. However, similar releases of small numbers of turkeys during the late **1960s** and early **1970s** in Eastern and Southern Maryland failed.

In 1979, a more intensive effort to reestablish wild turkeys throughout Maryland began. Armed with better knowledge of successful techniques and the encouragement of a newly formed Wild Turkey Advisory Committee and National Wild Turkey Federation,

the Department aggressively pursued trap and transplant efforts annually for the next 3 decades.

A total of 1,129 wild turkeys captured by rocket nets were released on 63 sites around throughout the state between **1979** and **2001**. By 2001, self-sustaining turkey populations were established in all counties of Maryland. Subsequently, trap and release operations were suspended. This restoration effort was funded entirely with revenue from hunting licenses and funds generated by the **Pittman-Robertson Act** (which places an 11% federal excise tax on firearm and ammunition sales). Thanks in large part to the trap and transplant program, Maryland's turkey population currently is over 30,000 birds.



Eastern wild turkeys being released. Photo by Bob Long, MD DNR

Managing for Wild Turkeys Today

The focus of current turkey management in Maryland is 1) to ensure that healthy turkey populations are maintained statewide, and 2) to maintain high-quality hunting opportunities for those who are interested in hunting turkeys. To meet these goals, Maryland Department of Natural Resources (MD DNR) biologists conduct wild turkey population surveys, manage habitat for wild turkeys, and manage hunting regulations.

Population Surveys

MD DNR biologists conduct wild turkey observation surveys and collect biological information from hunters to monitor the status of the wild turkey population. In the past, populations were also monitored through spring gobbler surveys and brood surveys.

Wild turkey observation surveys have occurred annually since 1993. The primary purpose of this survey is to estimate wild turkey reproductive success, so this survey is often called the "brood survey." Like most game birds, turkey populations are very dependent on reproduction to add new individuals to the population. Turkey numbers, harvest rates, hunter success, and the population age structure are all influenced greatly by annual poult production, making this survey an important monitoring tool.

Survey forms are distributed to interested DNR personnel, hunters, landowners, and citizens. The survey is conducted during the months of July and August when broods are most easily observed and age can be readily determined. Participants are asked to record the county and number of hens, poult, gobblers, and "unknown" turkeys observed. An annual production index is calculated as the number of poult observed per adult hen. The production index as well as other brood survey data can be used to explain and predict annual and regional variations in turkey populations and hunter harvest.

The table below illustrates data collected from the brood survey over a 10 year period (2003-2013). Overall, poult production is highest in the western and upper eastern shore regions of the State. While some yearly fluctuations occur with poult production, reproduction in Maryland turkey populations is relatively stable over the long term. More detailed observation data can be found in the table below (see Table 1).

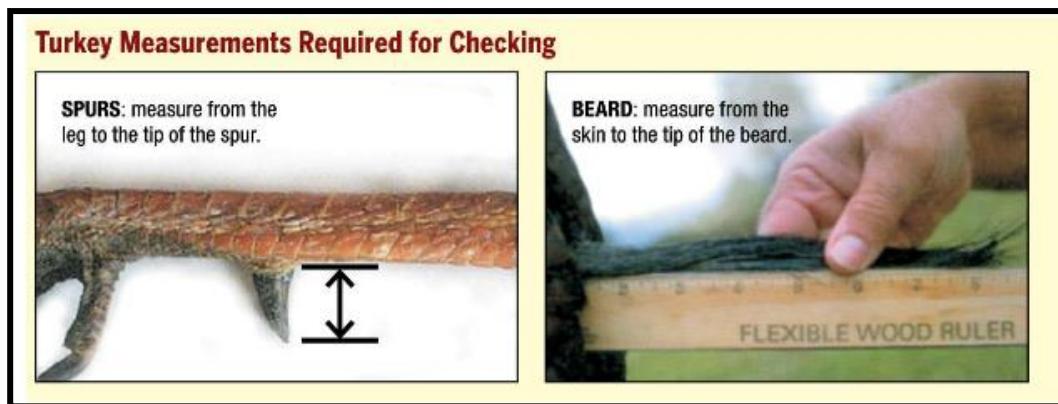


Hen with poult. Photo by D.Gordon Robertson
(Wikimedia Commons)

Table 1: Wild Turkey Production (poults per hen) 2003-2013

Region	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	10-year Average
Western	3.1	4.4	3.7	3.6	3.4	2.7	2.7	2.8	3.1	3.6	2.6	3.3
Central	1.5	2.8	1.9	2.3	1.6	2.7	1.4	2.3	2.7	2.4	2.6	2.2
Southern	2.9	4.2	2.2	0.6	1.7	3.9	3.0	3.6	2.2	3.3	2.3	2.7
Upper Eastern Shore (ES)	3.1	4.1	4.7	3.7	4.6	2.4	2.4	2.2	2.3	3.0	2.1	3.3
Lower Eastern Shore (ES)	1.5	4.5	1.9	3.2	2.2	1.4	1.6	2.6	1.9	2.8	2.2	2.4
Statewide	2.1	4.3	2.7	3.2	2.7	2.2	2.2	2.7	2.5	3.1	2.3	2.8

In addition to the observation survey, Maryland Department of Natural Resource's biologists collect survey data from hunters. Following harvest, turkey hunters are required to report the location of harvest, and length of spurs and beard (if applicable). These data allow biologists to estimate wild turkey densities, calculate age and sex ratios, and determine population trends over time



Wild Turkey Habitat Management

Habitat is crucial for the survival and success of a species. One way to manage for wild turkeys is to manage a mixture of forested and open lands to provide the best turkey habitat. The three main types of habitat that wild turkeys need include 1) nesting habitat, 2) brood-rearing habitat, and 3) fall/winter habitat. The Maryland Department of Natural Resources' biologists manage wild turkey habitat on many Wildlife Management Areas (WMAs) and other public hunting lands across Maryland. They also provide habitat recommendations for landowners interested in managing their property for wild turkeys. Some of the habitat recommendations are listed below.

Nesting Habitat

In Maryland, hen turkeys will usually nest from early April until July. A full clutch of eggs is typically between 9 and 12, and once all are laid, hens will incubate for approximately 28 days. Nesting failure is common and as many as 60% or more of the nests laid will be destroyed by predators. For this reason, abundant nesting cover is important to maximize the chances for successful hatching. Turkeys will nearly always nest in an area that is somewhat concealed from predators at the ground level. In the extensively forested areas of Maryland, turkeys will nest in the tree toppings of recently cut forests and brushy areas. In agricultural areas, nest sites are commonly found in hedgerows, thick woodlots, fallow fields, and hay fields.



Turkey nest. Photo by D.Gordon Robertson

Turkey nesting habitat can be created in several ways. Landowners should limit the annual mowing of brushy and grassy areas and allow native vegetation to grow for several years. Timber harvests can provide nesting habitat by permitting new undergrowth in the forest. Leaving the toppings of trees scattered provides further nesting sites.

Nesting hens will also use hayfields and pastures. These areas should not be mowed or hayed between April and August to prevent nest destruction. If possible, several acres of a field should be left to fallow for 3-4 years. In late August, the fields can be mowed or disked and then left alone for another several years.



Indiangrass by Jennifer Anderson, USDA

Fields planted in native **warm-season grasses** such as indiangrass (*Sorghastrum nutans*), switchgrass (*Panicum virgatum*), or big bluestem (*Andropogon gerardii*) can also provide high-quality nesting habitat. Warm season grasses are grasses that grow best during the summer (June-August) and form large clumps. These grasses provide excellent wildlife habitat. In addition, the extensive root systems of the warm season grasses help provide soil erosion control.

Federal cost-share programs such as the **Conservation Reserve Program** (CRP) and the **Conservation Reserve Enhancement Program** (CREP) often provide incentives to establish permanent grass cover around the edges of crop fields, benefiting both wildlife and water quality. Grasses established through these programs should be maintained by prescribed burning or light disking to provide optimum nesting and brood habitat for turkeys.

Brood-Rearing Habitat

After hatching, wild turkey poult will leave the nest within hours. As many as 50-75% of the young poult can die within the first few weeks of life due to exposure or predation. A high-protein diet of insects, spiders, and other invertebrates is essential to the survival of poult. Therefore, broods are often found where insects are abundant and adequate cover is provided. Suitable brood habitat is the most specific type of habitat that turkeys require. It is also the element most-often lacking on many properties throughout Maryland.



