

Oxbow Regional Park – Fall

We're excited that you will be joining us for a field trip to Oxbow Regional Park this fall! In this packet you will find the following documents:

- **Teacher checklist**
- **Teacher letter**
- **Notes to parents**
- **Chaperone letter**
- **Chaperone letter (Spanish)**
- **Directions to park**
- **The Life Cycle of Salmon**
- **Wildlife watching handouts**



Metro | Before You Arrive: *TEACHER CHECKLIST*

Thank you for making your reservation for a field trip to one of our outstanding natural areas. We look forward to a fun and educational experience for you and your students/group. The following checklist will help make your field trip a success.

- Confirm the bus schedule** with your transportation provider. We have had a number of recent incidences where bus drivers have needed to leave the park earlier than the established time. For the best field trip possible, **please ensure your group will be able to stay for the entire time scheduled.**
- Communicate **proper field trip attire** to ALL participants by **cutting up and sending home** the reminder note to parents that is in this packet. Field trips take place **rain or shine** and our natural areas can be chilly at any time of year. Proper field trip attire includes:
 - a **hat and gloves**
 - a warm **water-resistant coat**
 - **sturdy walking shoes, no sandals**
 - **layers of clothes** for added warmth, no shorts
 - clothes and shoes that can **get wet and dirty**
- Prior to your arrival, **divide field trip participants' into small groups of the same size/number of students.** The field trip leader will contact you prior to the field trip to determine the number of groups. Please ensure students know which group they are in.
- Make sure each participant wears a **nametag on their outer clothing.** Please print their first name in bold letters (do not use construction paper, as it melts in the rain).
- Pool all the students' **lunches & drinks into a big plastic tub** or laundry basket that can be carried down the trail.
- Bring a plastic bag for lunch garbage and a second for recyclables- **all garbage and recycling will be taken back to school** at the end of the field trip.
- Daypacks and electronic devices should be left on the bus or in cars and cell phone use is strongly discouraged.
- Make sure all chaperones have read the "**Dear Chaperone**" letter. Assign one chaperone for each group of students.
- Restroom access is limited, So go before you go!**

You are now ready for your field trip!

Thanks! We look forward to a great field experience with you!

Metro Education Staff

Metro | During Your Field Trip: *TEACHER LETTER*

We look forward to seeing you and your students next month. This letter describes what a typical field trip is like along with some practical information.

WELCOME TO OXBOW PARK: In previous years, busses and cars needed to pay an entrance fee at the park's front gate. **An entrance fee is no longer being charged for school field trips**, so please drive through the gate and **the naturalist will meet your group in front of the park office** immediately on the right. We'll climb on board the bus, welcome the students and lead you to the field trip site.

The location of the fall field trip within the park can change because we never know where the fish will be spawning. When we reach the shelter, naturalist staff will lead an introductory circle and introduce the students to our Volunteer Naturalists. The students will be given a snack by Metro (if anyone has a **nut allergy**, let us know before the program). Next we'll get into small groups and head off to explore. Each group of 7-10 students will have at least one naturalist and one parent chaperone or teacher who will stay with them throughout the day.

WHAT WE DO: Fall field trips at Oxbow Park focus on the life of the Sandy River, celebrating the return of the fall Chinook salmon to their spawning grounds, and the ecology of the river of which they are part. We will move through two main activities: 1: Salmon & Sensory Awareness Games (a salmon life-cycle talk with guided salmon viewing & sensory awareness games in the forest), 2: River Exploration & Tracking (catching water bugs, looking for animal tracks and other river bank discoveries). We will do one activity in the morning, then break for lunch and complete the second activity after lunch.

CLOSING CIRCLE: Coming together at the end of the day, we'll create a special salmon "sculpture" from natural objects collected by each group of students. After sharing highlights from the day and thanking our volunteers, we'll then board the bus and head home.

Please look closely at your Reservation Confirmation form and other enclosed materials, and call Sandy Jamison (813-7565) if you have any questions. I look forward to exploring Oxbow with you soon!

