

BIRDING 101

Investigating Birds in Texas



Name _____

Date _____

If you live in Texas you are very lucky! It is one of the richest birding areas in all of North America. People come from all over the world to see our special birds like the Whooping Cranes, Golden-cheeked Warblers and Green Jays. During spring and fall migration times, in winter, and even on the hottest summer days, Texas is full of avian life to please birders at any skill level.

Before we get started learning about them, let's review some basics of birding.

Ethics and Techniques

We have an obligation to learn about birds and wildlife without causing them or their habitat any harm.

A wild animal uses lots of energy just to stay alive, so if we cause them to fly or run away, they are using some of that energy. That could put them in danger of injury, could cause them to abandon their nests, or deprive them of food and water.

If you damage plants or water sources, it not only affects birds and other wildlife, but also hurts the health of the Earth and eventually your actions have an adverse effect on humans, too. Quietly watching birds and wildlife in their natural setting can teach us about them in a responsible way.

Working with others

- Be aware of other birders. Check before you walk in front of someone else to see if he is looking at something. Don't sing, whistle, talk loudly or make wild motions with your arms. If taking a picture, be sure not to block others from seeing the same bird you are photographing.
- Share your knowledge. Did you just see an interesting bird? Quietly point it out to others who might be interested. Urge others to stay on the path so they don't scare the birds or trample the undergrowth. Help your friends to avoid a hazard like poison ivy or a dangerous stretch in the trail if you know about it.
- Don't be afraid to ask questions, and do listen to others who might have some great knowledge to share.
- Try to blend in by standing very still near or behind a boulder, tree or other vegetation. Wear natural colors and avoid items that might glint in the sun and frighten a bird away. Walk and talk quietly, and be sure you dress for the weather and terrain.

Skills to work on

- When observing wildlife, practice using all of your senses. Use peripheral vision, and move your eyes, not your head! Watch for movement, and listen for noises, on the ground, in the air, and everywhere in between.
- Move slowly toward the sound or movement until you can see what it is.
- Practice with your binocular until you feel comfortable using it. Find an object with your eyes, then slowly raise the binocular up to your eyes.
- Review field guides often. You never know when a tid-bit of information you read will help you identify something new.
- Get to know your neighborhood flora and fauna, so that anything unusual will stand out for you to investigate.

ACTIVITY: In teams of two or three, practice standing very still, using only your eyes to look around you. In a quiet voice, call out something you see that your partners might not see. Describe how to find it. (For example: "to the right of the door about 6 feet up," "three o'clock in the first bare tree.") Practice finding objects in the distance with your binocular.



Let's Go!

We will take some time outside and sharpen our observation skills. First, we will find a specific area (field, woods, beach, and so on) and watch for at least 15 minutes, and do the first exercise below. Then we will take a walk for another 20 minutes, going through different habitats, filling in the information on page 3.

SEDENTARY BIRDING EXERCISE (at least 15 minutes):

TYPE OF HABITAT:

MAKE A MARK FOR EVERY DIFFERENT SPECIES OF BIRD YOU SEE:

SKETCH AT LEAST ONE BIRD:

Be sure to include notes about colors of feathers, feet and bill. What size do you think is it? What shape is the bill? What is it doing?

DESCRIBE OR DRAW THREE THINGS ALL THE BIRDS YOU OBSERVED HAVE IN COMMON.

DESCRIBE OR DRAW SOMETHING UNIQUE TO THREE OF THE BIRDS YOU OBSERVED.

WALKING EXERCISE (at least 20 minutes):

TYPES OF HABITAT:

MAKE A MARK FOR EVERY DIFFERENT SPECIES OF BIRD YOU SEE:

SKETCH AT LEAST ONE BIRD:

Be sure to include notes about colors of feathers, feet and bill. What size do you think is it? What shape is the bill? What is it doing?

DESCRIBE OR DRAW THREE THINGS ALL THE BIRDS YOU OBSERVED HAVE ALIKE.

DESCRIBE OR DRAW SOMETHING UNIQUE TO THREE OF THE BIRDS YOU OBSERVED.



Start With What You Already Know

Did you know the names of the birds you saw? Probably you've seen them quite often, and have a name that you call them. In the bird world, however, each species has an official name – not all blackbirds are black, and not all black birds are blackbirds!

Knowing the correct names of birds helps you to learn about them and share information with others. Start by listing the wild birds that you already know, and those that you saw in our outdoor exercise. Then, look them up in a field guide and write the official name. You can use your own descriptive name for birds you saw that you aren't familiar with (gray bird with white wing patches, for example), and then find the official name.

Birds I Already Know	Official Name	Birds I Saw Today	Official Name

There are many groups, or families, of birds. There are ducks, hawks, hummingbirds, and songbirds, to name just a few. Field guides sort birds by their families for easier identification. Determining what group a bird belongs to makes identification much easier. You would not look in the section on ducks if you see a bird using its bill to make a hole in a tree!

