

4-H WILDLIFE PROJECT IDEAS

Drew Ricketts – Wildlife Specialist



RESOURCES

- <https://bookstore.ksre.ksu.edu/pubs/4H1140.pdf>
- <https://bookstore.ksre.ksu.edu/pubs/4H1149.pdf>
- <https://marketplace.unl.edu/ne4h/curriculum/environmentaled/wildlife-conservation-1-the-worth-of-wild-roots.html>
- <https://mdc.itap.purdue.edu/subcategory.asp?subCatID=408&CatID=16>
- <https://texas4-h.tamu.edu/projects/wildlife-fisheries/>
- <https://www.whep.org>
- <https://ebird.org/home>

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4H1149 **Wildlife Challenge: Tracking Wildlife: Kansas 4-H Project Challenge**

 Wildlife leave signs that they've been in the area. In this challenge, youth will explore some of the ways to learn more about the wildlife in their area using the signs they leave behind. 6 pages, color.


 **\$3.15**
Quantity: 1 



4H1140S **4-H Wildlife Project Page, Spanish**

 This project page, translated into Spanish, provides information about the 4-H Wildlife Project, including the types of educational activities involved and how this project can lay a foundation for future learning and careers. 2 pages, color.

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4H1140 **4-H Wildlife Project Page**

 This project page provides information about the 4-H Wildlife Project, including the types of educational activities involved and how this project can lay a foundation for future learning and careers. 2 pages, color.

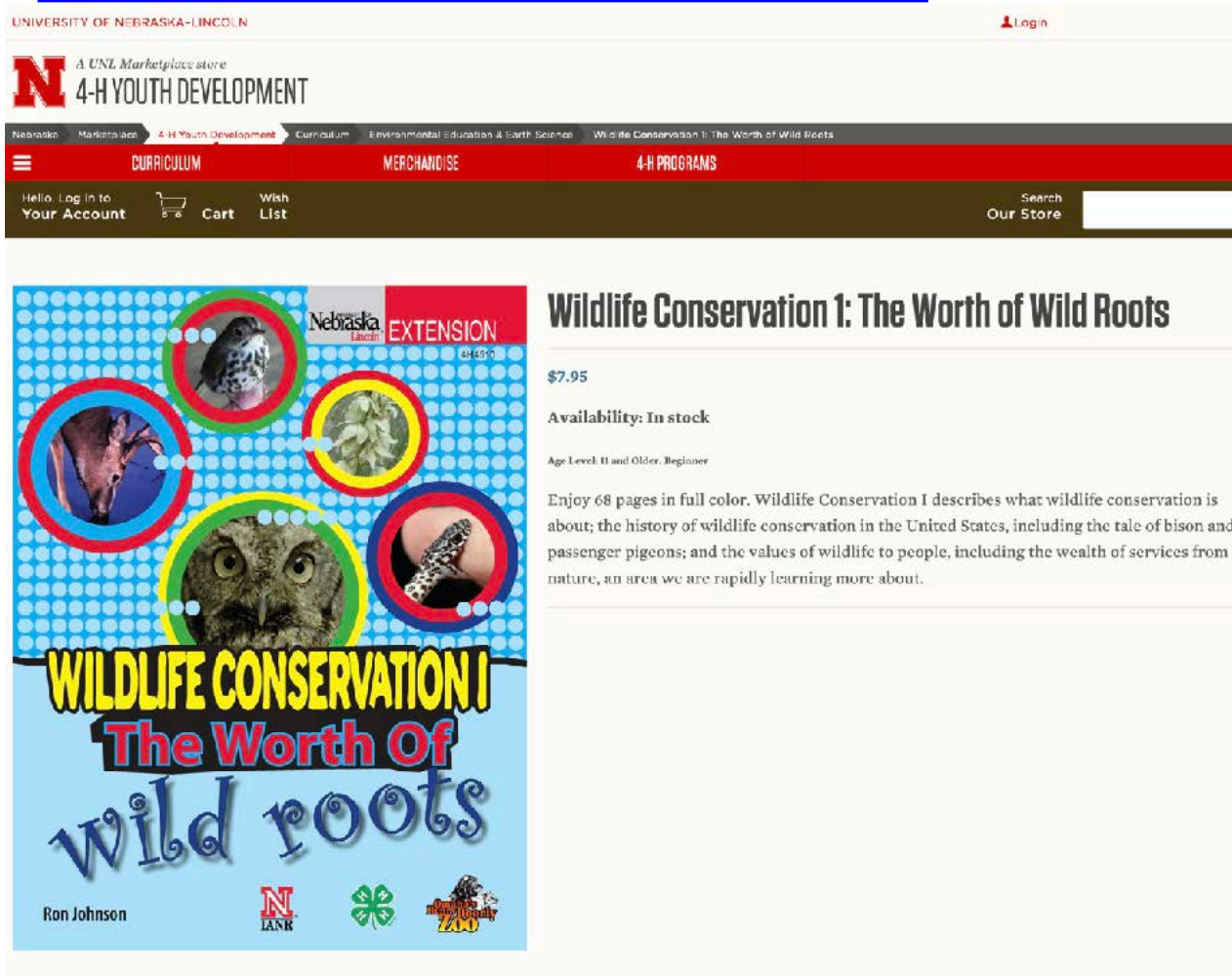
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- Exploring 4-H
- Exploring Your Environment
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RESOURCES

- <https://marketplace.unl.edu/ne4h/curriculum/environmentaled/wildlife-conservation-1-the-worth-of-wild-roots.html>



The screenshot shows the UNL Marketplace website interface. At the top, it says "UNIVERSITY OF NEBRASKA-LINCOLN" and "A UNL Marketplace store". The main navigation bar includes "CURRICULUM", "MERCHANDISE", and "4-H PROGRAMS". Below this, there are links for "Hello, Log in to Your Account", "Cart", and "Wish List". A search bar is also present.

The product page for "Wildlife Conservation 1: The Worth of Wild Roots" is displayed. The product image shows a book cover with various wildlife photos (hawk, owl, snake, etc.) and the text "WILDLIFE CONSERVATION I The Worth Of wild roots". The price is listed as \$7.95, and the availability is "In stock". The description states: "Enjoy 68 pages in full color. Wildlife Conservation I describes what wildlife conservation is about; the history of wildlife conservation in the United States, including the tale of bison and passenger pigeons; and the values of wildlife to people, including the wealth of services from nature, an area we are rapidly learning more about."

RESOURCES

- <https://mdc.itap.purdue.edu/subcategory.asp?subCatID=408&CatID=16>

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4-H Youth Development

4-H Wildlife Sort By ▾

4-H Wildlife Science Level 1

The 4-H Wildlife science curriculum is for youth who enjoy learning about wildlife. Level 1 introduces the wildlife groups: mammals, birds, fish, and herptiles. You will learn about the similarities and differences am...

