

Exploring Nature



Fall nature activity book

Libro de actividades de la naturaleza de otoño

Access nature in all of its wonder.
From our parks and natural areas,
to your neighborhood or backyard.
Enjoy these activities anywhere!

Actividades en español.

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Metro

oregonmetro.gov/natureeducation

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Fall migratory bird watching

See if you can spot these birds that migrate through the Pacific Northwest during your next fall bird watching trip.

Many birds migrate south to spend the winter in warmer climates, often traveling the same route along the Pacific Flyway through Oregon. This makes the fall season a unique time to view birds that aren't in our region the rest of the year.

Sandhill cranes

Large, tall birds with broad wings, long neck and legs, short tail and long, straight bill. Red forehead, white neck, brown back and black legs.

Distinctive traits Dinosaur-like, gravelly call. Dance by hopping and flapping wings!

Where to see them Howell Territorial Park. They spend time in wetlands and farm fields.

Where are they going? While most are heading to California, about 1,500 birds stay on Sauvie Island for the winter!



Northern pintail ducks

Long, pointed tail and long neck (for a duck). White chest, grey or brown head. While in flight, can see flash or green or bronze on long, narrow wings.

Distinctive traits Calls can be a short, train-like whistle or a rough quack.

Where to see them Killin Wetlands Nature Park. Spend time on the surface of the water and edges of wetlands, eating seeds and insects.

Where are they going? Southern U.S., Mexico, and Central America



Killdeer

Round head, short bill, large eyes with a red ring, long tail, long legs and long wings. Brown back, two black stripes across white chest, brown, black and white face.

Distinctive Traits Fast, high-pitched call that sounds like the words "kill deer." Travels by walking, running a few steps and stopping, looking around then running again.

Where to see them Smith and Bybee Wetlands Natural Area.

This shorebird spends time in flat areas with little vegetation, including wetland edges, golf courses, and lawns.

Where are they going? Southern U.S., Mexico, and Central America



*Note

The locations listed here that birds travel through and to are the ancestral homelands of Indigenous people who have stewarded these lands since time immemorial. The colonial names for these places, such as Oregon and Mexico are used because genocide and cultural assimilation have made the Indigenous names of these places lost or unfamiliar. When reading these names remember that countless generations of people have had, and still do have, different names for these places. For example, the Southern U.S. could also be known as the "lower half of Turtle Island."

Track identification

Fall is the perfect time to look out for tracks! You can identify whether animals like deer, raccoons and bears have been in the area you're visiting with their footprints. You can even find human tracks.

Tracking is a skill that can help you identify dangers in the forest, find where resources, like water, are located and help you see where others have been. Also, it can help you avoid getting lost! Remember to be safe and most of all have FUN!

Materials:

- Paper, pen or pencil
- Small notebook to draw

Directions:

Try to identify what animal the tracks belong to. See some common footprints you may encounter on the next page.

Answer the following questions:

1. When you find a track, observe the spacing between each track. How deep are they?
2. What direction are they moving toward?
3. Can you tell if the animal was running or walking?

Use the space below to draw some different tracks you come across:





Deer track

Deer have pointed hooves that are shaped almost like a tear drop. Tracking deer can lead you to water and food sources like berries.



Raccoon track

The raccoon's elongated back paw is in close proximity to their front paw. They have long fingers on their front and back paws.



Bear track

Notice the front paw of a bear is shorter than the back. You can see the side to side stride of the bear's walking pattern. Many bears drag their hind paw as they walk. If you see these tracks, don't follow them — it's important to give bears a lot of space.



Human track

Knowing what human tracks look like and how to follow them can help you in many situations. You can identify your own boot or foot tracks on the trail if you become lost. If you see your track again, you're going in circles. If you find other human tracks, follow them to find other people, water resources and viewpoints. There are many benefits that come from knowing where other humans are heading and where they've been.

Fall nature journal

For this activity, use the following prompts to draw or write some reflections.