Thank you,

Dan Daly, Naturalist
Conservation Education
(503) 797-1899 (Office)
(503) 663-0238 (Park)
Dan.Daly@oregonmetro.gov

Dear Parent or Guardian:

Tomorrow your child will go on an all day outdoor field trip. The weather is often wet and cold and we will be outside the entire time. Please dress your child in warm clothing that can get dirty. They will need:

- a **hat and gloves**
- a warm **water-resistant coat**
- **sturdy walking shoes**, no sandals
- **layers of clothes** for added warmth, no shorts
- clothes and shoes that can **get wet and dirty** (we will be sitting, kneeling and even lying on the ground)

Thank you. We look forward to having a fun and educational day!

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Thank you. We look forward to having a fun and educational day!

Metro | *Chaperone letter*

Thank you for accompanying your school or youth group on their field trip to one of Metro's outstanding natural areas. Please **dress appropriately for the weather** and remember that there is **no eating or drinking** during the field trip (unless there is a scheduled lunch). Daypacks and electronic devices should be left on the bus and **cell phone use is strongly discouraged**.

It is our hope that participants will leave with the following:

- Respect and appreciation for the natural world
- Awareness of their impact on the park and its wildlife
- Some basic skills for seeing wild animals in nature

The students will learn the above by copying your behavior. Modeling appropriate behavior and attitude is the most powerful type of teaching.

As a chaperone, your responsibilities include the following:

- **Emphasize quiet and awareness as you walk along the trails.** We have fun, but we conduct field trips quietly. The park or wildlife area you will be visiting is a naturally quiet place, and the animals that live there are accustomed to quiet. Your group will be visitors in the homes of owls, herons, osprey, deer, otter, beaver and other animals. These animals have excellent senses and are very well camouflaged. Moving quietly and being observant will greatly increase our chances of seeing wildlife. We will also be walking past animal sign such as deer, elk and fox tracks; droppings or scat; and plants that have been chewed on by beaver. Many pairs of observant eyes help detect these signs.
- **Demonstrate appropriate behavior.** Stay on the trails, move quietly and be respectful of the natural world around you.
- **Keep the group together.** Chaperones should make sure that their entire group is together and able to see and hear the leader's presentation.
- **Keep students focused.** Make sure that students are participating in activities, and gently redirect them if they are having trouble focusing.
- **Give students the chance to answer questions** asked by the naturalist before you give your enthusiastic response. We always try to draw on the children's knowledge and experiences when solving "nature mysteries," without adults giving answers and prompting students.

Thanks for helping your students have a great field trip experience!

Metro Education Staff



Metro | *Carta al acompañante*

Gracias por acompañar su grupo escolar o juvenil en su excursión a las áreas naturales excepcionales de Metro. Esperamos que los participantes se lleven lo siguiente:

- Respeto y apreciación por la naturaleza
- Crear conciencia de su impacto en el parque y la vida silvestre
- Algunas destrezas básicas para observar animales salvajes en la naturaleza

Los estudiantes aprenderán lo mencionado anteriormente copiando su comportamiento. El tipo de enseñanza más poderosa es aquella basada en modelaje del comportamiento y actitud apropiada.

Como acompañante, sus responsabilidades incluyen lo siguiente:

- **Enfatizar silencio y crear conciencia a través que camina en los senderos.** Durante las excursiones gozamos mucho, pero también nos conducimos silenciosamente. El parque o área silvestre que visitarán es un lugar naturalmente silencioso, y los animales que viven ahí están acostumbrados al silencio. Su grupo será un visitante en los hogares de buhos, garzas, águilas osífraga, venados, nutrias, castores, y otros animales. Estos animales tienen sentidos excelentes y están muy bien camuflageados. El caminar en silencio y ser observador aumentará la probabilidad de poder ver alguno de ellos. A medida que caminamos vamos a ver señas de la presencia de animales tales como huellas y excrementos de venado, alce, y zorra; y plantas que han sido mascadas por castores. Muchos pares de ojos observadores ayudaran a detectar estas señas.
- **Demostrar comportamiento apropiado.** Mantengase en los senderos, muevase en silencio, y respete la naturaleza a su alrededor.
- **Mantenga el grupo junto.** Los acompañantes deben asegurarse de que el grupo entero está junto y que pueden oír y ver la presentación del líder del grupo.
- **Mantenga los estudiantes enfocados.** Asegurese de que los estudiantes están participando en las actividades y ayúdelos si tienen problemas.
- **Dele la oportunidad a los estudiantes de contestar preguntas** hechas por el naturalista antes de ofrecer su respuesta. Siempre tratamos de extraer el conocimiento del niño y sus experiencias en resolver los “misterios naturales,” sin que los adultos ofrescan las respuestas o ayuda para recordar.