Wild turkey poult. Photo by Paul Fusco

Increasing brood habitat should be a high-priority for land managers seeking to boost turkey numbers. Brood habitat should have at least 70 % of the ground covered in grasses, **forbs** (herbaceous plants) and **legumes** (such as clover). The optimum vegetation height for brood habitat is about 12-20 inches which allows the hen to spot approaching predators while the poult are concealed. Broods rarely use row crop fields because pesticide and herbicide use limits the amount of insects present.

One of the easiest ways to create high-quality brood cover is to establish **field borders**. Field borders are simply strips of herbaceous vegetation located between a forest edge and a crop field. These borders can be planted in legumes such as clovers or alfalfa, a cool-season grass like orchard grass, or warm season grasses. An easier and just-as-beneficial practice is to simply let the borders seed in with native weeds and grasses.

Mature forestlands, particularly pine forests, can also be managed to provide exceptional brood-habitat. Thinning of pine stands through timber harvest followed by a prescribed burning of the understory every 3-4 years encourages lush, herbaceous growth that is preferred by turkeys year round.

Fall and Winter Habitat

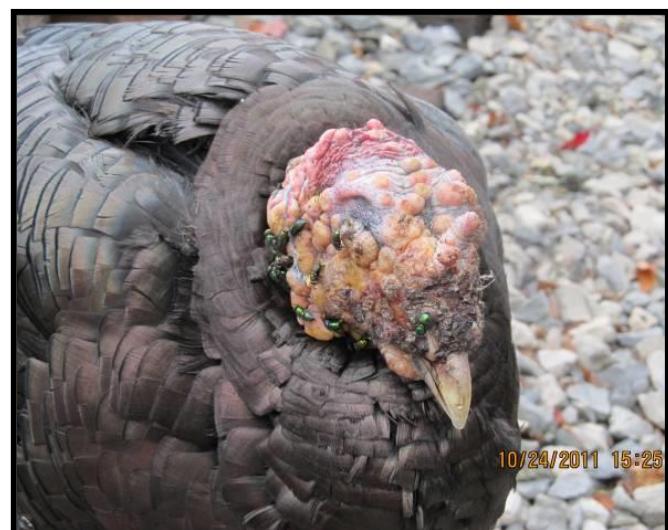
As fall approaches, wild turkeys will gradually use open areas less and spend more time in forested areas. Larger flocks will begin to form, and they will become concentrated where food is abundant. They will feed heavily on foods such as acorns, beechnuts, crabapples, and various berries. Corn and other grains will be consumed in agricultural areas when available.

Lands being managed for wild turkeys should contain fall and winter food sources and roosting areas. Mature oak and beech trees, crabapples, blackberry patches, and wild grapes should be preserved whenever possible.

Planting crabapple and dogwood can also increase the diversity and abundance of fall and winter foods on small properties. In fields, strips of unharvested grains left standing next to woodlands can be beneficial to winter turkey flocks. Corn is a highly preferred crop and standing corn will provide nourishment during severe weather when other natural foods are buried under snow. Chufa, a popular planting for turkeys in the southeast, also can provide a high-quality winter food source.

Supplemental feeding wild turkeys grains or other foods is not recommended. Feeding wild turkeys can concentrate flocks and can increase the transmission of diseases and parasites. For example, one case of lymphoproliferative disease (LPDV) was found in Maryland in 2011 at a site where turkeys were being fed by people. This disease causes a proliferation of lymphocytes and is usually found in organisms with compromised immune systems.

Additionally, human-fed turkeys become less wary and more dependent on humans, leaving them vulnerable to predators and sometimes creating a nuisance situation.



Wild turkey with LPDV. Photo by Bob Long

Wild Turkey Hunting

Wild turkey hunting is regulated by the Maryland Department of Natural Resources. The regulations are designed to ensure strong, future populations of wild turkeys in the State.

Wild turkeys can be hunted during two periods throughout the year. The spring hunting season is timed to occur after most of the hens have been bred and is one of the few wildlife species that can be hunted outside the fall and winter. During this time, it is only legal to hunt gobblers (bearded turkeys). As with many wildlife populations, harvesting males has little to no impact on future populations so the spring turkey season is very sustainable. The fall hunting season is limited to Western Maryland where there is a tradition of hunting turkeys in the fall and the population can support additional harvest. The season lasts 7 days and either sex can be taken at this time.

Turkey hunting is popular in Maryland, ranking 3rd in number of hunters behind white-tailed deer and waterfowl. Overall, around 3,000 gobblers are taken annually and around 10,000 hunters pursue wild turkeys. These numbers can vary depending on the weather and other factors. The annual hunter mail survey estimates that the number of turkey hunters in Maryland has declined slightly over the last 15 years. Fall turkey hunting participation has declined by approximately 80% since the 1980s. In the 2010-11 season about 1,700 fall turkey hunters spent 4,200 days afield. Success rate in the fall season is typically about 10%. Spring turkey hunting participation peaked in the mid-1990s when the season was opened statewide and has gradually declined since then. The most recent hunter mail survey estimated that about 9,900 spring turkey hunters hunted 45,300 days. About 25% of spring hunters are typically successful in taking at least one turkey.

While turkey hunting may not be as popular as deer hunting in Maryland, turkey hunters still contribute a great deal to the economy. The most recent National Survey of Fishing, Hunting, and Wildlife-Associated Recreation in 2006 estimated that turkey hunting produced an economic benefit of over \$16 million to Maryland.

The restoration of the wild turkey is among the greatest conservation success stories in North America as well in Maryland. With proper management, turkey populations should remain healthy and stable for years to come.



Successful turkey hunt. Courtesy of NJ FWS

Glossary

Brood - the young of animal, especially young birds that are born and reared together.

Conservation Reserve Enhancement Program- (CREP) a voluntary, federal land management program for private landowners

Extirpation- (aka a local extinction) when a species or taxon ceases to exist in a defined area

Field borders - strips of herbaceous vegetation located between a forest edge and a crop field.

Forb- herbaceous flowering plant that is not a graminoid (grasses, sedges and rushes)

Legume- a plant in the family Fabaceae (aka bean family)

Pittman Robertson Act - conservation funds obtained through an 11% federal excise tax on firearms and ammunition sales

Rocket net - a large net shot over feeding turkeys which was propelled by an explosive charge connected to the net.

Sarbacane- early form of a blow gun used to hunt wild turkeys

Trap and Transplant Program - (1971-2001) MD DNR program which used rocket nets to capture wild turkeys and transplant them to areas across the state.

Warm-season grasses - grasses that grow best during the summer (June-August) and form large clumps.

Section 3:



**Eastern Wild Turkey Lesson
Plans**

Activity: Tasty Turkeys

**Activity Adapted from Terrific Turkeys in Growing Up WILD: Exploring Nature with Young Children*

Due to copyright, this activity is only available in the turkey guide.

Activity: Calling All Turkeys*

**Activity Adapted from National Wild Turkey Federation "Wild About Turkeys"*

Grade Level: K-5

Setting: Indoors

Objectives: Students will be able (1) to identify the different calls made by wild turkey, and (2) to practice these calls.

Method: Students will make a turkey call to create different calls made by a hen.

Materials:

- One plastic cup (per student)
- 12" piece of string (per student)
- One round toothpick (per student)
- Turkey template (per student; found below and on resource CD)
- Crayons
- Staples or glue
- Turkey sounds (on resource CD)
- Stereo or computer to play CD
- Turkey calls (in trunk)



Background:

Wild turkeys communicate using body language and a variety of sounds. Adult male turkeys called **gobblers** or **toms** are most famous for their gobble, while **hens** (females) are best known for their yelps or clucks. Turkeys make approximately 28 different sounds. Each sound communicates a different message to other turkeys.

Some of the most common turkey calls include:

- **Tree Call** – This call is typically made from the roost in a tree first thing in the morning. The call is to other members of the flock as if to say "*Good Morning, how are you? Should we begin the day?*"
- **Gobble** – This call is made primarily by male turkeys in the spring to attract female turkeys for mating.
- **Putt** – This is a short, one-syllabled alarm call. When used in a series, it indicates that the turkey has seen or heard danger.
- **Cluck** – This call is usually in a series of short, soft notes. It is used to get the attention of another turkey.