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4-H Wildlife Science Level 1 (PDF)

The 4-H Wildlife Science curriculum is for youth who enjoy learning about wildlife. There are three levels. Level 1 introduces the basic wildlife groups: mammals, birds, fish, and herptiles. Youth learn about the simi...

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4-H Wildlife Science Level 1, Facilitator's Guide (PDF)

This facilitator's guide answers questions posed in the 4-H Wildlife Science Level 1 curriculum and supplies additional information about working with youth on the project. The 4-H Wildlife Science curriculum is for y...

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FEATURED ITEMS

Frogs and Toads of Indiana

Indiana is home to 17 frog and toad species, and this 50-page, full-color book covers all of them. For each species, the...

More...

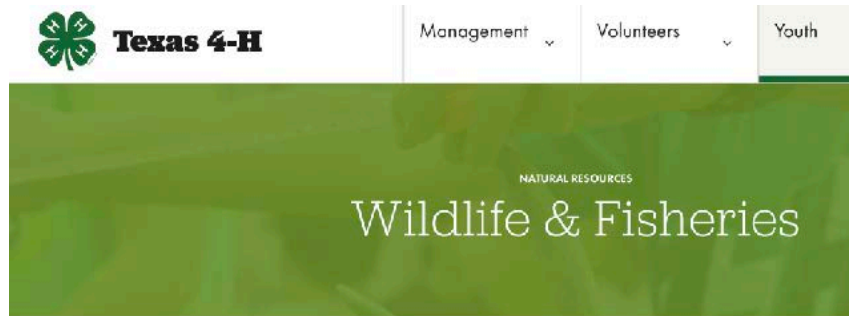
Possum in the Pawpaw Tree: A Seasonal Guide to Midwestern Gardening (Paperback)

Inspired by actual gardeners' inquiries, each chapter deals with such down-to-earth subjects as when to start seeds, ...

More...

RESOURCES

- <https://texas4-h.tamu.edu/projects/wildlife-fisheries/>



4-H Members

Become a nature watcher! Learn to tell the difference between different types of fish and animals by learning about animal species. Nature is all around you – no matter where you live! You will explore your natural surroundings through this project, including conservation and wildlife management.

Experiences and learning opportunities includes:

- habitat management
- wildlife biology and ecology
- hunting and fishing
- wildlife watching

[Natural Resources Program Activity and Event Schedule - Click Here](#)

Resources

- Aldo Leopold Teacher Packet Activity
- Educator's Resource to Texas Mammal Skulls and Skins
- Fish Study Guide -TPWD
- Fish Halves Activity
- Hunter Skills Trail Manual
- Repairing 3-D Decoys for Hunter Education
- Skill of Observation Activity
- Texas 4-H Forestry Invitational Handbook
- Texas State Parks Youth Group Annual Pass Application -TPWD
- Wildlife ID Guide

WILDLIFE HABITAT EDUCATION PROGRAM (WHEP)

- National 4-H & FFA competition
- Began in 1978 as the Tennessee Wildlife Judging Contest
- 1987 First regional contest was held in the SE US
- 1989 First national contest was held
- WHEP Manual created in 1990
 - National program named National 4-H Wildlife Habitat Evaluation Program

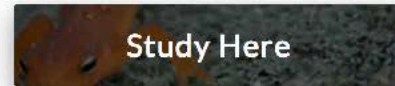
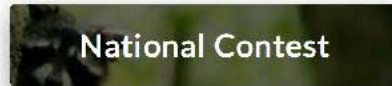
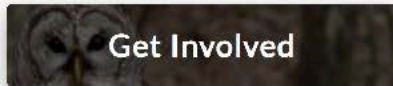
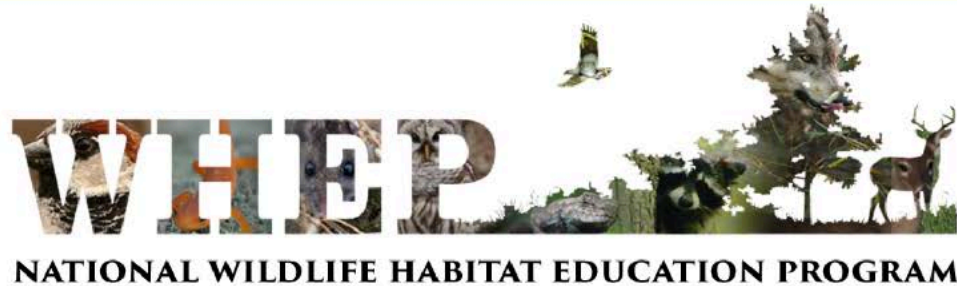
WILDLIFE HABITAT EDUCATION PROGRAM (WHEP)

- 2010 FFA teams invited to compete
 - Name changed to Wildlife Habitat Education Program
 - Reflect intent of providing a wildlife management curriculum



WILDLIFE HABITAT EDUCATION PROGRAM (WHEP)

- <https://www.whep.org>
- National WHEP Manual
 - Good introductory text on wildlife management
 - Intended for High School students (also used for Junior High age)
- Study Aids in addition to WHEP Manual
 - Flash cards for ID of Wildlife, Food Items, and Wildlife Management Equipment
 - Instructor resources with suggestions on teaching and learning Wildlife ID, Wildlife Management Practices, and Developing a Wildlife Management Plan



2018 National WHEP Competition

July 22-25, 2018

Schoodic Institute

Acadia National Park

Winter Harbor, Maine

WHEP



Wildlife Habitat Education Program

*Fourth Edition
(2018 revision)*



- 253 Page PDF Document
- Formatted like a text
- Includes
 - Contest Info
 - Wildlife management concepts & terms
 - Ecoregions of the US
 - Descriptions of wildlife species and their requirements
 - Wildlife management practices
 - Glossary and Appendix with definitions and food group explanations

K-STATE
Research and Extension

WHEP CONTEST

- 4 Activities

- Individual Activities:

- Wildlife Challenge

- Wildlife ID and general knowledge exam

- » Includes ID of images of wildlife and equipment & specimens

- On-Site recommendation of Wildlife Management Practices

- Evaluate an area for several species and select appropriate practices

- Team Activities

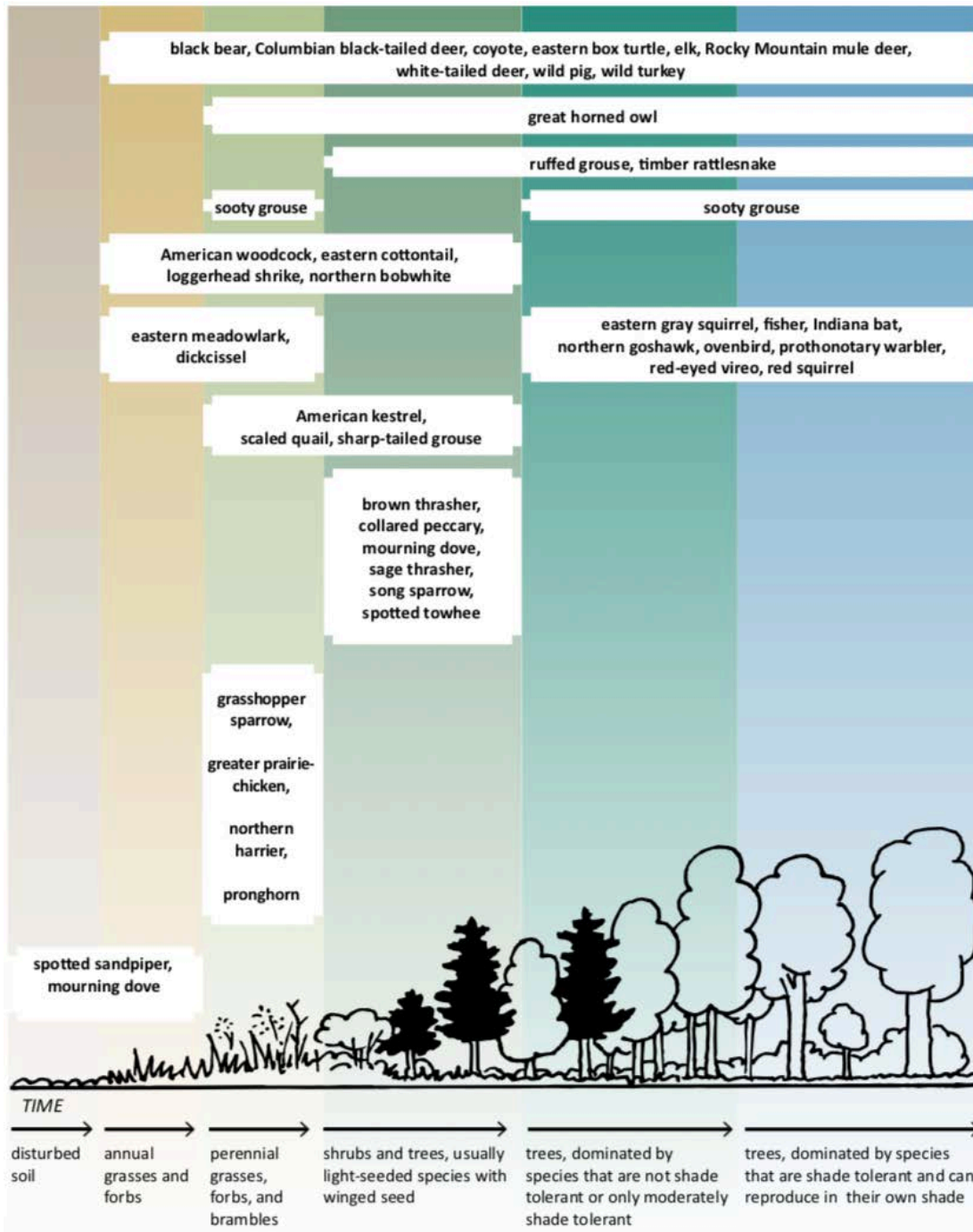
- Written Wildlife Management Plan

- Evaluate an area for 3-4 species and develop a comprehensive plan including drawings, justification, etc.

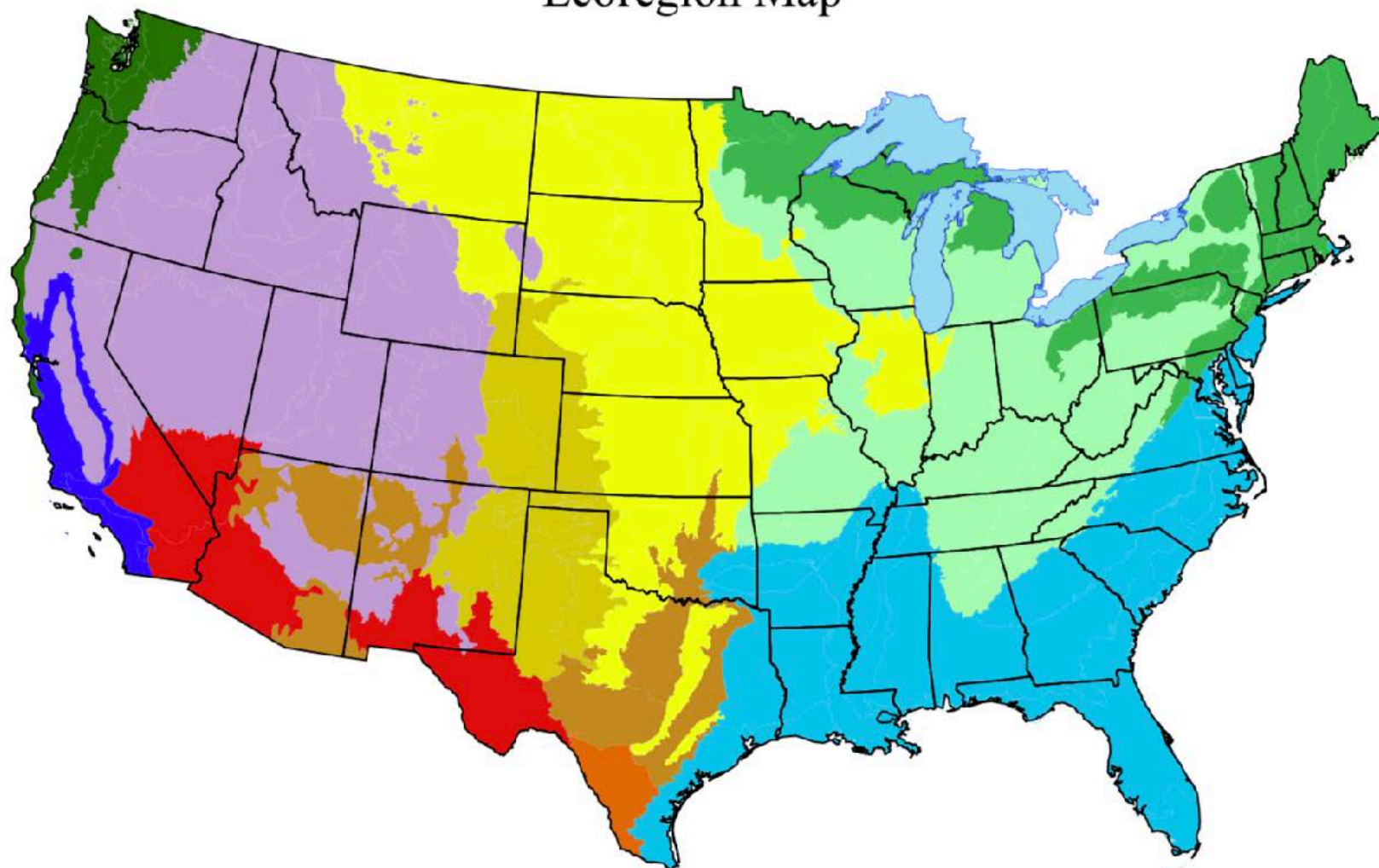
- Oral defense of Wildlife Management Plan