Por favor **use ropa apropiada** para las condiciones del tiempo y recuerde que no se permite comer o beber durante la excursión. Además, mochilas y aparatos electrónicos deben ser dejados en el autobús.

Gracias por ayudar a que sus estudiantes tengan una gran excursión!

Metro Education Staff

Metro | *Directions to parks*

Oxbow Regional Park

From I-84 eastbound, take the Troutdale exit (17). Go past the truck stop to the 2nd light and turn right on 257th Avenue. Go 3 miles to Division Street and turn left. Continue east for 5 miles, following the signs. Turn left on Oxbow Parkway and drive 1.6 miles to the park entrance. **The naturalist will greet you at the park office just inside the gate; please wait there for him/her to board the bus.**



Smith and Bybee Wetlands Natural Area

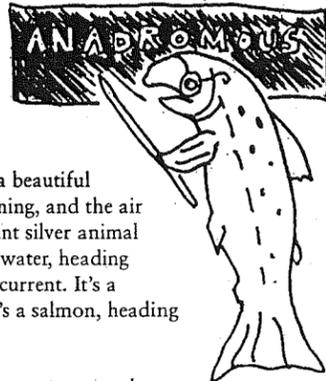
Take I-5 north to exit 307 (Delta Park/Marine Drive). Take the left fork of the off ramp, following the signs to Marine Drive West (don't go east to the airport!) At the light, turn right onto Marine Drive westbound and drive for 2.2 miles. Slow down as you come down from the railroad overpass and turn left at the large brown and white park sign. **The naturalist will greet you; please wait for him/her to board the bus.**



the life cycle of salmon

1. What is a salmon, anyway?

Imagine sitting by the edge of a beautiful river in the fall. Leaves are turning, and the air is cool. Suddenly, you see a giant silver animal streaking through the shallow water, heading upstream, fighting against the current. It's a 30-pound fish on a mission! It's a salmon, heading home.



The Pacific Northwest is home to seven members of the salmon family: chinook (called King salmon in Alaska), coho (or silver), chum, sockeye, pink (or humpback), steelhead and cutthroat trout. Salmon are special because they journey from the freshwater rivers and streams of their birth to the ocean and back! Fish that do this are called anadromous fish (ann-ADD-drum-us). Many salmon travel thousands of miles during their lives. Along the way, they go through many transformations, and they are important to many other animals.

Let's follow the life cycle of the fall chinook salmon . . .

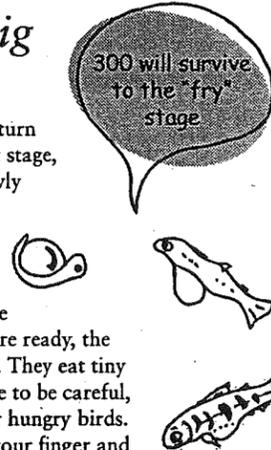
2. Born in a cradle of rocks

If we start with 3,000 eggs

That's right, the adult salmon parents lay their eggs in a nest made of rocks, called a "redd," at the bottom of the river. Eggs look like bright orange beads the size of small peas. One chinook salmon can lay between 3,000 and 10,000 eggs. When they finish laying and fertilizing their eggs (spawning), they die. Many of their eggs are swept away by winter floods, or eaten by birds and other fish. But some survive, and turn into . . .