- **Purr** - A soft, rolling call, the purr is often made by content turkeys mainly when they are feeding.
- **Assembly Call** - This call is usually made by the adult hen when calling her **poults** (young)

Procedure:

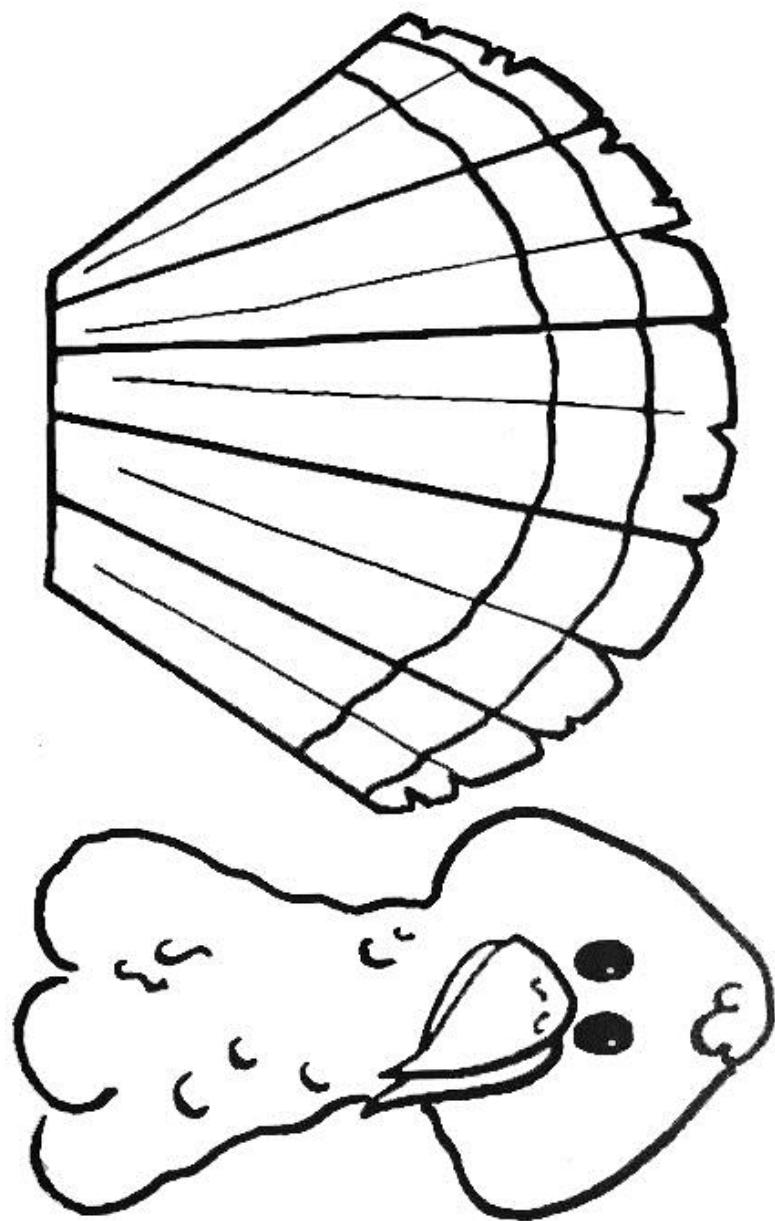
1. Ask students about ways communicate with other people. Do they communicate differently with adults compared to other students? Ask them if animals also communicate with each other. Make a list on the board of animal versus human communication. How does animal communication compare to human communication?
2. Ask students to imagine a wild turkey. What comes to mind? What sounds does a wild turkey make? Why do they make these sounds? Have students refer back to the list on the board.
3. Play the turkey sound files on the resource CD and use turkey calls found in trunk. Talk to students about different sounds and what the different sounds usually mean to the turkeys.
4. Tell students that they will be making a turkey calling device and then give each student a set of materials. Younger students will likely need an aid to help them with assembly.
5. Instruct students to place cups upside down on their desk.
6. Have students carefully poke a small hole in the center of the cup with the toothpick. (For young children, you may want to poke a hole in the cups for them). Enlarge hole with pencil, if needed
7. Next, have students thread the string through the hole in the cup bottom. Then, have students tie the string sticking out of the bottom of the cup to the center of the toothpick so the toothpick anchors the string in place.
8. Give each student the turkey cut out and have them color and cut out the turkey drawings
9. Once the cut outs are complete, assist the students with attaching the turkey drawings to the cups with either staples or glue.
10. Have the students try out their new turkey call by holding the cup with one hand and tugging on the string with the other. Have them practice changing the speed and the strength of each tug on the string. (*Note:* wetting the string usually produces a better sound). Do these techniques change the sound produced?

Evaluation:

1. What are ways that animals communicate?
2. Why do animals need to communicate?
3. Can you name a type of turkey call?

Extensions:

1. Encourage students to try different string lengths and hand positions on the cup. How do these variations change the sounds produced by the call? For older students, you can make point out the concepts of sound, pitch and vibration and how they can vary the noises made.
2. Use the calls in the turkey trunk to provide further examples of turkey calls.



Activity: Fit for a Turkey*

*Activity Adapted from: DLTK's Crafts for Kids (<http://www.dltk-holidays.com/thanksgiving/mleafturkey.htm>)

Grade Level: 3-5

Setting: Materials are gathered from the outdoors. The activity may be performed inside or outside

Objectives: Students will 1) learn about wild turkey habitat and diet and 2) will learn about turkey anatomy.

Method: Students will explore an outdoor area for wild turkey habitat and will make their own wild turkey crafts.



Materials:

- Glue
- Paper / Scissors
- Leaves for each student, or for a group to make 1 tail fan
- Pine cones for each student, or for a group to imitate the turkey's body
- Felt, or colored construction paper
- Laminated turkey pictures (in trunk)
- *Optional:* (craft "wiggly" eyes) or scrap paper to use as eyes
- *Optional:* black yarn to make into a beard.

Background:

Wild turkeys were once abundant across Maryland, but overhunting and habitat loss led to a sharp decline in the species. Through the work of multiple organizations, wild turkeys are once again found throughout Maryland. They can be found in every county in the state and occasionally wander through Baltimore City.

Wild turkeys can be found in many different habitats including forests, fields, orchards, and seasonal marshes. They are ground-dwelling birds that search on foot for food. Wild turkeys are able to fly and roost in trees at night for safety.

Wild turkeys eat a variety of foods, depending on the season. They will eat insects, acorns, leaves, berries, fruit, and seeds. Occasionally, they will also eat frogs, lizards, and even small snakes.

Male turkeys are more colorful than female turkeys. Male turkeys have bright red, white, and blue colored heads as well as modified feathers known as “**beards**”. Male turkeys have iridescent feathers which are tipped in black on their breasts. These colors are used for attracting potential mates. In contrast, female turkeys (hens) are brownish in color and have breast feathers that are tipped in a buffy color. Female turkeys are less colorful because they nest on the ground.

Procedure:

1. Take your students outside and ask them if they think a turkey could live there. Ask students why they said ‘yes’ or ‘no’. Encourage students to point out possible food sources or places to eat or hide. Talk to students about types of food that turkeys eat and what turkey habitat looks like. You can hold up materials like a pine cone or acorns and tell the students that both are excellent turkey food sources.
2. Have students search the area to see if they can find any other potential food sources for turkeys. Have students scratch at the ground with their feet in leaf piles. Can they find anything tasty? Finally, have them look up into the trees and ask them how they feel about sleeping up there every night! Tell them how turkeys roost each night in the tree tops.
3. After discussing turkey diet and habitat, have students gather the leaves and pine cones necessary to construct their own turkeys. Have them collect varying colored leaves to make their tail fans more decorative. Make a trip to the park, if possible, or have students bring in materials collected from their yards.
4. Once your students have gathered enough supplies, bring them back inside or to tables outside. (*Optional*) Have students press their leaves for a few days to prevent them from curling and becoming too fragile. Simply place leaves in between several sheets of newspaper and place a heavy book over them for 3-5 days until dry.
5. Before beginning the craft portion of the activity, talk to your students about the appearance of wild turkeys. What features do they know about? How can they tell a male from a female wild turkey? Use laminated pictures in trunk to help show students important features like the “beard” on the male turkey and/or the waffle (aka snood).
6. Have the students gather their glue, sheets of paper, and any eyes, felt, or construction paper they will need.
7. Glue the leaves onto a sheet of paper in the form of a turkey’s tail fan.
8. Using a good amount of glue, glue the pine cone onto the base of the tail fan.
9. Use wiggly eyes, or make eyes from scrap paper and marker, then glue them onto the pinecone.
10. Make an orange beak from felt or colored construction paper, and then glue it onto the pinecone. If students want to make a male turkey, then they can make a red waffle (*Optional*) Have some students cut 1-2 inch strands of black yarn and

glue them together at one end. Have them glue it to the pinecone below the waffle. This will imitate a beard and will also distinguish their turkey as a male.