- Given individually





Ecoregion Map



- | | | |
|--|---|--|
|  Southeast Mixed and Outer Coastal Plain Forest |  Shortgrass Prairie |  Pacific Coastal Forest |
|  Eastern Deciduous Forest |  Intermountain |  Hot Desert |
|  Northeast Mixed Forest |  Prairie Brushland |  Mediterranean |
|  Tallgrass/Mixed Prairie |  Woodland | |

Great Plains Grasslands – Tallgrass/ Mixed Prairie

Physical description

The terrain is characterized by flat to rolling plains. Average annual precipitation ranges from 20 to 40 inches. Precipitation increases from west to east and is received primarily as spring and summer rain and winter snow. Winters are cold; summers are hot.

Dominant vegetation

Tall grasses, such as various bluestems, indiangrass, and switchgrass, represent the dominant vegetation in the eastern Great Plains (or tallgrass prairie). Commonly occurring forbs include sunflowers, broomweed, western ragweed, and lespedezas. Tall grasses dominate moist sites with soil depth greater than 20 inches, such as floodplains and valleys. Dry sites, such as hilltops and south-facing slopes, are dominated by shortgrass species. Transition sites (in-between areas) consist of a mixture of tall, mixed, and short grasses, including bluegrasses, prairie sandreed, grama grasses, and various dropseeds are found in this area.

Drainages and other moist areas may have shrubs and trees, such as native plum, buttonbush, and cottonwood. Trees and shrubs, such as cottonwood, green ash, bur oak, American elm, box elder, eastern redcedar and various willows, occur along riparian areas. These sites are very attractive to various wildlife species that are adapted to woody vegetation cover.

Woodlands dominated by post oak and blackjack oak occur on upland sites in the southeast portion of the tallgrass prairie. This area is known as the Cross Timbers. It extends from northern Texas through central Oklahoma into Kansas. All of these vegetation types were historically maintained by a combination of grazing and fire. The lack of fire is a major cause of rangeland deterioration throughout this ecoregion.

Depressions (potholes) caused by glaciation in the north and closed drainages (playas) in the south fill with water, creating numerous lakes, ponds, and other wetlands that are extremely valuable to wildlife. These wetlands, especially the smaller ones, are susceptible to periodic droughts.

Typical nonnative invasive plants in the Tallgrass ecoregion include sericea lespedeza, bermudagrass, Canada thistle, smooth brome, musk thistle, and tall fescue.

Special: Planting trees for wildlife in this ecoregion is only recommended in areas where trees would have occurred historically, such as in riparian areas or major



drainages. The historic occurrence of these trees was influenced by soils, moisture, and fire.

Farming and ranching

Cultivated cropland is found in portions of this ecoregion where precipitation is adequate or irrigation is possible. Large areas are planted to agricultural crops, such as barley, wheat, millet, flax, oats, corn, sunflowers, and alfalfa. In the eastern part of the Great Plains and other areas where soil is fertile, the main crops include wheat, sugarbeets, corn, soybeans, grain sorghum, and alfalfa.

Changes in farm machinery and management have produced large areas of cropland with little or no other types of vegetation available for use by wildlife. Recent irrigation water management techniques have reduced the amount of wetlands and riparian vegetation associated with irrigated crops.

Most of the native range is grazed by livestock except for a few locations where terrain is too rugged or water is unavailable. Many acres of native rangelands in this ecoregion are being invaded by juniper (eastern redcedar) because of fire suppression. Fire is a critical component to rangeland health. The current lack of fire is the greatest threat to wildlife in this ecoregion.

Plant succession

Annual forbs and grasses represent the initial successional stage. Perennial grasses and forbs dominate the second successional stage. The climax community or third stage consists of woody species, such as juniper, osage orange, and elms. Shrubs and trees dominate riparian areas and other sufficiently moist areas that can support woody vegetation.

Wildlife associated with Tallgrass/Mixed Prairie

blue-winged teal	wild turkey
dickcissel	coyote
grasshopper sparrow	eastern cottontail
greater prairie-chicken	red fox
mourning dove	white-tailed deer
northern bobwhite	plains hog-nosed snake
northern harrier	bluegill
ring-necked pheasant	largemouth bass

Great Plains Grassland: Tallgrass/Mixed Prairie	blue-winged teal	dickcissel	grasshopper sparrow	greater prairie-chicken	mourning dove	northern bobwhite	northern harrier	ring-necked pheasant	wild turkey	coyote	eastern cottontail	red fox	white-tailed deer	plains hog-nosed snake	bluegill	largemouth bass
Habitat Management Practices																
Conservation Easement			X	X												
Control Nonnative Invasive Vegetation	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Create Snags																
Delay Crop Harvest		X	X	X	X		X									
Edge Feathering						X		X	X	X	X	X	X			
Field Borders		X		X		X		X	X	X	X	X	X			
Forest Management						X			X				X			
Leave Crop Unharvested	X	X		X	X	X	X	X	X		X		X			
Livestock Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nesting Structures																
Plant Food Plots	X			X	X	X		X	X		X		X			
Plant Native Grasses and Forbs	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Plant Shrubs					X	X		X	X	X	X	X	X			
Plant Trees					X			X	X				X			
Repair Spillway/Levee	X				X										X	X
Set-back Succession	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Tillage Management	X	X		X	X	X	X	X	X		X		X			
Water Control Structures	X				X										X	X
Water Developments for Wildlife	X				X				X				X			
Population Management Practices																
Decrease Harvest				X		X		X	X	X	X	X	X		X	X
Increase Harvest								X	X	X	X	X	X		X	X
Wildlife Damage Management									X	X	X	X	X			
Wildlife or Fish Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fish Pond/Stream Management Practices																
Construct Fish Pond															X	X
Control Aquatic Vegetation															X	X
Fertilize/Lime Fish Pond															X	X
Reduce Turbidity in Fish Pond															X	X
Restock Fish Pond															X	X
Streams: Create Pools																
Streams: Remove Fish Barriers																



Prairie is not only composed of grasses, but forbs are equally important. This recently burned prairie (left) has abundant forbs and bare ground. Large expanses of prairie (right) are critical to grassland species, such as the greater prairie-chicken.