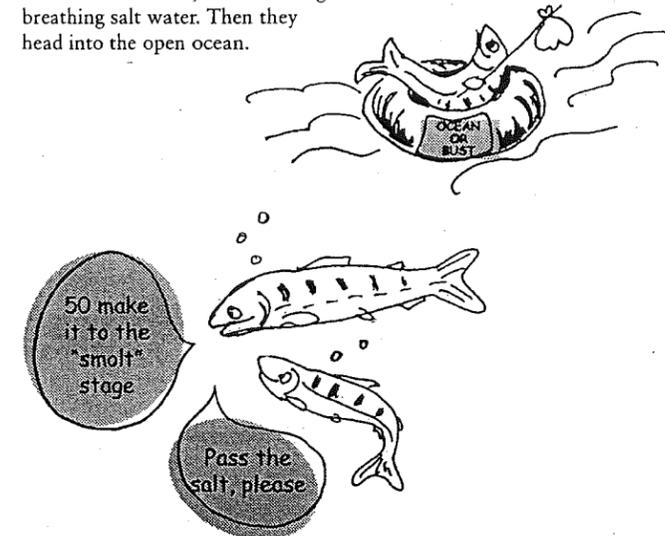
3. Small fry in a big wet world

The eggs take three to five months to turn into little fish, called "fry." In the first stage, called "sac-fry" or "alevin," they slowly absorb the egg's yolk sac as they grow. They don't have to leave the safety of the redd to find food. It's like they have little lunch-boxes stuck right to their stomachs. They are only about an inch long. When they are ready, the fry finally swim up through the rocks. They eat tiny water bugs in the river – but they have to be careful, or they will get eaten by bigger fish or hungry birds. Soon they get to be about as long as your finger and they are ready to begin the adventure of their lives.



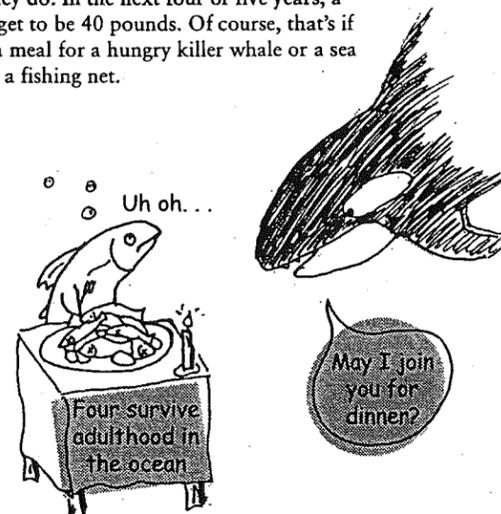
4. The big journey begins

If your family visits the ocean, you probably drive there in a car. When the young salmon are ready to go to the Pacific, they just hitch a ride on the water. They float for miles, down streams and rivers that flow into the mighty Columbia River. Hungry predators try to eat them, and they may have to figure out how to go around (or even over) big dams. If they make it, the salmon (called "smolt" at this stage) hang out for awhile in the Columbia River's estuary near Astoria. There, their bodies get used to breathing salt water. Then they head into the open ocean.



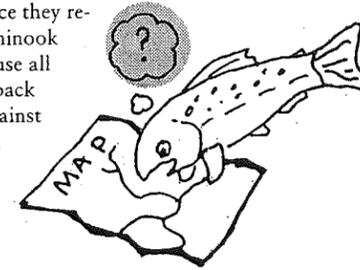
5. The all-you-can-eat salmon buffet

Not for us, for the salmon. Why do salmon risk the dangers of this long journey to the sea? Because the ocean is full of food, such as yummy squid and little fish – the perfect meal for a growing salmon. And grow they do. In the next four or five years, a chinook salmon can get to be 40 pounds. Of course, that's if they don't turn into a meal for a hungry killer whale or a sea lion, or get caught in a fishing net.



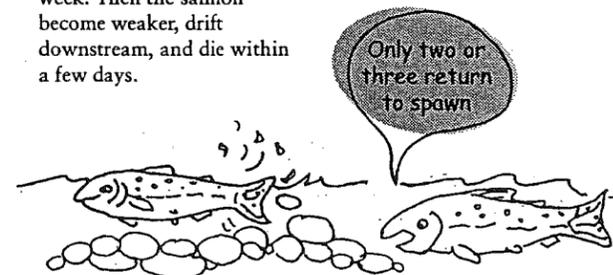
6. Homeward bound

When a chinook reaches a certain age (usually 4 or 5 years old), it gets a very strong urge to return to the place it was born. How do salmon know where to go? They use their amazing sense of smell, sniffing out the unique scent of their "home" river. They may also have an internal compass that helps them find their way. Scientists do not entirely understand this mystery. The trip home is hard. Once they re-enter the freshwater, fall chinook salmon stop eating. They use all their stored energy to get back home. They must swim against the current the whole way, and they may leap over waterfalls or navigate up "fish ladders" to get past tall dams.