- 11.** Once all students have completed their turkeys, have the students display their artwork. Which turkeys are males? Which are females?

Evaluation:

1. Have students list different types of food that turkeys eat.
2. Ask students to describe wild turkey habitat.
3. Ask students to describe differences between male and female turkeys.

Activity: Too Many Turkeys?

Activity: Quick-Frozen Critters*

Activity: Turkey Trouble*

Activity: Let's Talk Turkey

Due to copyrights, these activities are only available in the turkey guide.

Section 4:



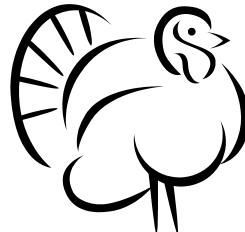
Eastern Wild Turkey Activities

Wild Turkey Ecology Word Find

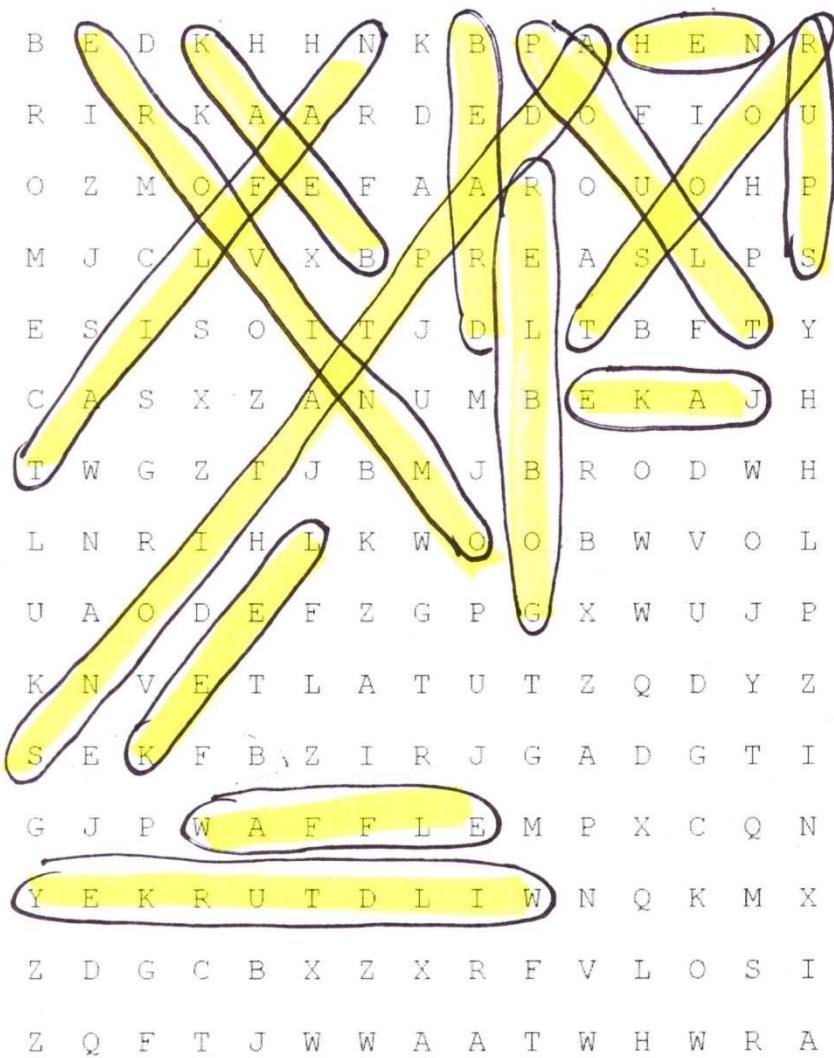


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M	J	C	L	V	X	B	P	R	E	A	S	L	P	S
E	S	I	S	O	I	T	J	D	L	T	B	F	T	Y
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Z	Q	F	T	J	W	W	A	A	T	W	H	W	R	A

1. Adaptations
2. Beak
3. Beard
4. Gobbler
5. Hen
6. Jake
7. Keel
8. Omnivore
9. Poult
10. Roost
11. Spur
12. Tail Fan
13. Waffle
14. Wild Turkey

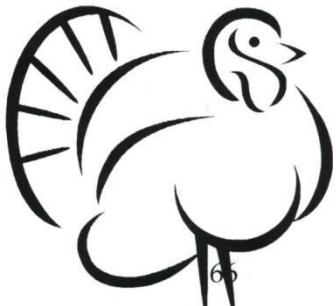


Wild Turkey Ecology Word Find Answer Key



- 1. Adaptations
- 2. Beak
- 3. Beard
- 4. Gobbler
- 5. Hen
- 6. Jake
- 7. Keel

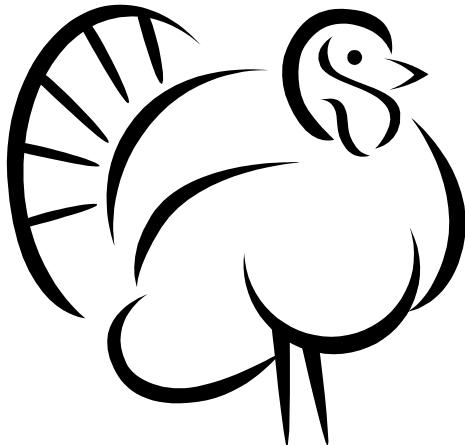
- 8. Omnivore
- 9. Poults
- 10. Roost
- 11. Spur
- 12. Tail Fan
- 13. Waffle
- 14. Wild Turkey



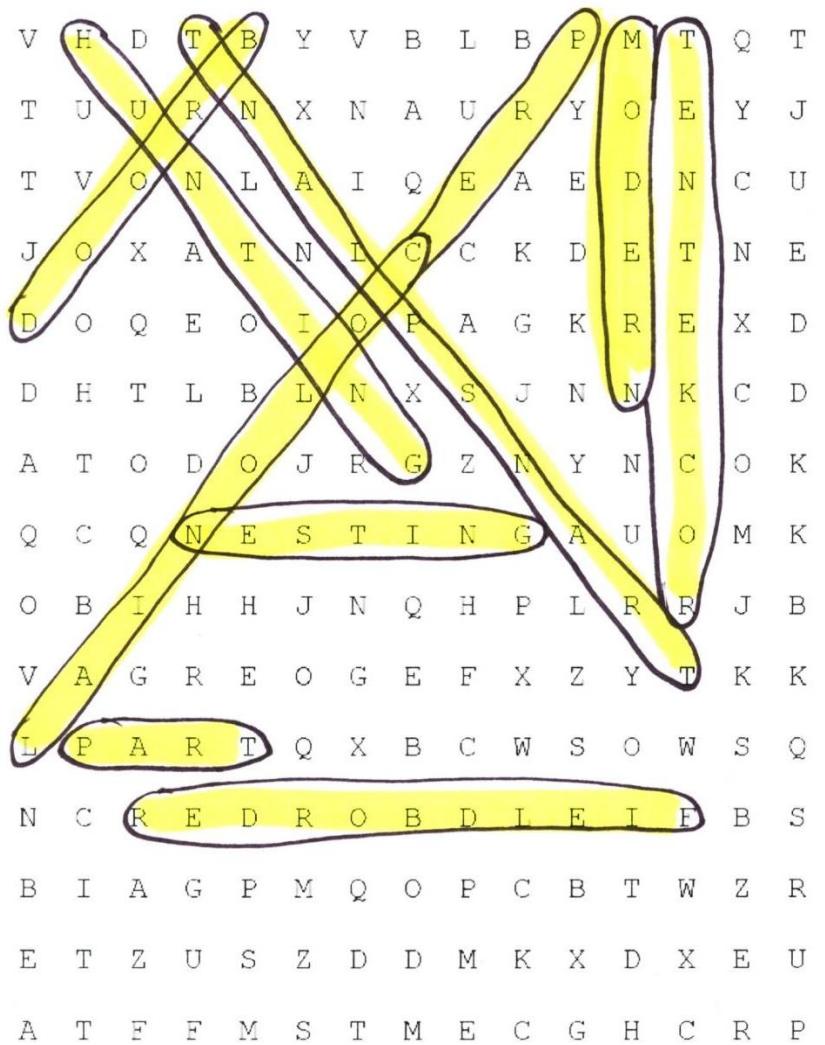
Wild Turkey Management Word Find

V H D T B Y V B L B P M T Q T
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T V O N L A I Q E A E D N C U
J O X A T N L C C K D E T N E
D O Q E O I O P A G K R E X D
D H T L B L N X S J N N K C D
A T O D O J R G Z N Y N C O K
Q C Q N E S T I N G A U O M K
O B I H H J N Q H P L R R J B
V A G R E O G E F X Z Y T K K
L P A R T Q X B C W S O W S Q
N C R E D R O B D L E I F B S
B I A G P M Q O P C B T W Z R
E T Z U S Z D D M K X D X E U
A T F F M S T M E C G H C R P