Dwayne Elmore

American wigeon

General information

The American wigeon is a medium-sized dabbling duck. It is easily distinguished from other dabbling ducks by its round head, short neck, and small bill. The American wigeon's body ranges from 17 to 23 inches long. The male (drake) has a mask of green feathers around its eyes and a cream-colored cap that runs from its bill to the crown of its head. This cap gives this bird its other common name, baldpate, which means bald head. Drakes also can be identified in flight by a large white shoulder patch on each wing. Hens have primarily gray and brown plumage. Both sexes have bluish-gray black tipped bills and gray legs and feet. The American wigeon has a very distinctive call with the drake producing a three-note whistle and the hens a low growl quack. They nest in areas of tall grass or shrubs, often far from water. The nest is constructed on the ground in a depression lined with grasses and down.

Habitat requirements

Diet: mostly aquatic plants and a few insects, and mollusks

Water: obtains water through diet

Cover: shallow freshwater wetlands, ponds, marshes, and rivers

Wildlife management practices

Control Nonnative Invasive Vegetation: when nonnative invasive vegetation begins to reduce habitat quality for American wigeon

Livestock Management: livestock should be excluded from wetlands managed for waterfowl

Plant Native Grasses and Forbs: where nesting cover is limited

Plant Shrubs: where nesting cover is limited

Repair Spillway/Levee: if not functioning properly

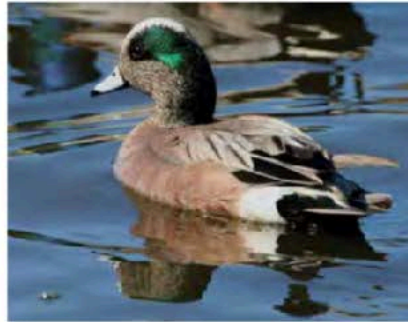
Set-back Succession: *Prescribed Fire* can be used to rejuvenate vegetation in nesting areas and to maintain proper water and vegetation interspersions in wetlands

Tillage Management: eliminate fall tillage to encourage vegetation in agricultural fields for grazing opportunities

Water Control Structures: to control water level in wetlands managed for waterfowl

Water Developments for Wildlife: shallow impoundments can be important for migrating and wintering waterfowl; flooding grain fields and planting food plots in winter makes food more available

Wildlife or Fish Survey: flush counts and aerial surveys are used to estimate populations in fall and winter



■ Year Round
■ Summer
■ Winter
■ Migratory

Coyote

General information

Coyotes are found throughout the continental U.S. and have even been observed in large cities and urban areas. Grasslands, shrubland, and farmland provide optimal habitat for coyotes, but they also use forested areas as well. Coyotes den in a variety of places, including brush-covered slopes, steep banks, rock ledges, thickets, and hollow logs. Coyotes are most active at night, during early morning, and around sunset, but they may be active throughout the day. Coyotes live in packs, alone, or in mated pairs, depending on the time of year. Coyotes have an extremely varied diet that fluctuates with the seasons.

Habitat requirements

Diet: rodents, rabbits, and other small mammals, insects, birds, eggs, deer, carrion, and soft mast; livestock and wild ungulates (deer, elk, pronghorn) usually are represented in coyote stomachs as carrion; however, in some cases, coyotes prey heavily on deer and pronghorn fawns, and can limit reproductive success in some situations

Water: requirements are not well documented; necessary water probably is obtained in diet

Cover: grasslands, shrublands, regenerating forest, mature forest; crevices and burrows along river banks, rock ledges, brushpiles, and holes under stumps or abandoned buildings are used as den sites for raising pups

Wildlife management practices

Control Nonnative Invasive Vegetation: when nonnative invasive vegetation reduces habitat quality for coyote prey species

Edge Feathering: (in some ecoregions) to increase cover and food availability for prey species around fields

Field Borders: to increase usable space for prey species around fields

Forest Management: (in some ecoregions) *Forest Regeneration (Clearcutting, Shelterwood, Seed-tree, Group Selection)* and *Forest Stand Improvement* can improve habitat for prey and lead to more abundant prey

Livestock Management: should maintain adequate cover for prey species

Plant Native Grasses and Forbs: where additional early successional cover is needed for prey and planting is necessary

Plant Shrubs: in areas where additional shrub cover is needed to attract prey and provide security cover for coyotes

Set-back Succession: *Prescribed Fire, Disking, Chaining, and Herbicide Applications* are recommended to maintain



Steve Thompson



herbaceous openings; *Prescribed Fire* can be used to enhance forest understory structure and composition; *Chainsawing* can be used to create additional forest openings where necessary

Decrease Harvest: where hunting or trapping has limited population and additional coyotes are desired to control a prey species that is overburdened

Increase Harvest: through hunting or trapping where coyote populations need to be lowered

Wildlife Damage Management: may be necessary where livestock or pet depredation is a problem

Wildlife or Fish Survey: track counts, trapper harvest data, and camera surveys are used to estimate population trends

NOTE: Situations in which landowners would manage for coyotes are exceptionally rare. However, the coyote is a native predator and plays an important role in many ecosystems. Although management is rarely, if ever, implemented to promote coyotes, management for their prey helps both prey populations and coyote populations and promotes a healthy ecosystem.

Leave Crop Unharvested

General description

Strips or blocks of grain or other crops (such as soybeans) can be left unharvested. This practice is especially valuable if the strips are left adjacent to cover. This practice should be recommended only if there is a crop present. It is not applicable to food plots.

Effect of practice

- Provides additional food for many species, which can be particularly important when naturally occurring foods are in low supply and/or in years with poor acorn production.



By leaving strips or blocks of grain unharvested, additional food is available for wildlife. Leaving this food resource can be an important consideration, especially in areas where winters are harsh.

Livestock Management

General description

The intensity and duration of livestock grazing directly impacts the structure (height and density) and composition of the vegetation community and, consequently, habitat quality for various wildlife species. Stocking rate is the amount of land allotted to each animal for the entire grazable portion of the year and is the most important consideration concerning livestock grazing management. Stocking rates can be adjusted to manipulate the structure of vegetation to favor various wildlife species. Intensity and timing of grazing favor various plant species over others. Thus, available nutrition for livestock and plant species diversity are influenced by grazing intensity and duration. Heavier stocking rates typically result in shorter vegetation, more open structure, and earlier successional stages (annual and perennial grasses and forbs with little or no woody cover), whereas lighter stocking rates tend to favor taller vegetation, more dense structure, and more advanced

successional stages (perennial grasses and forbs and considerable woody cover). Stocking rates are relative to different ecoregions. A heavy stocking rate in the Great Plains would be a light stocking rate in the eastern U.S. where annual precipitation is much greater.