Fall is a special time of year, where the summer comes to an end and our outdoor adventures change from ones spent in the sun to ones spent under a layer of gray skies and rain. This makes fall an excellent time to write in a journal!

Answer the following questions:

1. What do you notice about this time of year in nature?
2. What do you like most about the fall?
3. What was your favorite activity from this summer?
4. Have you seen any critters in your yard? What kind?



Fall flower pressing

Pressing flowers, leaves or other cuttings is a fun craft project that can last many years.

We celebrate fall as the last burst of color and life before many trees, plants and animals go dormant for the winter season. Just because the fall foliage is fleeting doesn't mean we can't hold onto those bright colors a bit longer to save some vibrancy for the wintry months ahead!



Materials:

- **At least 2 heavy books** (or something else heavy — weight is the key here!)
- **Absorbent paper** (i.e., parchment paper, coffee filters, or thin cardboard paper)
- **Flora:** Vibrant flowers, leaves, ferns, or other cuttings to press — use flowers that have already been cut, leaves that have fallen from trees, fern branches that have broken away, or other fallen soft organic items (no need to take from living plants!)

Directions:

1. Prepare your fall flora. Make sure your plant material is not wet to the touch. — the drier the better. Remove any unwanted leaves, debris, or dirt. Place the flora between two pieces of absorbent paper.
2. Open a large, heavy book and place absorbent paper on the book's pages to protect them. Large books like dictionaries and phone books work best for this, but heavy wooden blocks, boxes, or boards can work as well. Make sure you choose an item that you don't mind getting damaged. The colors can bleed onto and wrinkle pages as water is pressed from the plants!

3. Position the flora on absorbent paper and, if using a book, carefully close the book so as to not move the plants from how you've arranged them.
4. Place more books or other weighty objects on top of the book, block, etc. to help press moisture out of the flora. Keep in a place that is out of the way so it doesn't get knocked over.
5. Let the plants sit for at least 2 weeks before removing them from the weighted items. If they don't have a papery feel, change out the paper and let them sit for another one to two weeks. The longer you press the flowers, the less water will be left in them.

Tips

- Once you've created your pressed flowers, you can put them on display! Use them as art, arrange a dried bouquet, or gift them to a friend to brighten their day!
- Eventually these organic materials may degrade and go back to the earth — that's okay — another reason to look forward to more flowers in the future!

Leaf art

Fall is a prime time to see the beautiful diversity of leaves. You can find leaves in many different colors, shapes and sizes - even when they're from the same tree! Spend time observing these changes and create your own leaf art for fun.

Materials:

- Leaves of varying sizes, colors and shapes

Directions:

For this activity, gather as many leaves as you would like! Use your leaves to create art on the ground. Be creative and see what you can make with the leaves around you.

Feel free to use other nature objects other than leaves, such as sticks, rocks, etc., as long as they're items you are able to move without harming a living plant or animal.

Question:

1. What kind of art will you create with your found items?



Leaf rubs

For this activity, create a leaf in any color(s) you'd like with just a little bit of friction.

Falling leaves are one of the best things about autumn! As days get shorter and colder, the chlorophyll that gives leaves their green hue begins to break down and reveals a rainbow of oranges, reds, yellows, even occasional purples and blues — great inspiration for art!

Materials:

- Dry fallen leaves — try to choose a variety of shapes and sizes!
- A crayon or pencil
- Paper — thin paper works better than thick paper

Directions:

1. Choose your favorite leaves from the ground and place them on a solid, smooth surface like a table or counter.
2. Place a sheet of paper on top of the leaves. Make sure they're dry, otherwise the water may wrinkle your paper.
3. Applying even, strong pressure, rub your pencil or crayon over the leaf. You may find that using the side of your tool works better than the point!
4. Remove the leaf from under the paper and ta-da! You've created a leaf rub! Add more color, decorate, or create a collage, whatever sounds fun.



Be creative!