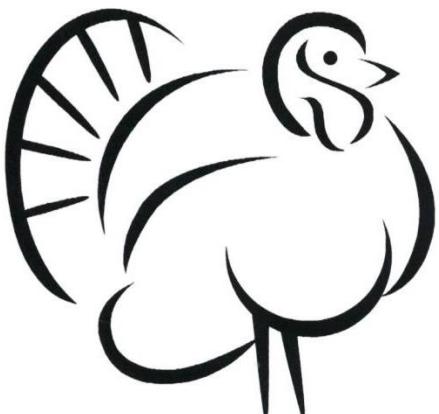
1. Brood
2. Colonial
3. Field Border
4. Hunting
5. Modern
6. Nesting
7. Pre-Colonial
8. Rocket Net
9. Transplant
10. Trap



Wild Turkey Management Word Find Answer Key

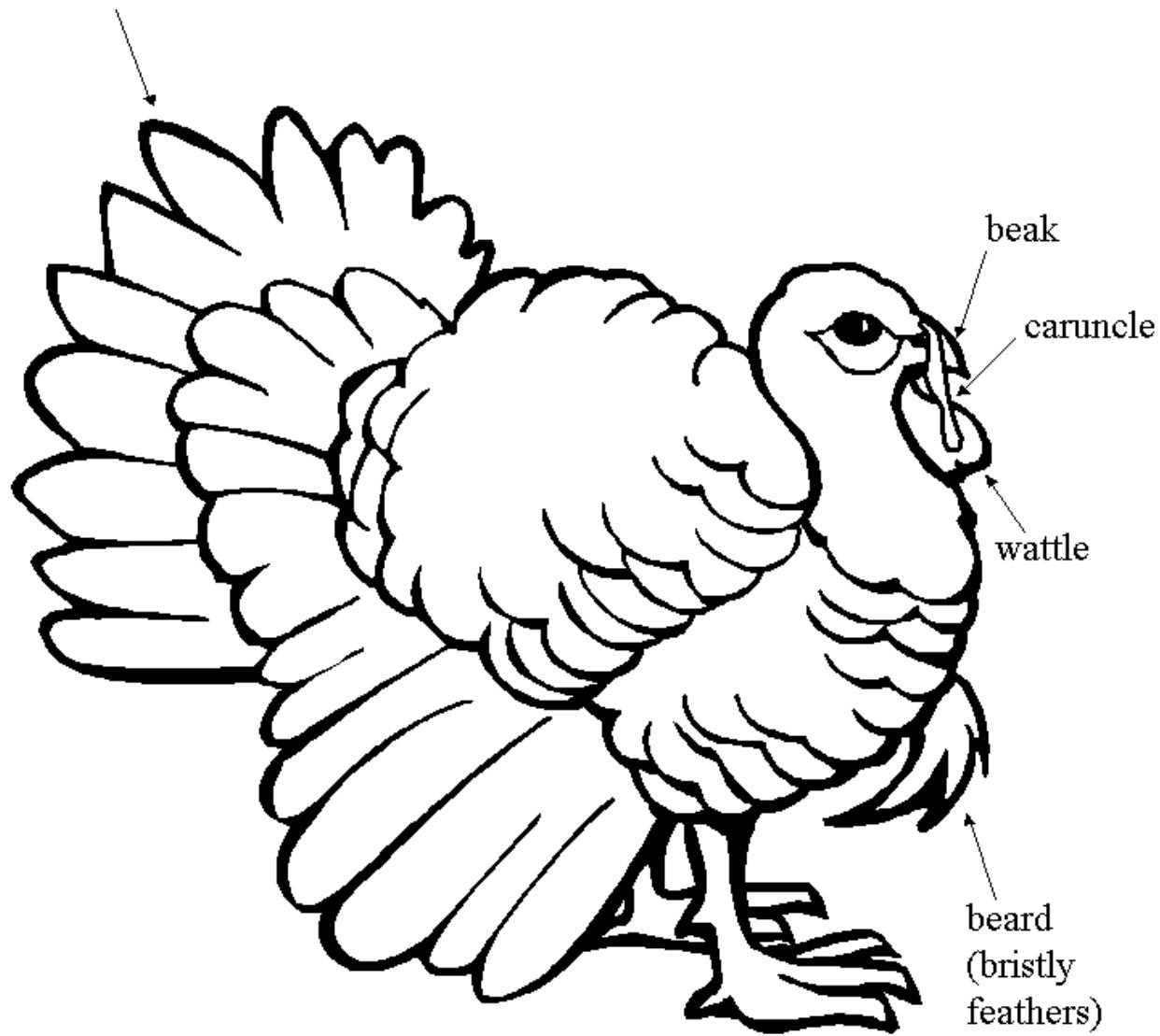


- 1. Brood
- 2. Colonial
- 3. Field Border
- 4. Hunting
- 5. Modern
- 6. Nesting
- 7. Pre-Colonial
- 8. Rocket Net
- 9. Transplant
- 10. Trap



