



CRITTER CONNECTIONS

All About Woodpeckers

Pine Trees



Pine trees are found throughout most of the United States and in east Texas. One of the more common species is the loblolly pine (*Pinus taeda*). In fact, the loblolly pine is one of the most common species of tree in the United States. Pine trees are found in many different habitats including swamps, mountains, forests and even snowy habitats.

The loblolly pine is one of the largest species of pine tree in Texas and can grow very fast, reaching a height of 125 feet tall with a trunk that is 4 feet in diameter or across. Pine trees are in a group of plants called conifers which means they produce or make cones. Many plants reproduce by creating flowers and fruit, but pine trees use cones. The pine cones are pollinated by wind, and when they are matured, the pine cone opens and releases seeds. Pine trees have different leaves than other types of plants. Their leaves are adapted into long, thin needle-like structures. They are usually darker shades of green to allow more sunlight to be absorbed during photosynthesis.



Pine trees are important to humans and wildlife in many ways. Woodpeckers and other birds will peck holes in the soft bark to find insects. Birds and other wildlife will eat the seeds and depending on the species of tree, even people will eat the seeds, known as pine nuts. Birds and small mammals will nest inside the holes of trees, even dead trees create a great habitat for wildlife. Some birds will use the pine needles to line their nests and people will weave the needles into baskets. Teas can be made from the pine needles, and the sap is used in some forms of medicine to heal burns. Another important use of pine trees is wood. Pine trees are grown in tree farms to be used as lumber or wood that is cut and processed to make things like tables and paper.

Source: Texas A&M Forest Service

Photos: top, Woodlot; middle, Matt Lavin; bottom, Jane Shelby Richardson

Woodpecker Craft

Download the craft and follow the steps here:

<http://bit.ly/CCWoodpecker>

Required Materials:

- printer
- 4x6 index card or cardstock paper
- yarn or string
- scissors
- glue
- thin straw (like a coffee stirrer)

Once completed, this woodpecker craft will peck down the piece of yarn just like it would on a tree.



Did you know...

- ... that woodpeckers' toes are in an "X" shape to help them climb up the side of trees?
- ... that a woodpecker's tongue can be three times as long as its beak?
- ... that woodpeckers don't get headaches from pecking?
- ... that woodpeckers can peck 20 times per second?
- ... that a woodpecker's tongue curls around the back of its head between the skull and skin?
- ... that woodpeckers can make different sounds, but they do not sing?
- ... that woodpeckers will tap or drum on objects like trees, roofs and poles to communicate with each other?
- ... that woodpeckers will come to bird feeders and eat sunflower seeds and nuts?
- ... that most woodpeckers are black, white, red and yellow in color?



Red-headed Woodpecker

Photo source: Mdf

Color Me

Pileated Woodpecker

(Dryocopus pileatus)



Pileated Woodpecker

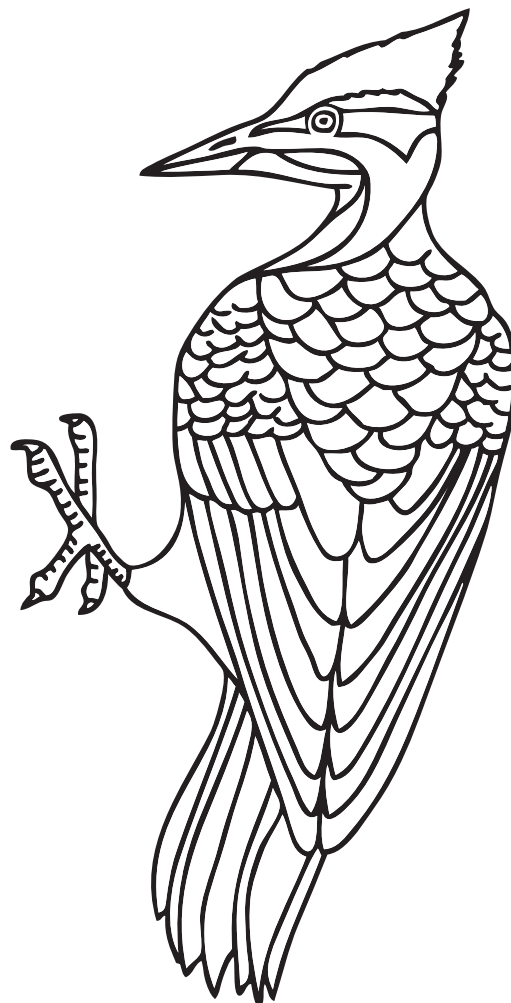


Image © Sheri Amsel, www.exploringnature.org



Texas Woodpeckers

By Elanor Dean

Texas is home to several species of woodpecker. They are found across much of the United States and Texas in habitats with trees. Some species or types of woodpeckers will live in habitats with tall cacti too. Texas woodpeckers range in size from the small sparrow-sized Downy Woodpecker to the larger crow-sized Pileated Woodpecker. While they are different sizes, they all have the same adaptations. They are all colored black and white often with red and yellow patterns too. Woodpeckers are named for the behavior they use to find food.



Pileated Woodpecker

Woodpeckers are mainly **insectivores** or insect eaters, but instead of catching flying insects like many other birds, they eat insects found inside trees. Their bodies are specially adapted to find and consume these insects. First, let's talk about their feet. Woodpeckers have four toes on each foot which are in the shape of an "X." This toe arrangement is called **zygodactyl** (pronounced zy-go-dack-till) and is common in roadrunners and in birds that climb tree trunks. Their toes also have long claws; this, along with

the "X" shape, help them grip and move around on the trunks of trees. They also have short, strong legs that allow their body to be close to the tree.