This practice also can be used to exclude livestock from an area. Livestock distribution can be controlled with fencing, herding, or fire. Livestock exclusion may be necessary for wildlife species that require considerable shrub cover. Livestock exclusion is necessary for many wildlife species that inhabit forests, particularly those species that require a well-developed understory. Livestock exclusion is necessary wherever trees, shrubs, or food plots have been planted. Livestock exclusion is required to protect sensitive areas, such as riparian zones and other wetlands where erosion, siltation, and livestock waste can cause problems for associated wildlife and fish and reduce water quality.

This practice should be recommended if the stocking rate needs to be increased or decreased, or if livestock need to be excluded from the area.

Effect of practice

- Stocking rate can alter the vegetation structure and composition to favor various wildlife species.
- Livestock may be excluded from areas where advanced successional stages and increased vegetation structure is desirable for various wildlife species.
- Excluding livestock from riparian areas can help reduce siltation, turbidity and stream bank erosion, and reduce stream and pond pollution from livestock waste, which is beneficial for many wildlife and fish species. Excluding livestock from riparian areas also may improve habitat structure and composition for various wildlife species that use these areas.



Debbie Elmore

Grazing can be used to manipulate cover for wildlife. Stocking rate greatly influences the vegetation composition and the resulting structure. Overgrazing severely limits cover and food resources for many species of wildlife. However, more bare ground and shorter structure is beneficial for some species.

Population Management Practices

Decrease Harvest

General description

Regulated hunting, trapping and fishing regulations are primary tools used to manage many wildlife and fish species. State and federal wildlife agencies set regulations for hunting, trapping, and fishing seasons and bag and creel limits. Landowners can choose to take the maximum allowed or less than that, depending on local populations and personal management objectives.

Gamebirds and mammals

Decreasing harvest may be necessary when data indicate populations are declining, especially in areas with good habitat. However, harvest through hunting and trapping is seldom the reason for declining wildlife populations. Rather, habitat quality is usually the reason for widespread low or declining populations. If food, cover, water, or space is limiting, populations may remain low or decline. Appropriate habitat management practices should enhance habitat and allow populations to stabilize or increase.

Disease and, less often, unsustainable mortality from predation are other reasons for low or declining populations. If populations are low or declining because of predation, it is likely related to habitat (poor-quality cover) or possibly an abnormally high predator population. In this scenario, habitat management and possibly a reduction in the predator population can address low or declining gamebird or mammal populations. Possible examples, though relatively rare, include abnormally high predation rates on deer fawns by coyotes or abnormally high predation rates on wild turkey eggs and poults from raccoons.

NOTE: Decrease Harvest is not an option for migratory species, such as waterfowl and mourning dove, because the U.S. Fish and Wildlife Service sets bag limits and individual landowners cannot influence population levels of migratory species.

Largemouth bass/bluegill

Balanced bass/bluegill populations

Documented via seine sampling: Young largemouth bass present. Many newly hatched bluegills and some intermediate (3-5 inches) bluegill present.

Documented via angler sampling: Proportional Size Distributions (PSDs) – Between 40 percent and 70 percent of 8 inch or larger largemouth bass caught are at least 12 inches long and 40 percent to 60 percent of 3 inch or larger bluegill caught are at least 6 inches long.

Decrease bass harvest when:

Seine sampling reveals young bass may or may not be present, many intermediate-sized bluegills in poor condition but no recent hatch of bluegills. If angling reveals few bass present but > 60 percent of the bass caught are at least 12 inches long while < 50 percent of bluegill are at least 6 inches long, return all bass. The lack of bluegill reproduction and poor condition of intermediate bluegill suggests the bluegill population may be too high and food is a limiting factor. Reduce bass harvest (catch and release is ok) to increase predation pressure on intermediate-sized bluegills.

Decrease bluegill harvest when:

Seine sampling reveals no young bass present and many recently hatched bluegills but few intermediate bluegills present. If angling reveals < 20 percent of bass caught are at least 12 inches long and > 80 percent of bluegill are at least 6 inches long, return all bluegill. Assess if other species of fish (such as green sunfish) may be competing with bluegill and if so, consider draining or renovating pond and restocking.

Channel catfish

As angler catch rates of channel catfish decline, impoundments are usually restocked with additional fingerlings (rather than reduce harvest) in order to maintain angling opportunities.

Coho salmon

A number of populations of Coho salmon in the southern portion of its range are in decline and have been listed as federally endangered or species of concern; therefore harvest is not allowed.

Cutthroat and Rainbow trout

Decrease trout harvest when seine and fishing records of a pond reveal that fish are in good condition and there are few medium and large fish and many small fish.



Wildlife Challenge: Tracking Wildlife



Inspire Kids to Do

Skill Building

- Take a closer look at the animals living in your area. Learn more about ways to identify them. What clues do they leave behind?
- Once you've identified the wildlife in your neighborhood, see if you can find tracks that they are leaving behind.

Goals

- Learn which wildlife species live in your neighborhood.
- Capture their signs through casting or photos.

Project Ideas

- Select one wildlife species and create a display about its tracks.
- Cast plaster tracks of wildlife found in your area. Identify them.
- Keep a journal of wildlife you see in your neighborhood.

Self-Evaluation Before

Using the rating scale below, answer the following:

- 1 = not at all
- 2 = a little
- 3 = a lot

I know how to...

- Identify tracks for different wildlife species common in my area 1 - 2 - 3
- Identify scat left behind by wildlife species common in my area 1 - 2 - 3
- Identify other signs left by wildlife species common in my area 1 - 2 - 3

Kansas wildlife is an important and diverse part of our state and includes buffalo, birds, fish, deer and more.

Wildlife leave signs that they've been in the area. Footprints, or tracks that they leave on the ground, rubbing or chewing on tree bark, droppings or scat are just a few of the visual signs. Some animals, like skunks, leave scents behind.

In this challenge, we'll explore some of the ways you can learn more about the wildlife in your area using the signs they leave behind.

Starting Out

- Research the types of wildlife found in your area. What do the signs they leave behind look like? Tracks, scat, rubbings or chewing?
- Make castings of several tracks found in your area.

Learning More

- Build a footprint tunnel to see what tiny tracks you can capture.
- Take part in a Track Scavenger Hunt.