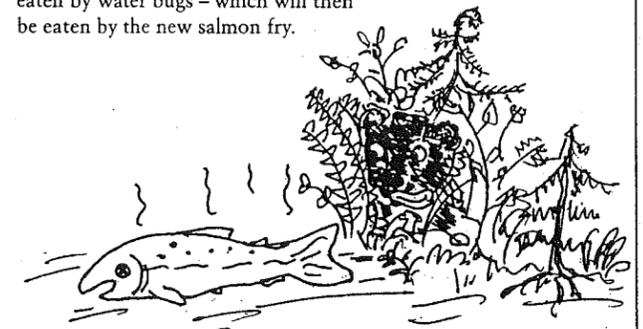
7. Spawning time

The female salmon chooses a good spot with cool running water and rocks that are golf ball to grapefruit-sized. A fish has no hands, so how does she move all those rocks to make a redd? She turns on her side and rapidly swishes her tail up and down, which pushes the water and moves the rocks. The male salmon compete to be her mate, chasing each other and fighting. The successful male stays next to his new mate. When she lays the eggs, he fertilizes them, and then she covers the eggs with more rocks. The whole process takes about a week. Then the salmon become weaker, drift downstream, and die within a few days.



8. Something smells fishy around here

What good is a dead salmon? Even in death, salmon have a very important job. They are great at recycling. They provide food for bears, bald eagles and other animals. Their bodies return to the water and the earth, giving back vital nutrients that will nurture the next generation of fish. The dead salmon help fertilize plants and trees, which shade the stream and prevent erosion (dirt going into the water). Then, fallen leaves from the trees are eaten by water bugs – which will then be eaten by the new salmon fry.



9. The silver thread that sews us together

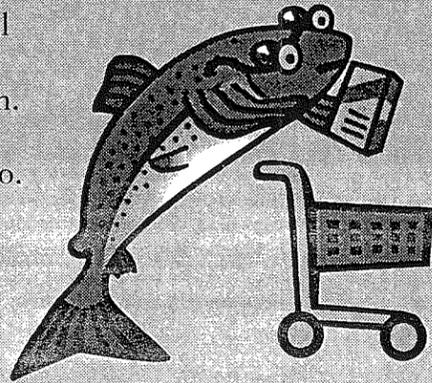
The Pacific Northwest is famous for its beautiful, silvery salmon. They aren't just "good eating," though. Wild salmon tell us a lot about the health of the ecosystem we share with them. What's important for salmon is important for people too: clean water, healthy streams and forests, abundant fish and wildlife, and healthy oceans. Salmon are like silver threads connecting the whole ecosystem. They remind us of the important things that tie us all together. So, do what you can to give them a hand. And join us at the Salmon Festival at Metro's Oxbow Regional Park in October to celebrate the chinook salmon coming home once more.



Metro Regional Services
Creating livable communities

Text and illustrations by Elisabeth Neely, naturalist with Metro's Regional Parks and Greenspaces Department

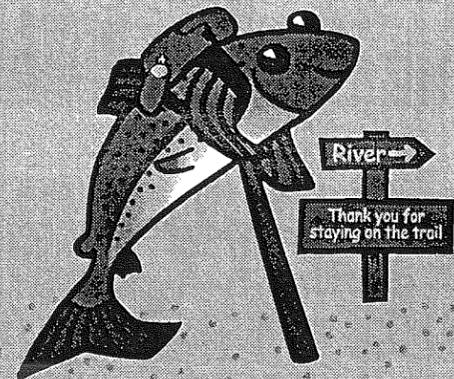
When you're at the store, read the labels. Products that are made from recycled material help save water and reduce water pollution. Avoid products with harmful chemicals, too.



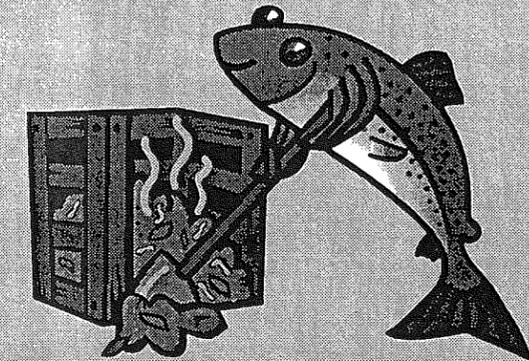
Healthy homes for salmon and people



Taking care of native plants is easy. They like growing in the Pacific Northwest and don't need as much water as non-natives.