In teams of two or three, look in a field guide and pick one of the following groups: DUCK, HAWK, GULL, PIGEON/DOVES, OWL, HUMMINGBIRD, WOODPECKER, SPARROW. Circle your selection.

Next, find three species of birds in that group that live in your area at this time of year. (HINT: Each field guide will have an explanation of how they show the range of birds at different times of the year.) Write the names of those three birds below, and then write or draw what makes it different from other birds in the same family.

Did you see one of those birds during our outside exercise today? If not, you can put the bird on a wish list to search for later.

Bird Name	Beak/Bill	Wings	Tail	Face/Head	Other

Our **eyes and ears** are the best tools we have to use when birdwatching. Most people use these senses to find and identify birds. In fact, people with visual impairment also love birding, and they use their ears almost exclusively to identify the creatures around them.

Binoculars are essential for seeing birds that are too far away for proper identification or observation. Look for a magnifying range of 7x or 8x, and a diameter size of 35 to 40. Adjust the width of the lenses until you see one circle through the binoculars. To focus correctly, close the right eye and focus the fixed lens on an object. Then close the left eye and focus the other lens. If you have perfect vision in both eyes, or wear glasses that give you identical vision in each eye, you can set the focus to zero without having to adjust the lenses independently.

ACTIVITY: Practice using your binoculars and get them in perfect focus. Team up with a partner and play “I Spy” while looking through the optics.

Many birders also carry a **camera** to document what they have seen. Sometimes they find a great bird they didn't know they had photographed!

A **spotting scope** is often used by birders to see at a much farther distance. This can be valuable while birding near a large body of water, or other expanse of landscape.

Field guides come in many shapes and sizes. There are pocket-sized books and waterproof ones; some use photographs and some use drawings. You might find a guide that will offer similar birds, so that you can compare them to the species you are observing and make an informed identification. A guide may discuss nesting, or focus on unique field marks. Every one of them offers information to help you become a better birder.

Studying your field guide at home, and becoming familiar with different terms, names of birds, their characteristics and ranges, will be very helpful when you are observing our avian friends.

Additionally, there are many **websites and phone apps** that help with identification and also with sharing observations. It may not seem very important when you share what you have seen in your neighborhood but, in reality, ornithologists count on this aspect of "citizen science" a great deal in their studies of birds.

Many birders carry a **notebook and pencil** to sketch or make notes while in the field. This can be a valuable resource for future study.

When?

Spring and fall migration months are usually the best times to see unusual birds in South Texas. The Central flyway covers over half the area of the continental United States. It runs from Canada, through Texas and then south to Central and South America, but what begins as a broad swath of land is squeezed in half by the Gulf of Mexico on the east, and the Sierra Madres in Mexico on the west. The flyway funnels flocks of birds through the area and, because they have less space, they are more numerous and easier to see. Birds habitually follow the same migration path each year, but in South Texas, there are often birds from other migratory paths that are swept in, usually by weather effects.

In the summer, local birds are raising their young, which offers another opportunity for entertaining birdwatching. In winter, our "snow birds" that migrate from up north enjoy our more moderate weather.

Dawn and dusk are the best times of day to observe birds. They are either getting their breakfast, or having a snack before bed, and tend to be less wary of humans. Birding after bad weather is also rewarding. Birds will hunker down during a hard rain, and migrating birds can also be stopped by head winds that prevent them from flying. They will need to eat to keep up their strength.

Where?

Birds have **preferred habitats**. Woodpeckers love to be in... trees! But some woodpeckers also love telephone poles or fence posts, while others prefer to stay in the woods. When you are birding, make a note of the type of habitat where you have seen a bird. Eventually you will have a feel for what birds to expect when you are near a fresh water pond with lots of shrubbery around it in April, or walking around a bare field in winter.

Not all birds are found in every state, nor are they all found year-round where you see them. Knowing the **ranges** of the birds you want to see is essential for correct identification. Always use your field guides to help you narrow down the choices if you are having difficulty with an identification. There are also websites, such as eBird, that show similar data.

Each species of bird has its own **niche, or special role**, in nature. Even birds from the same family play different parts in helping to regulate other species so that life doesn't fall out of kilter.

For example, doves eat mostly seeds. An Inca Dove is only 7½ inches long, so the seeds it prefers would be smaller than those preferred by a White-winged Dove that is 11 to 12 inches long. This variety helps to maintain the balance of nature.

No matter the season, one place where birders should be especially vigilant, is an area where two habitats **verge**. For example, where a grassy field is ringed by woods, you can find bird species that inhabit both environments. Keep an eye out for more opportunities to "bird the verge."

How?