Expanding Horizons

- Search your surroundings for wildlife. What kinds of tracks do you find?
- Build a track trap to entice wildlife in and then cast their tracks.
- Study wildlife scat and see if you can identify the wildlife that left it behind.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Tracking Wildlife — Casting Tracks

Capturing tracks of wildlife can be a fun way to learn more about them. Here's how to make a plaster cast of animal tracks you might find in your area.

What you'll need:

- Plaster of Paris
- Cold Water
- Zip Bag
- Strip of Cardboard or Poster board
- 2 Paper Clips

Steps

1. Locate a well defined track that you'd like to cast.
2. Clear away any leaves, sticks or other debris from the track.
3. Create a ring from the cardboard and secure it with the paperclips.
4. Place cardboard ring into the ground around the track. This cardboard will hold the plaster in place.
5. In your zip bag, mix together 2 parts plaster of paris and 1 part water. (Refer to your plaster instructions.) It should be the consistency of thick pancake batter.
6. Carefully pour the plaster from the bag into the ring, covering the track. Use a twig to smooth out the plaster, filling the entire ring.
7. Allow to dry for 30 minutes.
8. Pull back some of the soil around the ring, so you can remove the track easily.
9. Lift the ring straight up to remove the cast.
10. Let dry a couple of days before cleaning the track.
11. Remove the cardboard.
12. Gently wipe off any excess dirt.
13. Rinse off the track.
14. Research the animal that you "tracked." Create a display about this animal and it's habitat.
15. Take pictures of the tracks you cast and share them on www.tinyurl.com/KS4HChallenge
16. To view a "How To" video, visit <https://www.youtube.com/watch?v=BnSXFFqDPus>



Taking a raccoon track casting.



Raccoon track cast

WILDLIFE TRACKS & SIGN

Let's Make a Footprint Tunnel



Capturing tracks of wildlife can be a fun way to learn more about their habits. Here's how to make a Footprint Tunnel to capture the tracks of critters both large and small!

What you'll need:

- Piece of Cardboard – 24" X 30"
- Ruler
- Ink
- Duct Tape
- Masking Tape
- 1 Small Plate
- Bait – peanut butter works great
- Spreading Knife
- 2 Pieces of White Copy Paper

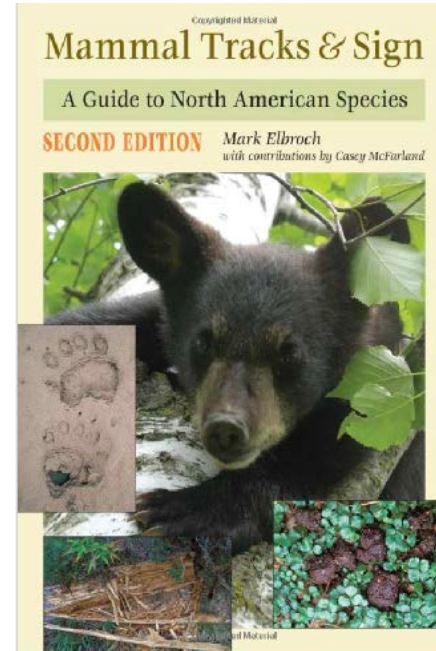
Steps

1. Divide the cardboard into three equal parts, folding along the lines to form a "tunnel."
2. Tape 2- 8 1/2" X 11" sheets of white paper to the floor of the tunnel, positioning them at each end.
3. Use masking tape to hold them in place.

4. Lay a second strip of masking tape across the entire end of each sheet, nearest to the center of the tunnel.
5. Tape a small plate in the center of the tunnel, between the two sheets of paper.
6. Add a good amount of "bait" to the plate.
7. Go outside and find a good location to place your tunnel.
8. Before placing the tunnel, cover the masking tape strips near the bait plate with ink.
9. Fold up the cardboard sides and tape with duct tape to create the tunnel.
10. Place the tunnel in a location you might expect to find small rodents. You may have to experiment to find a good location.
11. Come back the next day to see what tracks you captured.
12. Research to identify the animal tracks you found.
13. Take pictures of the tracks you captured and share them on www.tinyurl.com/KS4HChallenge
14. To view a "how to" video for making a Footprint Tunnel, visit <https://www.youtube.com/watch?v=IwyvYjHrbU>

Variation:

- Visit areas with different habitat conditions
 - Record species in each area
 - Compare communities in different areas to test hypotheses



BIRD WATCHING

- Resources on KSRE Bookstore
- Bird ID Apps
 - Merlin
 - Audobon
- eBird

The screenshot shows the eBird website interface. At the top, it says "The Cornell Lab of Ornithology" and "eBird". There are navigation links: "Submit", "Explore", "My eBird", "Science", "About", "News", and "Help". On the left, there is a "MY STATS" section with the following data:

Icon	Value	Description
🕒	4	Species observed
📄	0	Complete checklists
	3	Total
📷	1	Species with photos
	1	Observations
✅	0	Days of checklist streak
	1	Next streak: 1 days

The main content area features a large photograph of a Ruby-crowned Kinglet perched on a branch. Below the photo, the text reads: "Ruby-crowned Kinglet (Certhya caudata) © Leahy Anderson, Macaulay Library, eBird".

BIRD WATCHING

- eBird

1 2 3 **Where did you bird?**

Identify the location where you made your observations.

Choose from Your Locations

C.SSR

[Manage "My Locations"](#)

Find it on a Map

Use Latitude/Longitude

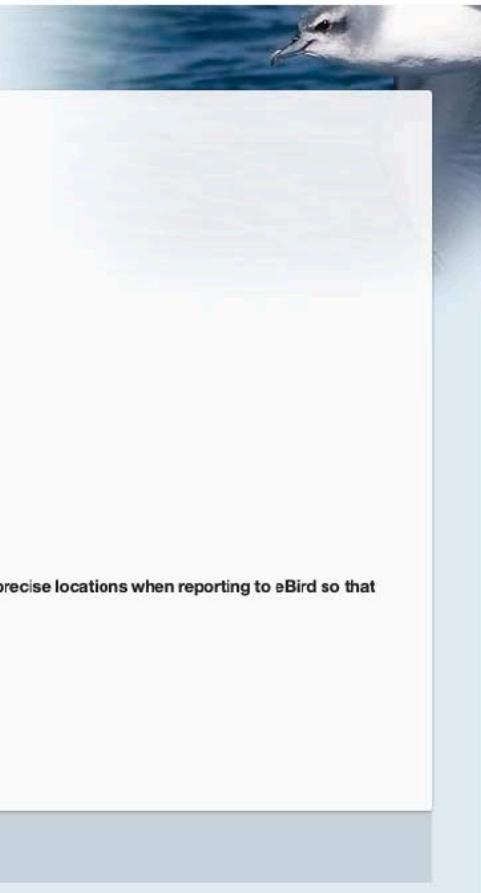
Create a new location using latitude and longitude.