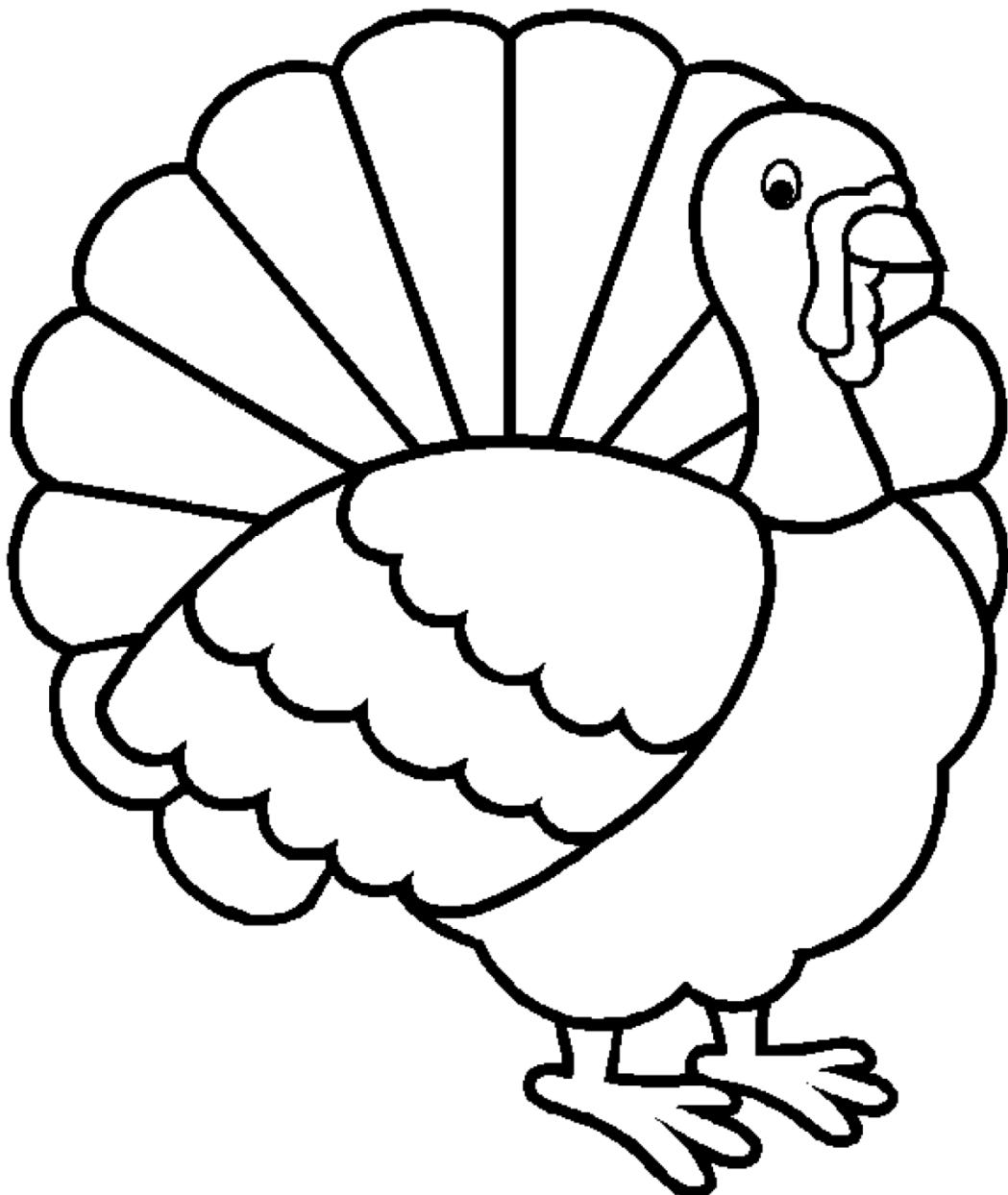
American Turkey

tail feathers – male turkeys show them off in spring

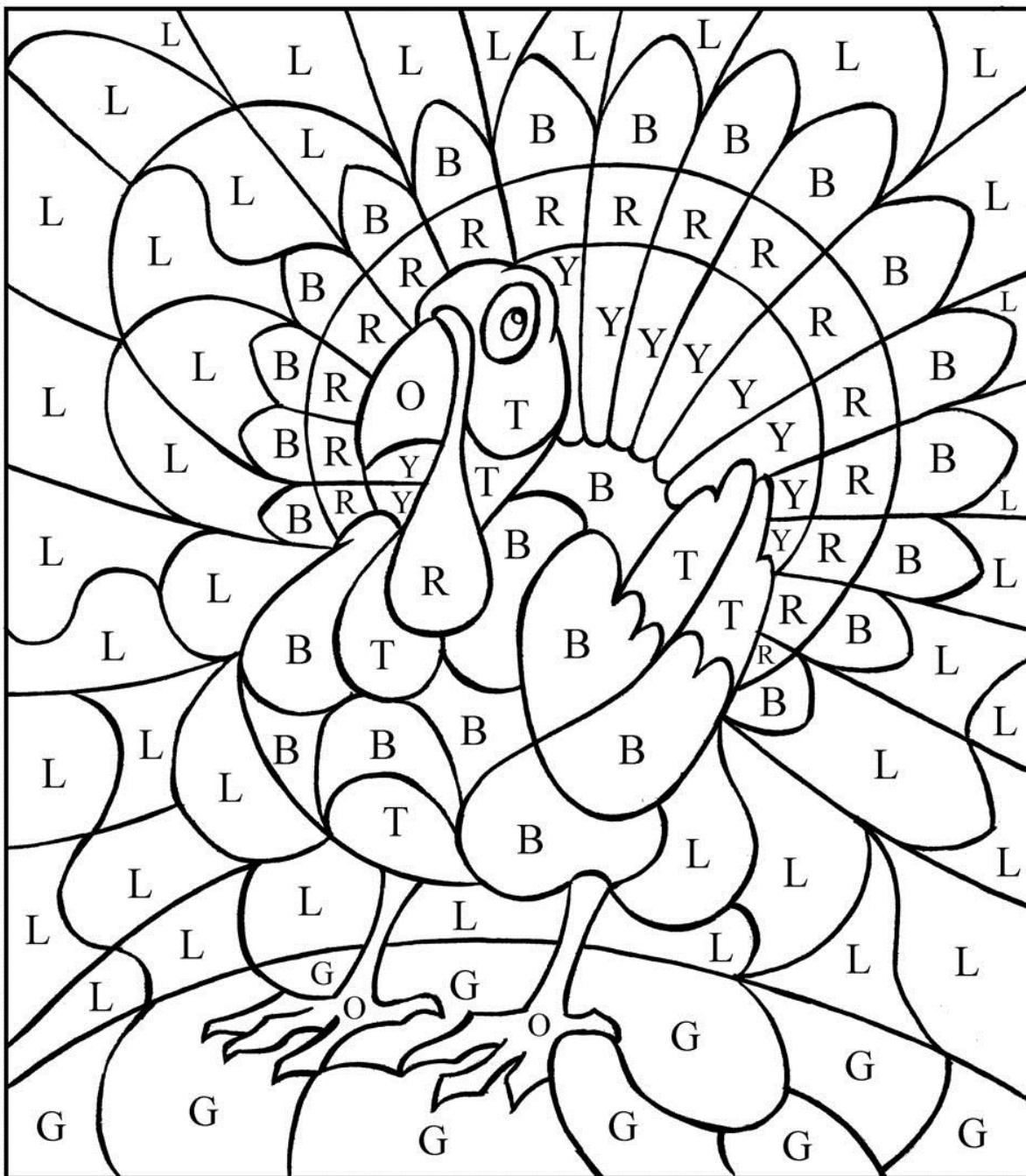


Domestic turkeys are white. Wild turkeys are dark and speckled.
Turkey eggs are tan and speckled brown

Wild Turkey Coloring Page



Wild Turkey Color by Letter



B = Brown T = Tan R = Red

G = Green Y = Yellow W = White

O = Orange L = Light Blue

Five Little Turkeys

Contributed by [Leanne Guenther](#)



Five little turkeys standing at the door,
One waddled off, and then there were four.

Four little turkeys sitting near a tree,
One waddled off, and then there were
three.

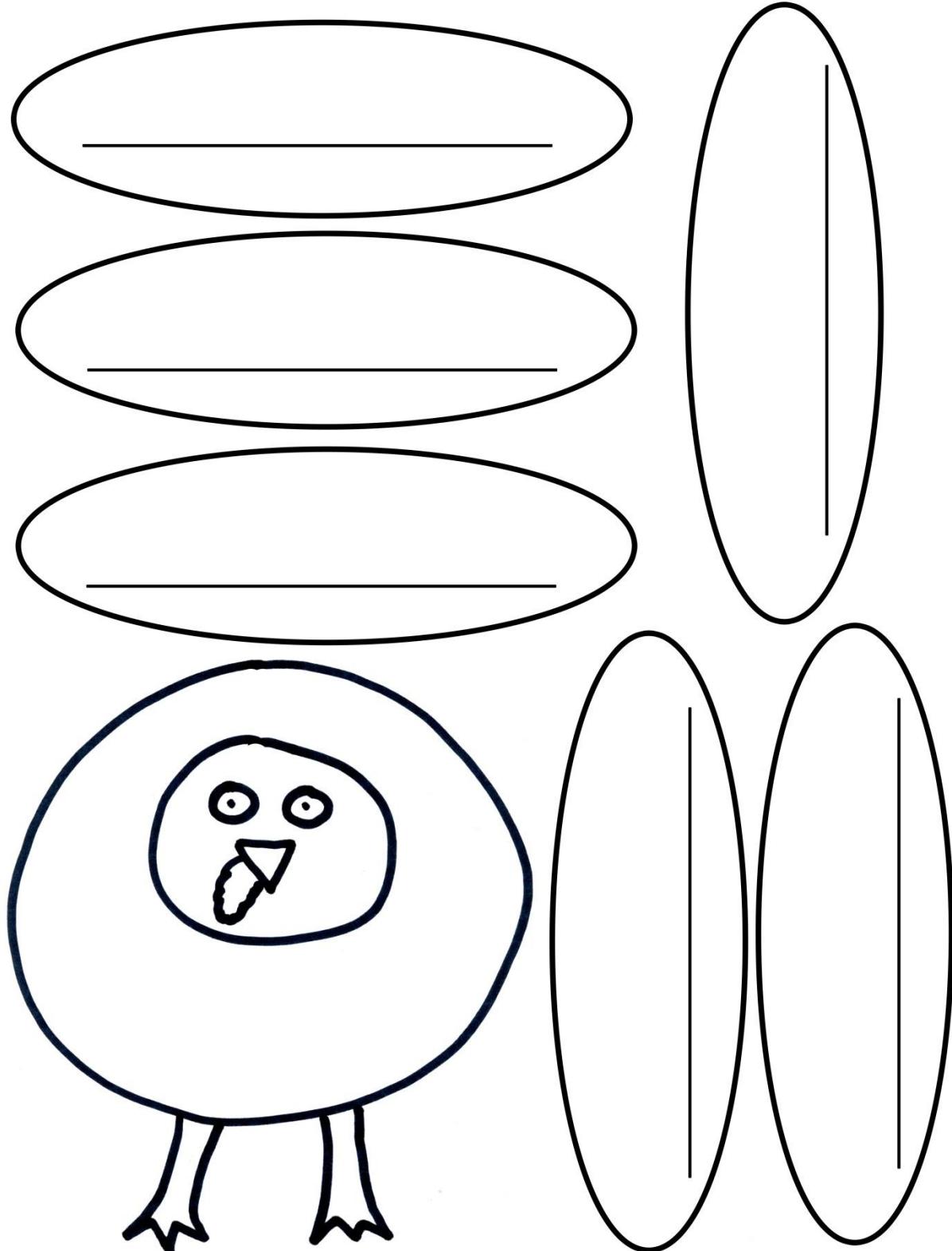
Three little turkeys with nothing to do,
One waddled off, and then there were two.