It's important to remember that we have responsibilities to the welfare of birds and the places where they live. Abide by the **Leave No Trace** principles and leave a place better than you found it. There is also a **code of ethics** that nature-lovers should follow, including avoiding harm to birds and respecting the rights of others. The American Birding Association (ABA) has published a list of rules to follow while birding. Here is a condensed version:

- **Protect habitat**; exercise restraint and caution when observing, photographing, recording, or filming; minimize potential for disturbance to the bird, its surroundings, and other people; stay on roads, trails and paths.
- **Stay out of private property** without owner permission; follow rules and regulations concerning use of roads and public areas; practice common courtesy.
- **Respect interests**, rights and skills of others; share your knowledge and experience; assess unethical behavior and intervene if prudent; report it if the behavior does not stop.
- **Group leaders**: be an exemplary role model; keep groups to a manageable size; ensure everyone practices this code; inform the group of special circumstances (i.e. no sound replay at national parks); place welfare of birds ahead of commercial or personal interests.

Last, it's important to **STAY SAFE** while birding. Dress for the weather and the habitat. Always be on the lookout for fire ants, snakes and noxious plants such as poison ivy. It's usually best to wear long pants and closed-toe shoes, no matter the season. Insect repellent is a necessity here, almost year-round. Take water and maybe a small snack if you will be out for a long time. If you are birding with a group, the leader will ensure that everyone sees the birds and follows the rules of birding. Each participant, however, also has a responsibility to pay attention and comply with these regulations.

Bird Stake-out!

Now it's time to go back outside and put what we've learned into action. The best way to improve as a birder is to go birding! You can also join national and local organizations and learn from more seasoned birders. Bird watchers are always eager to share their knowledge.

ACTIVITY: Look at your field guide and list ten birds you want to see while we are outside. Remember to determine if they will be found in our area, and if they are here at this time of year.

- | | |
|----|-----|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

During your birding time, pick one of the birds you see, and answer the following by drawing or writing. Remember the WHEN, WHERE AND HOW tips from above.

WHAT SHAPE DOES IT HAVE?

Body (sleek, chunky, long neck or short?)	Wings (rounded, pointed, bent, short, long?)	Legs and feet (length of legs, visible in flight, webbed toes, claws?)
Bill (long, short, thick, thin, curved, hooked?)	Tail (length, forked, rounded, notched, wedge-shaped?)	Body posture (stands straight, leans forward, stays crouched down?)

WHAT SIZE IS IT?

This is tricky, since the appearance of a bird's size is affected by its distance from you. Compare it to nearby objects like leaves, flowers or other birds or animals, and write your estimate here:

WHAT IS THE BIRD DOING?

Some birds move their tails a lot, opening and closing, flipping up or down, or side to side. Others dart through the trees, or run quickly on the ground. Many birds forage on the ground for food, while there are others that rarely go lower than the tops of trees to eat. There are ducks that dive to get their food under water, and there are dabbling ducks that just tip up with just the head and neck under water.

Write what your bird is doing:

HOW DOES IT FLY?

Does the bird fly straight, or does it fly in an up-and-down pattern? Do you see it soaring high overhead? Are the wingbeats quick, or very slow? Does it have a direct flight, or does it fly in a zig-zag way? Draw a line to show how it flies:

WHAT FIELD MARKS DO YOU SEE?

In addition to colors, look for patterns on wings, breast, belly, sides, face and tail. Are there white stripes (bars) on the wing? Does the tail have a strip (band) across it? Is there a circle (ring) around the eye? How about other white or colored areas? Does it have a crest on its head, or a line through the eye? Write what you see:

HOW DOES IT SOUND?

Some birds sound as if they are saying something, like “tea-kettle, tea-kettle, tea-kettle,” or “quick, pick up a real chick!” Some just make a harsh croak, a sweet whistle, or a loud squawk, and some birds make noise mostly with their wings rather than a voice. Can you put words to your bird’s call? Describe what you hear, or IF you hear anything:

Can you identify your subject? Based on your observations, what bird have you been watching?

Great job! You have learned a lot about birds, where and how to find them, and why they are important. Most birders have a list of birds they want to see, and some keep a life list of all the species they have seen in their lives. Perhaps you would like to start one of these lists for yourself.

We hope you will enjoy being a birder!

Ten Great Reasons to go Birding

1. Sitting or walking quietly reduces stress.
2. Birding helps you to develop skills and sharpen your senses. That can help in school, at home, and all through your life.
3. This could be the start of a lifelong hobby, or a career.
4. Observing new things in nature makes you want to learn more about them.
5. It's easy – birds are everywhere!
6. You can keep track of what you see by writing, drawing, taking photos, or submitting data electronically. Who knows? You might discover something important about birds.
7. In the future, you can look back and revisit what you did that you might not remember as an adult.
8. Nature journaling will help you do better in school.
9. Being outdoors is good for your health.
10. Identifying a new bird is very satisfying.

Resources

American Birding Association www.aba.org

National Audubon Society www.audubon.org

Laboratory of Ornithology at Cornell University www.birds.cornell.edu

Texas Audubon Society www.tx.audubon.org

eBird www.ebird.org