Select an entire county, state, or country

If you were birding across a very large area (e.g., an entire state or county) select this option. **Please consider using more precise locations when reporting to eBird so that your observations are more valuable for analysis .**

Import Data


Import data from a spreadsheet, database, or birding program. [Learn how](#)



BIRD WATCHING

- eBird

1 **2** 3 **Date and Effort** C3SB, Riley County, Kansas, US [Change](#)

* **Observation Date:** Oct -- 2021  * = Required

* **Observation Type:**

<input type="radio"/> Traveling	You traveled a specific distance — walking a trail, driving a refuge loop, field birding.	▶ More Info...
<input type="radio"/> Stationary	You stayed at a fixed location — watching from a window, hawkwatching, seawatching.	▶ More Info...
<input type="radio"/> Historical	Birding was your primary purpose , but you cannot estimate start time, duration, and distance; use Traveling or Stationary if you can estimate these.	▶ More Info...
<input type="radio"/> Incidental	Birding was not your primary purpose — noting a bird while driving or gardening.	▶ More Info...
<input type="radio"/> Other	<input type="text" value="Choose..."/>	

[◀](#) [Continue ▶](#)

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BIRD WATCHING

- eBird

1 2 3 What did you see or hear? CSSB, Riley County, Kansas, US Change
Sun Oct 10, 2021 8:00 AM Change

WATERFOWL	<input type="checkbox"/>	Greater White-fronted Goose
	<input type="checkbox"/>	Domestic goose sp. (Domestic type)
	<input type="checkbox"/>	Canada Goose
	<input type="checkbox"/>	goose sp.
	<input type="checkbox"/>	Muscovy Duck (Domestic type)
	<input type="checkbox"/>	Wood Duck
	<input type="checkbox"/>	Blue-winged Teal
	<input type="checkbox"/>	Blue-winged/Cinnamon Teal
	<input type="checkbox"/>	Northern Shoveler
	<input type="checkbox"/>	Gadwall
	<input type="checkbox"/>	American Wigeon
	<input type="checkbox"/>	Mallard
	<input type="checkbox"/>	Mallard (Domestic type)
	<input type="checkbox"/>	Northern Pintail
	<input type="checkbox"/>	Green-winged Teal
	<input type="checkbox"/>	Canvasback
	<input type="checkbox"/>	Redhead
	<input type="checkbox"/>	Ring-necked Duck
	<input type="checkbox"/>	Lesser Scaup
	<input type="checkbox"/>	Greater/lesser Scaup
	<input type="checkbox"/>	Aythya sp.
	<input type="checkbox"/>	Hooded Merganser
	<input type="checkbox"/>	Ruddy Duck
	<input type="checkbox"/>	duck sp.
BOBWHITE, QUAIL AND ALLIES	<input type="checkbox"/>	Northern Bobwhite
	<input type="checkbox"/>	Wild Turkey
	<input type="checkbox"/>	Greater Prairie-Chicken
	<input type="checkbox"/>	Ring-necked Pheasant
GREBES	<input type="checkbox"/>	Pod-billed Grebe
	<input type="checkbox"/>	Horned Grebe
	<input type="checkbox"/>	Eared Grebe
	<input type="checkbox"/>	Horned/Eared Grebe
	<input type="checkbox"/>	Western Grebe
	<input type="checkbox"/>	Western/Clark's Grebe
	<input type="checkbox"/>	grebe sp.
PIGEONS AND DOVES	<input type="checkbox"/>	Rock Pigeon (Feral Pigeon)
	<input type="checkbox"/>	Eurasian Collared-Dove
	<input type="checkbox"/>	White-winged Dove
	<input type="checkbox"/>	Mourning Dove
	<input type="checkbox"/>	pigeon/dove sp.
CUCKOOS	<input type="checkbox"/>	Yellow-billed Cuckoo

Jump to Species...

+ Add Species
+ Alphabetic

Show Identies
 Show Subspecies
 Group by Most Likely ?

Shortcuts Preferences

Are you submitting a **complete checklist** of the birds you were able to identify?

Yes No ?

Submit

BIRD WATCHING

- eBird

Draw Ricketts
Draw Ricketts

	YEAR	MONTH	DAY
Species observed	0	0	0
Total checklists	0	0	0

MANAGE MY...

- [Checklists](#)
- [Locations](#)
- [Alerts](#)
- [Data imports](#)
- [Contacts](#)

EXPLORE MY...

- [Profile](#)
- [Sightings lists](#)
- [Media](#)
- [Preferences](#)
- [Cornell Lab account](#)
- [Download my data](#)
- [Sign out](#)

World Change region ▾

4
Species observed

0
Complete checklists
3 total

1
Species with photos
1 Observation

0
Species with audio
0 Observations

4
Total region ticks
1 country, territory, or dependency

eBirding over time Species Checklists

Your species by year

YEAR	14 OCT	31 DEC
2017	1	1
2013	3	3

Your species for October

YEAR	14 OCT	31 OCT
2017	0	0
2013	0	0

Species by country, territory, or dependency

NAME	LIFE	YEAR	MONTH
1 United States	4	0	0

Species by major region

NAME	LIFE	YEAR	MONTH
World	4	0	0
Western Hemisphere	4	0	0
North America	4	0	0
Central America	0	0	0
South America	0	0	0
West Indies	0	0	0
USA Lower 48	4	0	0
ABA Area	4	0	0
ABA Continental	4	0	0
AOU Area	4	0	0
Eastern Hemisphere	0	0	0

Latest checklists


1 Species **8 Apr 2017**
Private Property
Kansas, United States

2 Species **12 Sep 2013 19:30**
Hemo
Kansas, United States

1 Species **13 May 2013 10:00**
CSD
Kansas, United States

[View all](#)

Latest media



[View all](#)

BIRD WATCHING

- Simple list of yard birds with/without feeder
- List of birds encountered at a park in town
- List of birds encountered at a lake, in the prairie, at a pond, etc
- Compare species present at different locations



FISH SAMPLING

- Seine, or net fish and/or invertebrates and ID
- Sample different habitats and compare species captured in different habitats to test hypotheses



CAMERA TRAPPING

- Deploy camera trap do identify species in the area
- Deploy camera traps in different habitats to test hypotheses about habitat selection or human impacts on wildlife



QUESTIONS?

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YouTube: [www.youtube.com/channel/](http://www.youtube.com/channel/UCoCUoT3Oi90S5zDnzzgL34iA)

[UCoCUoT3Oi90S5zDnzzgL34iA](http://www.youtube.com/channel/UCoCUoT3Oi90S5zDnzzgL34iA)

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