Consider using other plant material to rub over or trying out several colors on one rub. Once your leaf has left its impression, return it to nature so it may provide nutrients for spring as it continues to break down!



Match the leaf to the tree

Leaves fall to the ground every year. They break down and produce nutrients for the soil, preparing for plants to grow in the spring. They also create a layer that helps the ground absorb water — one of the most important building blocks for all life on the planet.

Directions:

For this activity, gather a few different leaves and look for the tree they may have come from. You can try this out in a park or near your home. The name of the tree is not important but if you know it, great!

Look around to spot a tree and see if your leaves match the leaves on the tree. Have your leaves traveled far from the tree? Nutrients from fallen leaves go back into the ground when the leaves decay. Plants and insects need these fallen leaves to survive.

Answer the following questions:

1. Do you see anything else that might have fallen out of the tree? Leaves? Twigs? Pinecones? Fruit?
2. What are the different kinds of leaves around you? Which leaves are the biggest? Do they come from the same type of tree?
3. What are some cool leaf shapes you find?
4. How do you think the leaf ended up where you grabbed it?
5. Has an insect eaten pieces of your leaves?
6. What colors do you see on your leaves?



Jumping into a pile of leaves

It's an activity that's been around since people started piling up leaves to allow grass room to grow: Gather up a pile of leaves, jump in, spread them out again and repeat!

Directions:

This is a great activity to try at home. Keep it simple. Come up with your own way of interacting with the pile and collecting leaves. If you want to frolic, jump, or mix up the leaves, then there is never a better time than in the fall and the best place to be is in the Pacific Northwest. Just make sure you take care so you don't get hurt while doing so.



Answer the following questions:

1. What are some different patterns you can make with the leaves?
2. Where did you find your leaves?
3. Do you know the type of tree or trees that the leaves came from?



Fall colors hikes

This season, visit these Metro sites to take in some beautiful fall foliage.

Every fall, deciduous trees shed their leaves to conserve water and energy for the cold, dark winter months. In our region, the leaves of oaks, cottonwoods and dogwoods and many others turn yellow, orange, and red in September, October and November. The abundance and variety of deciduous trees at parks, natural areas and cemeteries make this colorful transformation even more spectacular.



Oxbow Regional Park

Yellow bigleaf maples and red vine maples contrast against evergreen Douglas firs up in the ancient forest, while views of the Sandy River watershed include vibrant yellow and orange black cottonwoods and alders.

Graham Oaks Nature Park

Check out the vibrant red vine maples in the forest and the beautiful yellow white oaks in the woodland and prairie, including the giant, lone heritage tree in the middle of the park.

Canemah Bluff Nature Park

White oaks in the forest turn a soft yellow, while the view from the bluff over the Willamette River allows you to take in a wide range of colorful trees.

Cooper Mountain Nature Park

The mix of forest and white oak savannah includes vibrant red vine maples and the beautiful yellow white oaks in the fall.

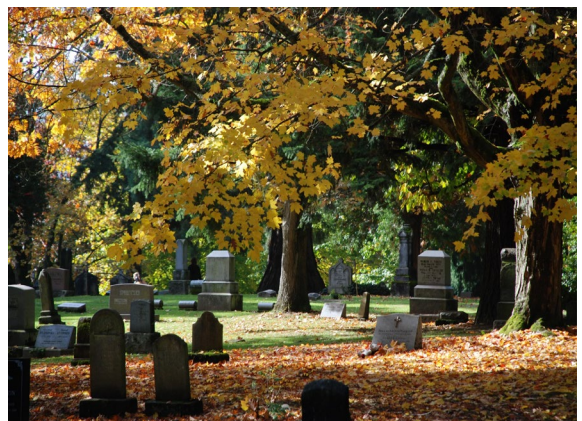


Howell Territorial Park

The sweeping views of Sauvie Island are a lovely place to appreciate the fall colors.

Mount Talbert Nature Park

An autumn hike around this extinct volcano includes yellow bigleaf maples, red vine maples, and even a few yellow white oaks.