Two little turkeys in the morning sun,
One waddled off, and then there was one.

One little turkey better run away,
For soon it will be Thanksgiving Day.

Thankful Turkey

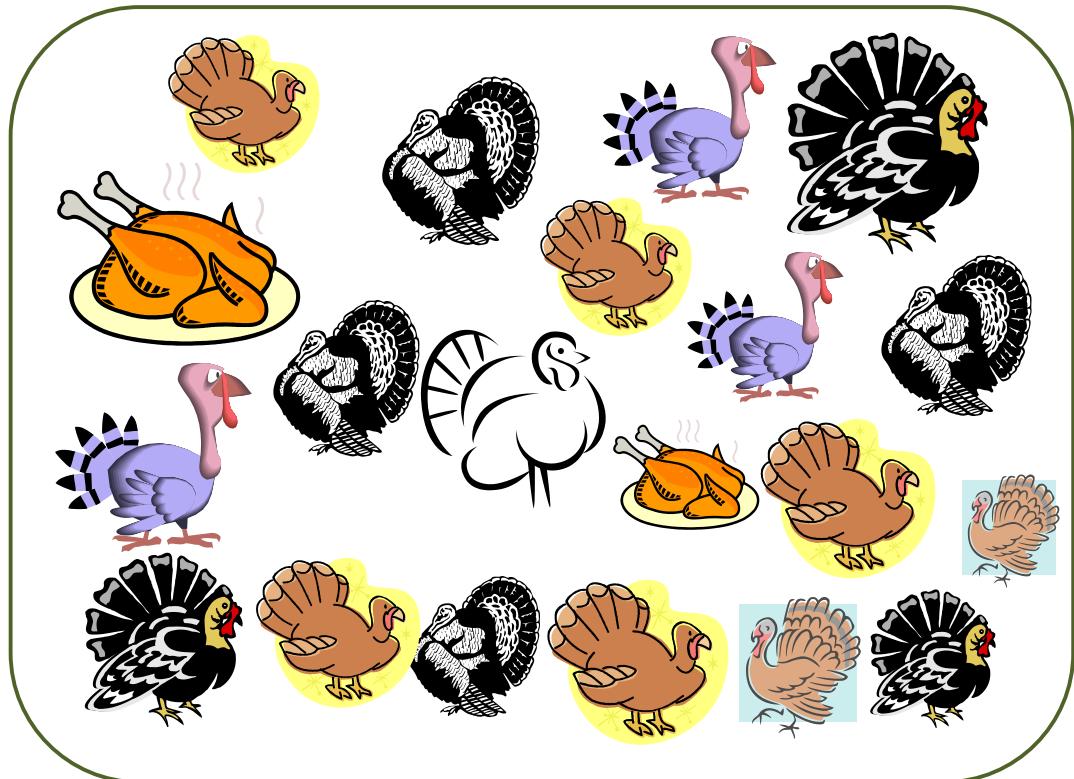
Write what you are thankful for on the lines. Then, color & cut out the feathers and turkey. Glue the feathers to the back of the turkey.



Graph-A-Turkey

*Modified from an activity by Monica Hart-Nolan, Teachers Pay Teachers

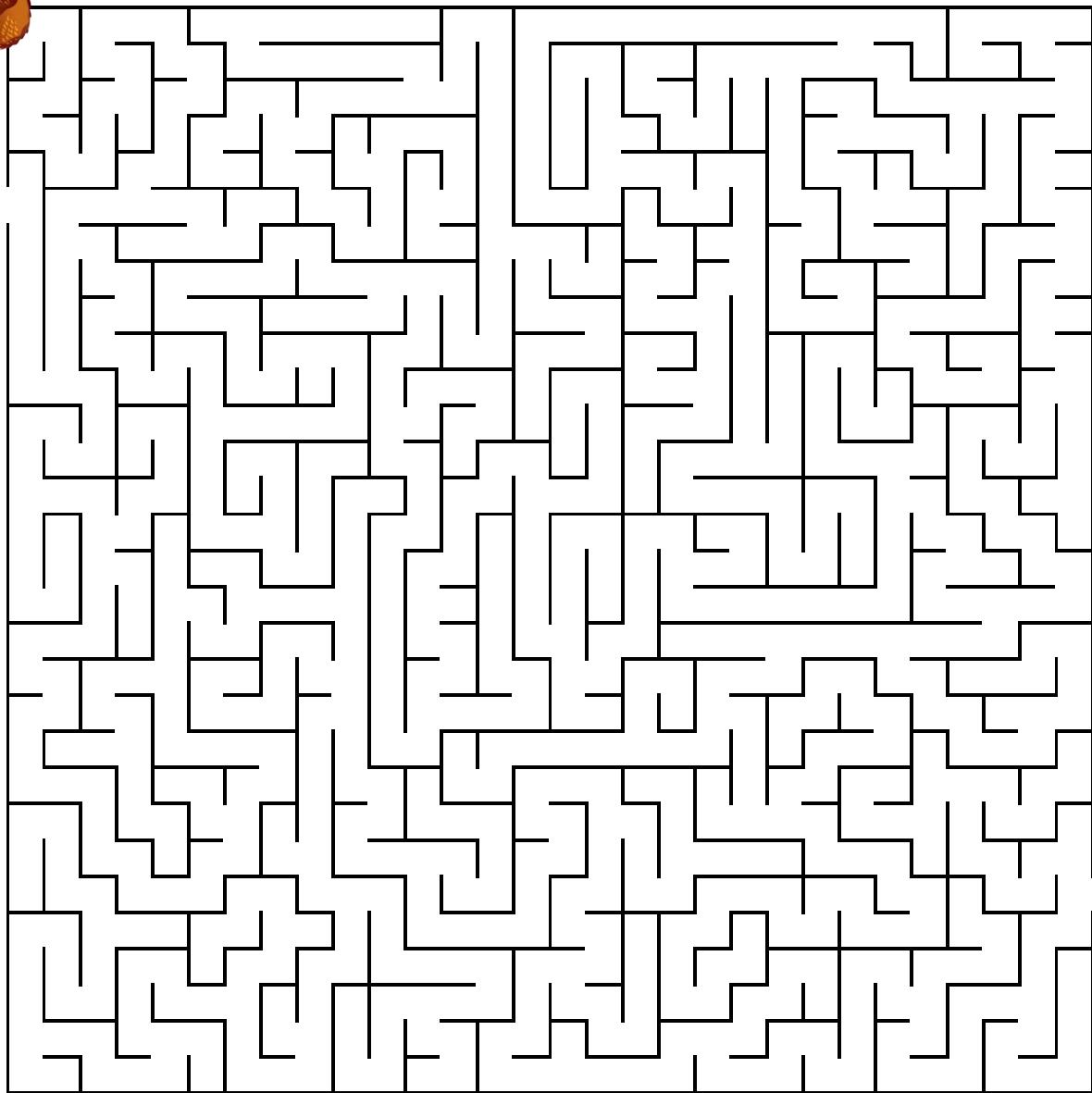
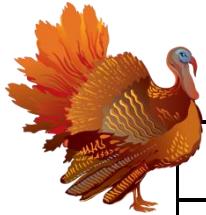
Count different types of turkeys and color the graph accordingly.