When hiking outdoors, please stay on the trail. It helps keep soil from washing into rivers and streams.



Using compost is a way of fertilizing your garden naturally without chemicals that can get into our rivers and streams. It saves water, too!

We all live in a watershed.

It's the area of land that water flows through on its way to a lake, river or ocean. What we do in our watershed will decide how clean the water is for people to use and for fish to have a home. Salmon depend on healthy watersheds and people to keep them clean.

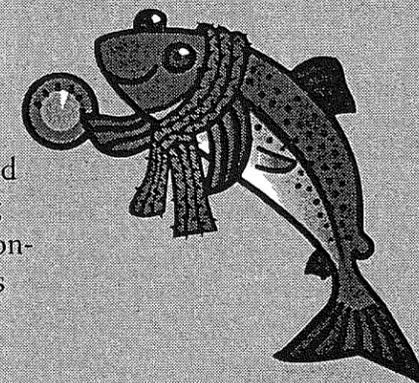
Taking shorter showers and using a water-efficient shower head will keep more water in our rivers and streams. A family of four each taking a 10-minute shower will save 7,000 gallons of water each year. It can add up to a lot. If 100,000 Portland families did this, it would save 700 million gallons!



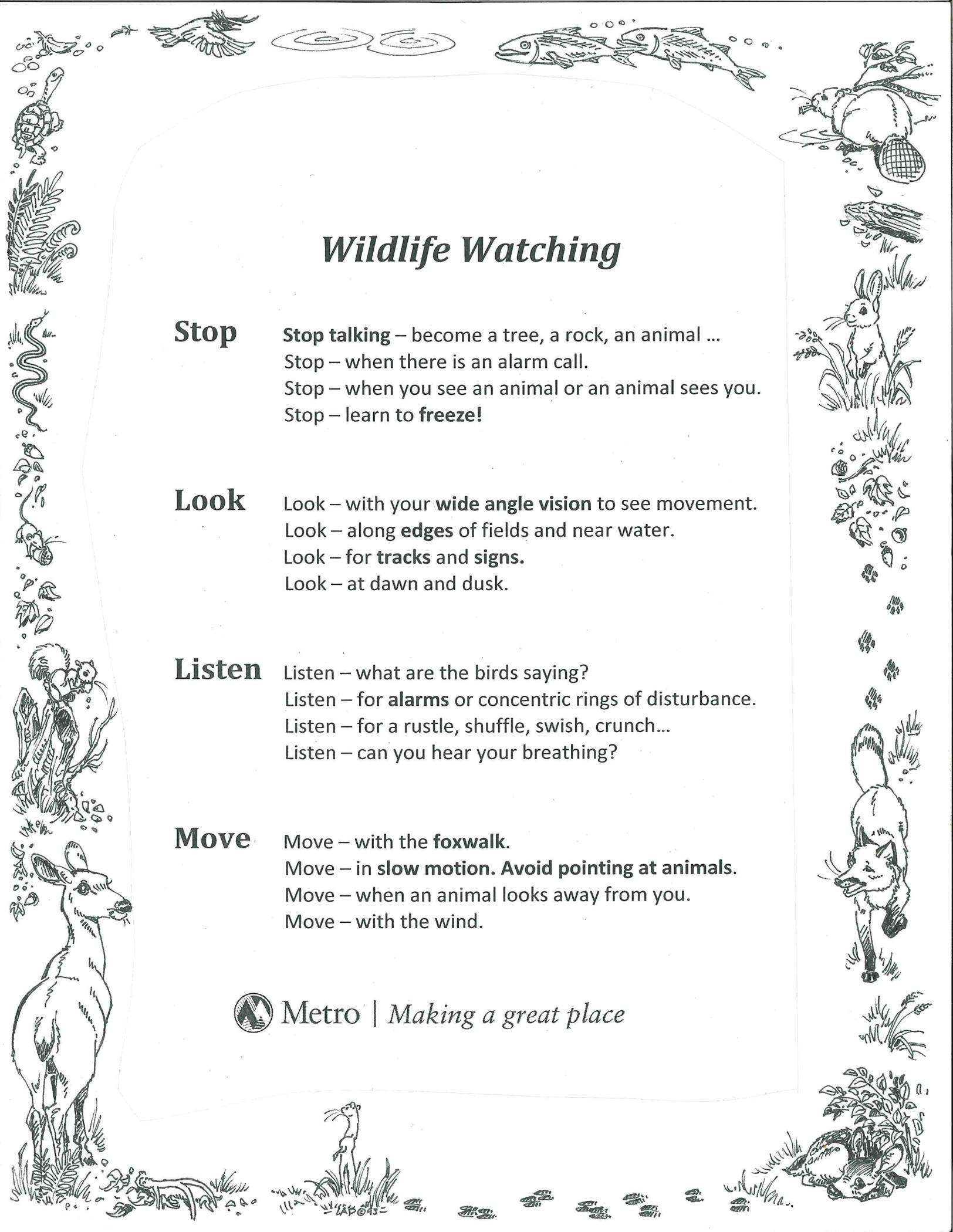
Information resources

- Metro Recycling Information**
 (503) 234-3000 www.metro-region.org
 Information about household hazardous waste disposal, recycling and natural gardening
- Portland Water Bureau**
 (503) 284-6827 www.water.ci.portland.or.us
 Schedule of free water conservation workshops in the Portland area and water-saving advice
- Portland General Electric**
 (800) 722-9287 www.portlandgeneral.com
 Information about using energy wisely

Watch that thermostat! More than half the energy used in the Portland region is for home and water heating. Saving energy does no environmental damage and is better than building power plants.



Metro Regional Services
 Creating livable communities



Wildlife Watching

Stop

Stop talking – become a tree, a rock, an animal ...

Stop – when there is an alarm call.

Stop – when you see an animal or an animal sees you.

Stop – learn to freeze!

Look

Look – with your **wide angle vision** to see movement.

Look – along **edges** of fields and near water.

Look – for **tracks** and **signs**.

Look – at dawn and dusk.

Listen

Listen – what are the birds saying?

Listen – for **alarms** or concentric rings of disturbance.

Listen – for a rustle, shuffle, swish, crunch...

Listen – can you hear your breathing?

Move

Move – with the **foxwalk**.

Move – in **slow motion**. **Avoid pointing at animals**.