Lone Fir Cemetery

More than 500 trees within Lone Fir Cemetery includes bigleaf maples, tulip trees, Oregon ashes, dogwoods, weeping birches, and ginkgos that will all change colors this season.

Fall fruit

Quick tips to help you name trees.

What's your favorite fall fruit? Apples? Figs? Pumpkins? (Yes, really! Pumpkins are fruits!) Could you identify a cousin of your backyard apple tree in the neighborhood or spot a fig tree from far away?

Apples:

1. Location. Apple trees prefer full sun and plenty of space.
2. Size. Standard apple trees can grow up to 20 feet tall with an equal spread or be as small as 10 feet tall for dwarf apple trees.
3. Apple trees have gray and scaly bark. Their pink or white leaves are coarse and oval. Their spring blooms are made up of 5 petals up to three-quarters of an inch across.
4. From early to late fall, look for the telltale fruit hanging from the branches of the tree. The fruit is the best way to determine what kind of apple tree you have found!



Note

Remember to only eat fruit you know. Be sure to check a guide, dichotomous key, or other trusted source before ingesting any fruits you may find outside!

Figs:

1. Look for the tall, twisted and muscular-yet-flexible branches with trunk bark that contains large nodules. Fig trees often have several main trunks that branch widely.
2. Study the leaves to identify the fig tree. Some common fig variety leaf shapes include Hamma, Ischia and Brunswick.
3. Identify the fig tree by studying its fruits, which are green, brown or purple at maturity. Ripe fruit will be very soft, darker in color, and wilt on the stem.



Photos: fig leaf (left), hazelnut leaf (right)

Hazelnuts (filberts):

1. Start at the base! American hazelnut trees are normally 8 – 15 feet tall, and 5 – 10 feet wide. Hazelnut trees often have many branches that start lower, making them look like a shrub more than a tree.
2. Check the shape of its leaves. The hazelnut tree has heart-shaped leaves that alternate along the branches. Paler on the back than the front, these leaves have serrated edges that look like the edge of a bread knife. If you rub one, you may notice a fuzzy coating on the leaf.
3. Look at the size and shape of the nut. It should be between a half-inch to an inch long and have a very smooth shell with a warm brown color. If you crack the shell open, the walls are thin and brittle, with a soft nut inside.

Fall stargazing

With cool, long nights and plenty of meteor showers, fall is a lovely time to go stargazing!

Here are some astronomical events to check out this season, as well as stargazing tips that are helpful year round.

Nov. 11 and 12 - Northern Taurid meteor shower

The Northern Taurids are dust grains left behind by an asteroid, and often include very bright fireballs! This meteor shower is most visible right after midnight, in the early morning of Nov. 12th.

Nov. 30 - Penumbral lunar eclipse

On the night of Nov. 30, the moon will pass through the partial shadow, or “penumbra,” of the Earth. During this type of eclipse, the moon will become noticeably darker.

Dec. 7 to 17 - Geminid meteor shower

With plenty of meteors in multiple colors, the Geminids are considered by some to be the best meteor shower out there. These meteors consist of burning up pieces of rock and dust left over by an asteroid. The meteors will peak on the night of Dec. 13, with great viewing right after midnight.

Dec. 21 - December solstice

On Dec. 21, the sun will be as far south in the sky as it goes, directly over the Tropic of Capricorn. In the Northern Hemisphere this day marks the first day of winter, while in the Southern Hemisphere, it signals the first day of summer. In our region, this will be the shortest day and the longest night of the year.

Dec. 21 - Conjunction of Jupiter and Saturn

Jupiter and Saturn, both bright planets visible to the naked eye, will appear to be aligned on Dec. 21, creating what will look like a super bright double planet! This conjunction will be visible in the western sky just after sunset.