5							
4							
3							
2							
1							

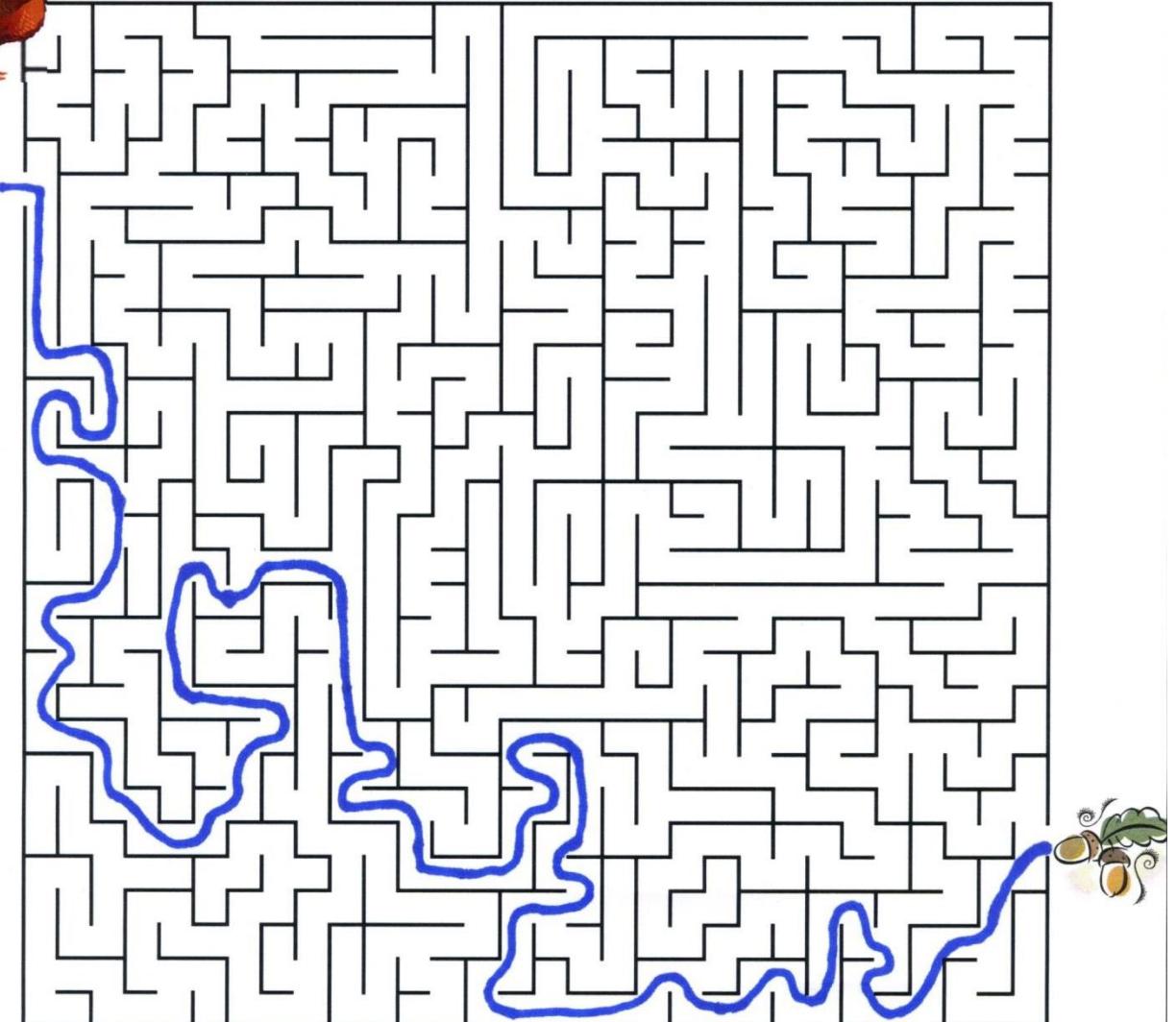
Turkey Trouble!

Help the wild turkey find acorns to eat!



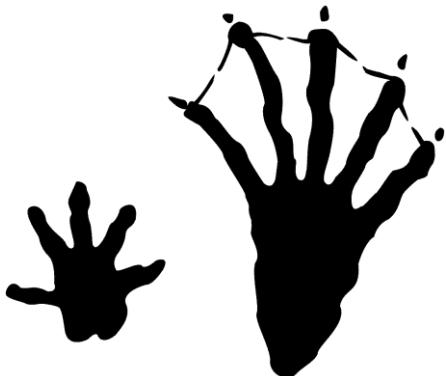
Turkey Trouble! *Answer*

Help the wild turkey find acorns to eat!



What Animals Made These Tracks?

Look at the tracks below and write down the name of the animal that made them!



B _ _ _ r



O _ _ _ m



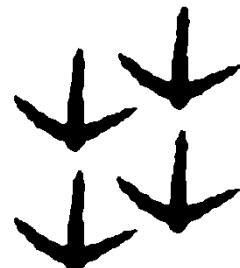
S _ _ k



R _ _ _ n



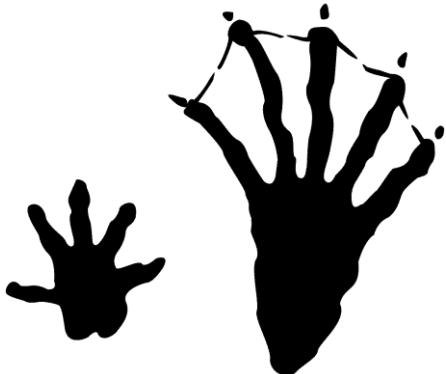
W _ _ e - T _ _ _ d
D _ _ r



W _ _ d T _ _ _ y

What Animals Made These Tracks Answers

Look at the tracks below and write down the name of the animal that made them!



Beaver



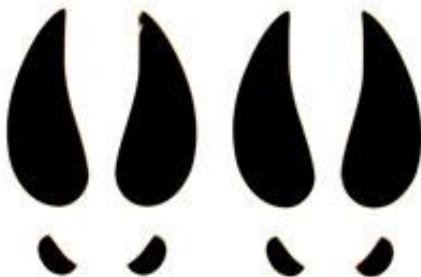
Opossum



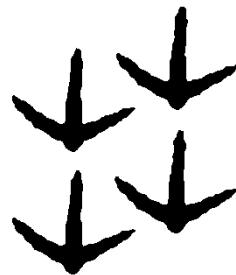
Skunk



Raccoon



White-Tailed Deer



Wild Turkey

Calling All Turkeys!: Making a Drinking Straw Turkey Call

Activity written by Texas Wildlife Association

Materials

- 1 plastic drinking straw
- 1 yd of leather lace (or yarn)
- 8 plastic pony beads
- 2 turkey feathers
- scissors

Procedure

1. Cut a 6 inch length off of the plastic drinking straw. Discard the rest.
2. Take the leather lace, both ends together, and slide on 2 of the plastic pony beads. Slide them up until they are about 2 inches from the loose ends.
3. Slip the length of plastic straw between the two beads. Push them together to hold it in place.
4. Slide 3 pony beads on each of the two loose ends of the leather lace. Leave about $\frac{1}{2}$ inch beneath the lowest bead.
5. Attach the feathers by sliding each one up under the three beads on the end of each lace.



Learning to Use Your Turkey Call

Turkeys are wary and hard to fool. Generations of turkey hunters will all agree. By using a call, a person is imitating, not the male turkey, but the turkey hen. The male turkey gobbles to let the hens know where he is. The hens then come to the male to be bred. So a hunter uses the call of the hen to broadcast to the toms that "she's" out there. He in turn gobbles to let "her" know where he is.

To use your turkey call, place the uncut end in your mouth, halfway between the front of your lips and the corner of your mouth. Cup your hands over the end of the call to create a kind of echo chamber for the sound. Now suck on it in little short breaths, much like making a "kissing" noise. You should be making the sound of a hen turkey. It gets easier with practice!