Move – when an animal looks away from you.

Move – with the wind.



Metro | *Making a great place*

Wildlife Watching – The Freeze Game

Would you like to know how it feels to **be invisible**?

At the word **freeze!** stay perfectly still. You can breathe and you can blink – but that is all.

Stay “frozen” for a moment. Pretend that you have become a statue, a rock or a tree.

If a rabbit or a deer gets frightened, this is what they do. Then their colors blend in with the forest and allow them to disappear (camouflage).

You will probably only see them if they move.

If you are looking at a deer who has “frozen,” you should try to stay still as long as the deer can. You may have to stay still for a long time! Finally, the deer will forget that you are there. It will look away from you. Now is your chance to move closer to it! Any time the deer looks at you – **freeze!**

Use the freeze game when you are watching wildlife and when you hear an **alarm call**. An **alarm call** is a short, choppy call given by a bird or squirrel to let other animals know there is danger nearby. Even hummingbirds have alarm calls!

If you hear an alarm call – **freeze!** Is the alarm call nearby? Is it far away? Wait for it to stop before you move. Perhaps another animal or person is moving in the woods and the birds have spotted them. Soon you can learn to understand the birds.

Use a hand signal for “**freeze!**” on your walks. You don’t want to shout “**freeze!**” and scare everything away!

Try not to point at an animal to show it to other people. This is very hard to, but the animal may think you are trying to catch it or throw something at it when you point and it will leave. Keep your arms down, make yourself as small as you can, and say “I am just part of the surroundings” with your body.

If you have an hour or two, try finding a nice spot in a park, forest or your backyard. Then sit down, get comfortable and **freeze!** After a while the birds begin to sing and come closer to you. Soon you will be in a new world full of surprises – animals talking, eating, playing or hunting. That’s the way the forest is when there are no people around!

You have become invisible!



Wildlife Watching – Wide Angle Vision

Would you like to see twice as much wildlife – even in your own backyard?