Stargazing tips

- **Check the weather.** Clear or mostly clear nights are ideal for stargazing. Check out AccuWeather’s Astronomy Weather Forecast for information about stargazing conditions.
- **Check the moon phase.** The light from the moon can make it harder to see the stars, so consider the moon cycle when planning to go stargazing. You can still see stars and meteors during the full moon, but new moon or crescent moon phases are optimal. Moongiant.com tells you the current moon phase and has a lunar calendar so you can plan ahead!
- **There’s an app for that.** Download an app on your mobile device to help you find and learn about constellations. The best part is many of these apps are free including Night Sky, Sky Map and SkyView.
- **Look closer.** Use a telescope. If you don’t have one, you can build your own telescope at home. Some at-home telescopes use simple materials, including two magnifying glasses, some duct tape and a paper towel roll. Ask an adult to help you search for instructions on the internet.
- **The darker, the better.** Choose a dark stargazing space to see the most stars. If possible, travel outside of the city to a space with less light pollution. If you’re stargazing at home or in a local park, turn off indoor and outdoor lights, as well as car headlights. Darksitefinder.com can help you find nearby dark skies.
- **Get settled.** Set up a comfortable spot and give your eyes at least twenty minutes to adjust to the darkness. Bring some snacks or a hot beverage and tell stories with your family to pass the time!
- **Early birds can stargaze, too!** If you have trouble staying up late to stargaze, get up early. It is more common to see some astronomical phenomena — like many meteor showers — in the dark, early morning hours than it is right after sunset.

Night sky coloring page

Identify all the nocturnal animals as you fill this drawing with color!

Share your coloring creation with Metro! Snap a picture and tag @OregonMetro on Instagram and Facebook to be featured.

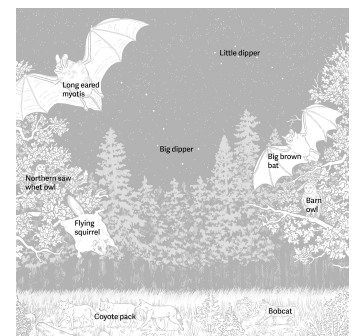


Animals:

Barn owl
Big brown bat
Bobcat
Coyote pack
Flying squirrel
Long-eared myotis
Northern saw whet owl

Constellations:

Big dipper
Little dipper

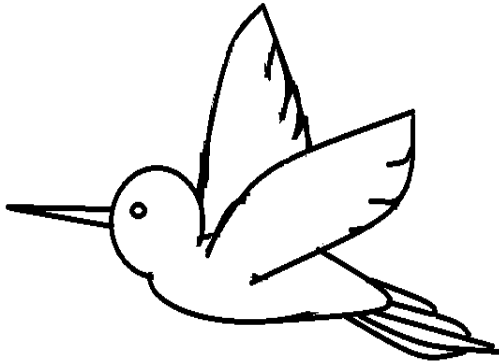
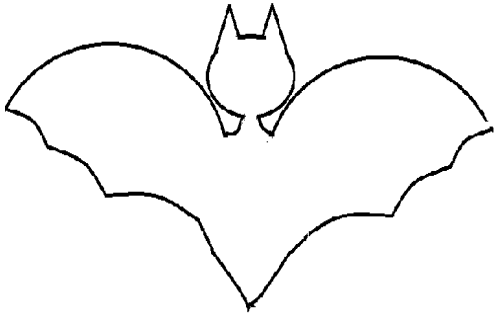
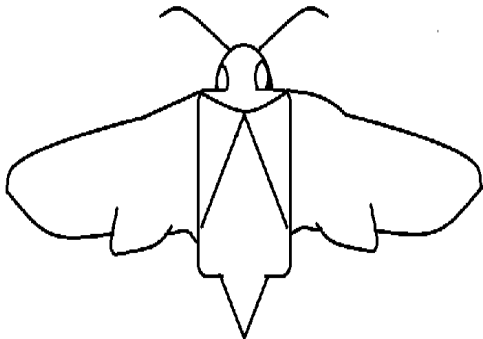
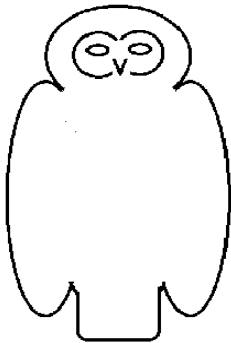


Drawing by Zoe Keller

Alas de hojas

En esta temporada es común que encuentres muchas hojas cayéndose de los árboles y arbustos en tu ambiente.