Woodpeckers grip tree trunks with their bodies in a vertical or up and down position, so they must have good balance. One adaptation that helps their balance is their tail. The feathers in a woodpecker's tail are stiff and long. Woodpeckers will use their tail as a prop, pressing it against the tree to help hold themselves in place when pecking for insects.

If you have ever seen a woodpecker in the wild you might notice that they don't peck a hole right away when they land on a tree. Instead, they move up and down the tree and tap in different places, listening for the insects. They can tell from the sound the tree makes, the best place to drill a hole and find their prey. Once they have found the perfect spot, they grip on tightly with their feet, use their tail to hold their place and start pecking a hole in the tree to uncover tasty insects.



Downy Woodpecker

You might think that woodpeckers would get a headache from banging their heads into trees all the time, but they have adaptations to help with that too. They have a very straight, hard and chisel-like beak which is perfectly adapted for pecking holes in wood. Also, the bones between a woodpecker's beak and skull are more flexible and spongy than other birds. These spongy bones act as a shock absorber to reduce the force made from pecking. Woodpeckers also have strong neck muscles which is important to provide a strong enough force to peck holes in wood. They even have extra bristle-like feathers around their beak which help reduce wood dust from entering their nostrils.



Woodpecker holes

Woodpecker tongues are specially adapted to help them to consume insects from inside trees. First, their tongues are very long, three times longer than their beak in some cases. Most birds are not able to stick their tongues outside of their mouths, so this is a unique characteristic. Hummingbirds also have this ability; they can extend their long tongue into flowers to drink nectar. When it is inside the mouth, the woodpecker's long tongue wraps around the back of its head between the skull and skin. Their tongue has to be longer than their beak in order to remove the insects from the hole. In addition to being long, woodpecker tongues are sticky and have barbs at the end that stick to and grip the prey, making it easier to remove insects from within the tree.



Northern Flicker



Yellow-bellied Sapsucker

In addition to finding insects, woodpeckers peck holes in trees for other reasons too. The Yellow-bellied Sapsucker is a type of woodpecker that creates holes in trees to find sap. Like their name indicates, tree sap is the main food source of sapsuckers. They drill holes into trees in horizontal rows and drink the sweet sap that flows out. Did you know that people eat or consume tree sap too? Maple syrup is created from the sap of maple trees. Woodpeckers also drill holes into trees to

create a nesting cavity where they lay eggs. The male and female will work together to create the hole in which they build their nest and will take turns incubating the eggs and caring for the young.



Ladder-backed Woodpecker

Woodpeckers will also tap on trees to communicate with one another. This behavior is called **drumming**. Instead of forming songs like some species of birds, woodpeckers will create complex patterns by tapping on trees and other items that produce sound like poles, trash cans, roofs and other surfaces. They use drumming to communicate different things like to attract a mate or as a warning to

other woodpeckers to stay out of their territory.



Red-headed Woodpecker

Some people think woodpeckers are pests because they make holes in trees, but the insects they consume are actually damaging the tree from the inside, so by eating them, woodpeckers are actually helpful. In addition to eating insects, woodpeckers will also eat nuts and fruit from trees and will come to bird feeders. If you want to attract woodpeckers, place vertical bird feeders that they can grip onto, just as they would on a tree, and fill them with nuts,

seeds or suet, which is a type of fat that provides birds with a great food source in the winter. Woodpeckers will often peck holes for food or to create a nest cavity in trees that are dead or dying because the wood is softer. In fact, dead or dying trees are important for many species of wildlife as shelter, so it is important to leave fallen logs and stumps on land to serve as wildlife habitat.



Golden-fronted Woodpecker



Red-bellied Woodpecker

WORD BANK

insectivore – an animal that eats insects

zygodactyl – an “X” shaped foot with two toes facing forward and two toes facing backward

drumming – a pecking or tapping pattern that woodpeckers use to communicate

Source: Cornell Lab of Ornithology

Photos from Wikimedia Commons: USFWS Mountain Prairie, USFWS Midwest, Shenandoah National Park, Cephas, Andy Reago & Chrissy McClarren, Brad Sutton, Andy Morffew

Woodpecker Code

Photo Source: USFWS Mountain Prairie

Woodpeckers communicate by tapping on an object such as a tree, roof, fence or trash can creating a sound pattern that other woodpeckers understand. This action or behavior is called drumming. Before telephones, people also used a tapping method to communicate called Morse code. Morse code is a series of dots and dashes or short and long taps used to send messages.

This is what the alphabet looks like in Morse code:

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

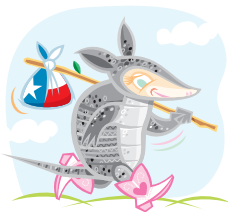


Northern Flickers

You can use Morse code to send messages to your friends, for example, HELLO would be ● ● ● ● ● — ● ● ● ● — — — —.

Use Morse code to figure out the answer to this riddle: What is a woodpecker's favorite kind of joke?

● —
 — ● — — ● — — — — — ● — ● — ● — —
 — ● — — ● — — — — — ● — ● — ● — —
 ● — — — — — — — — — ● — — ●



Nancy's Corner



Draw a habitat where woodpeckers find their food.



What is something you learned about woodpeckers?

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TWA is a membership-based, non-profit organization whose goal is to educate all people, especially the youth of Texas about conservation, management and stewardship of wildlife and habitat on private land.

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