Most people have learned to focus on one small area at a time. We look at a person's face, a book, or a television and blot out the surrounding areas. It is like looking through a little tube all the time.

Most animals see in a different way. They have to be aware of what is moving all around them – is it food or will it eat me? They need to see and hear in all directions – not just in front of them. Their lives depend on this.

We can learn from our animal friends how to see much more – use **wide angle vision**.

First, put your arms straight out to your sides at shoulder level. Then point your fingers up and wiggle them. While you are looking straight ahead, get so that you can see both hands:



Think of seeing out of the corners of your eyes. This is your peripheral vision.

Everything may seem a little blurry, but you will now be able to catch the slightest movement around you, even at your sides. If a bird hops, you'll see it! A blade of grass moves differently than the others! Is there a mouse there? Every bug in the vicinity will be seen too! If you spot something you want to look at, then you can focus as you normally do.

After a few tries, **wide angle vision** becomes automatic and easy for anyone to do.

The next step is to sit down in your backyard, a field or a forest and practice your **wide angle vision**.

Welcome to a new world!



Metro | *Making a great place*

Wildlife Watching – The Fox Walk

We can learn from our four-legged friends how to walk silently and unseen. The fox is especially good at sneaking softly through the forest.

First – **stop talking!**

Then – try the **fox walk**:

1. Try taking a short, slow step and place only the outside edge of your foot on the ground.
2. Gently roll your foot down flat.
3. Then slowly move your weight forward.
4. Repeat with the other foot...



With this walk you can **freeze** easily (if an animal looks towards you or you can hear an alarm call). If you feel a twig that might break, just pick up your foot and place it in a new spot. You don't need to look down – just feel the way.

It is best to use **slow motion**.

Try the **rabbit game**. Have your group form a circle with one person in the center pretending to be a rabbit. When the rabbit looks at you, **freeze!** When the rabbit is not looking at you, **fox walk** toward it. See who can reach the rabbit first. Try two rabbits. This is the same way to sneak up on a real animal.

Try the **fox walk** at home. See if you can sneak up on a cat or dog. Don't scare them. Just try to get near them, and then let them know that you are there and just practicing.

Then go outside and try the **fox walk** on beetles, bugs, birds, frogs, chipmunks, squirrels, deer or anything else. With care you can get close to lots of different animals. Remember, just get near and enjoy watching them, don't touch them or startle them.

Fox walking is part of **becoming invisible** and sneaking into the world of wildlife that most people never see.



Wildlife Watching – Focused Hearing

How much can you hear? As much as a deer, a fox or an owl?

Close your eyes, take a deep breath, relax and listen...

Take your time and focus.

What is the most distant sound you hear?

What is the nearest sound you can pick out?

How about all the sounds in between the near and far?

Can you hear your own breathing?

Can you hear your heart beating?

Listen closely to what the birds are saying.

Are they making long and musical sounds? If they are, they are **singing** and all is well with them.

Are they making a short, choppy and hard to locate sound? That is called an **alarm call**. Birds use **alarm calls** to warn other birds and animals of approaching danger. Some alarm calls are loud and easy to hear, like a jay's or a crow's. But even very small birds have alarm calls – it may be a tiny chirp that is hard to hear. Even the smallest alarm call is the birds' way of shouting, "There is danger coming! Hide! Run away!" to all other animals in the forest.

If you hear an **alarm call** near you, chances are that the bird is warning other animals in the forest that you are approaching! If you hear an **alarm call** not in your immediate area, it could mean that there is another animal moving. Or it could be that there is a disturbance being made even further away...

You see, if a loud, scary, dangerous animal moves through the forest (like a human, for example), the **alarm calls** will move outward from the source of the danger. It is like dropping a rock in a pond – the **concentric rings of disturbance** move out in larger and larger circles.

Can you detect any concentric rings of disturbance?

Birds will make different types of **alarm calls** for different dangers – people, deer, fox, snake, etc.

You can even learn to understand them!



Another type of **concentric ring** is a bird flying rapidly through the forest.

If the forest is very quiet, it means that some danger is near, or has passed through recently, or that you are creating a disturbance.

Try putting on **deer ears**. Just cup your ears with your elbows pointed forward. This will let you focus and amplify the slightest rustle, swish or sound in the forest.