En esta actividad, buscaras hojas de tamaños y colores diferentes para situar y pegarlas en las alas de cuatro animales comunes que se encuentran en nuestra área regional.

Colibri coronirrojo	Miotis californiano
	
Polilla esfinge	Búho barrado
	

Busqueda de tesoros en el otoño

¿Qué tesoros puedes encontrar afuera durante el otoño? Con este guía, puedes salir y conectar con las maravillas de la naturaleza.

Haga esta fácil búsqueda de tesoros en su propio patio trasero, o en un parque cercano donde quiera estar al aire libre. ¡Encuentra los objetos y las sensaciones de la naturaleza en orden o mézclalas! Un portapapeles y un lápiz son útiles para esta actividad.



Busca...

- ☐ Un árbol que no tiene ni una hoja
- ☐ Una aguja del árbol pino
- ☐ Una araña en su telaraña
- ☐ Un insecto volando



Toca a...

- ☐ Musgo en un árbol
- ☐ Una pluma caída
- ☐ Una piña de un árbol
- ☐ Un esqueleto de hoja



Escucha para...

- ☐ Dos pájaros comunicando
- ☐ El sonido de los saltamontes
- ☐ Hojas caídas y crujientes
- ☐ El aire girando alrededor de ti



Huele...

- ☐ El aire libre
- ☐ Las agujas de un pino
- ☐ El tronco de un árbol
- ☐ Tierra mojada en la distancia

Hongos de otoño

Identificación y colorear por número

Usa esta clave de color para colorear los hongos:	
1	Brown/marrón
2	White/blanco
3	Beige
4	Orange/naranja



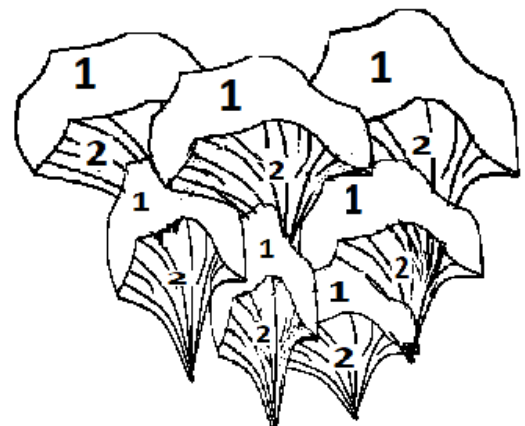
Hongo morilla

Estos hongos distintivos tienen una apariencia de panal debido a la red de crestas con hoyos que componen sus tapas. Hongos morrillas se puede encontrar en una variedad de colores tierra, con gorras que varían en color desde amarillo, amarillo-marrón, marrón, oliva, hasta gris y negro grisáceo. Viven en el borde de las áreas boscosas. Busque alrededor de los fresnos y robles, allí crecen.



Seta de ostra

Los hongos ostra tienen una tapa en forma de embudo de color blanco o marrón claro con branquias de color amarillo blanquecino que ascienden por un tallo corto descentrado. La carne es blanca. Busque en los troncos, árboles caídos o árboles muertos. También debajo de los árboles que se hayan caído, las ostras prefieren crecer a la sombra.



Hongo boletus

El hongo boletus es un hongo erguido con tallo y con poros esponjosos en lugar de branquias debajo de la tapa. El color de la gorra del bolete bicolor varía de rojo claro a naranja y rojo ladrillo. Puede encontrarlos debajo de árboles de cicuta y roble, especialmente donde hay musgos. También se encuentran comúnmente en la hierba debajo de las coníferas.

