

Sustainability  
Agriculture &

# Animal Tracking

Activity Guide



Saskatchewan

## 4-H MOTTO

Learn to do by doing.

## 4-H PLEDGE

I pledge  
My HEAD to clearer thinking,  
My HEART to greater loyalty,  
My HANDS to larger service,  
My HEALTH to better living,  
For my club, my community and my country.

## 4-H GRACE

(Tune of Auld Lang Syne)

We thank thee, Lord, for blessings great  
On this, our own fair land.  
Teach us to serve thee joyfully,  
With head, heart, health and hand.

This project was developed through funds provided by the Canadian Agricultural Adaptation Program (CAAP). No portion of this manual may be reproduced without written permission from the Saskatchewan 4-H Council, phone 306-933-7727, email: [info@4-H.sk.ca](mailto:info@4-H.sk.ca). Developed July 2013.

The material was written by *M-over-C Land & Cattle Co. Ltd.*



Saskatchewan



Agriculture and  
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AGRICULTURE COUNCIL  
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# Introduction

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Welcome to the 4-H Wildlife Tracking Activity Guide. It is jam-packed with activities to help you learn more about wildlife and wildlife tracking. You will be “Doing” a lot!

All of the activities are laid out in the same way. First the approximate amount of time the activity will take is listed. What the activity is “About” gives you a better understanding about what you will be doing and why. The section on “Materials” will tell you if you need an outdoor location and what type it is and what supplies you will need. After the “Instructions” there are “Discussion/Questions” that will help you and your other club members think more about what you are learning about Wildlife Tracking.

In the corner are important symbols for you and your Leader.



There is information about this activity for your Leader ONLY in the Leader Section.



It is a MANDATORY activity you must do. The activities marked with this symbol are designed to address the fundamentals of Wildlife Tracking.



It is an OPTIONAL activity. Pick optional activities that appeal to you and your fellow club members, suit the time of year you are in 4-H and match the habitats you have available to you.



The activity is suitable to be used as an ACHIEVEMENT DAY ACTIVITY or project. These activities can produce something to display or present at Achievement Day.

The activities are placed in the Activity Guide in approximately the same order as they appear in the Wildlife Tracking Reference Manual. However, the first handful of activities are ones that can and should be done at any time during the 4-H project year. Some of these activities are also marked as “Achievement Day”. This way, you can start to think early on about what you would like to show at Achievement Day. There are other activities throughout the guide marked as “Achievement Day” also.

Happy Tracking!

## Activity 1

# Tracking Trek



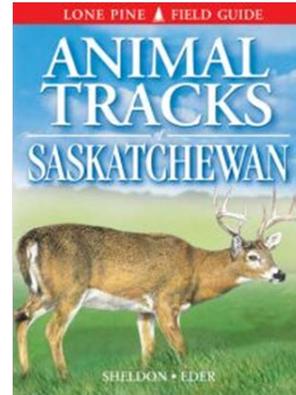
**Time Estimate:** ½ hour to full day or overnight trips. Your club should go on as many treks as possible as you go through the project.

### About

You will practice your skills of observation, finding wildlife signs, and tracking. By setting out on many treks throughout the 4-H year you will improve your skills and fill your wildlife observation notebook with many adventures.

### Materials

- Outdoor location (It is good to use a variety of locations over the year but also return to the same familiar locations over and over again)
- Track pack (packed appropriately for the outing)
- Animal Tracks of Saskatchewan guide
- Copy of any activities from the GuideMap of the area
- Appropriate number of helpers or leaders to supervise
- Track stick (for stage that you are in the project)
- Wildlife observation notebook



### Instructions

1. Either the leader or the members can plan the trip. The first few trips the leader may want to plan and have you plan trips after that.
2. Ask permission for using private lands.
3. Pull up a map of the area where you want to track and figure out where you should start looking for wildlife.
4. Ensure you have the appropriate clearance for tracking treks from your parents or guardians.
5. Plan a trek far enough in advance that you can pack accordingly and dress appropriately. The first couple of tracking treks your leader can help remind you what you need to have in your tracking pack and how to dress.
6. Plan the trip so there is enough time for finding a cool track and following it. Allow for unexpected delays and/or longer travel times.
7. Jot down your thoughts in your wildlife observation notebook as you go.

### Discussion/Questions

Question and explore! Let your questions lead you to explore more!

For example ask yourself: How does that insect eat? What does that sign feel like, look like, or smell like? What does that track look like? Where do you think the next one will be? Why do you think the animal left the sign here? What does it look like when you look at it from a different angle or different height?

Ask lots of questions and discover the answers yourself! If you have a question you can't answer and your Leader can't answer make sure to write it down while on your tracking trek. Find an expert to answer your question when you get home (experts may be a: Wildlife Biologist, Conservation Officer, Park Warden, Ecologist, or Agrologist).

*Before you head out on your first tracking trek you will need to pull together supplies for your track kit or backpack.*

*You can prepare a basic kit to have for whenever you go on a trek. It can be stored in a box until you are ready to go (make sure it is non-perishables only). Put a list in the box of the other things you need to add before you go.*

## Activity 2

# Plaster Casts of Tracks (dirt, sand)



Thank-you to Kim Cabrera of [www.bear-tracker.com](http://www.bear-tracker.com) for these step-by-step directions and images

**Time:** 1-4 hours

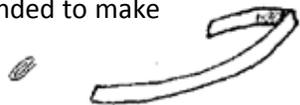
### About

Making plaster casts of different animal tracks allows you to reference back to what you've seen and allow you to study the tracks more in depth. All trackers have a large collection of plaster casts from their treks.

### Materials

- Place to find tracks (mud, damp sand, garden)
- Plaster of Paris
- Water container
- Water
- Mixing container
- Cardboard strip
- Paper clip
- Paper towel and container to bring cast home in

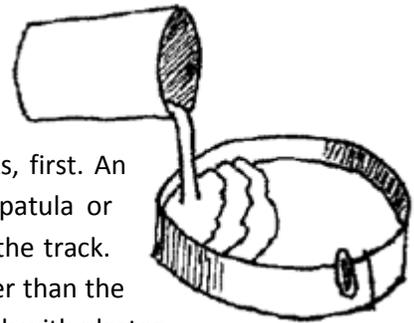
### Instructions

1. Find a track to cast. This may sound easy, but good clear prints can be difficult to find. Look in mud at water sources, damp sand, and other such easy surfaces to find tracks in. Once you have found your track, you may want to remove any leaves or sticks that have fallen into it. Do this carefully and do not attempt to remove sticks or leaves that are compressed into the track. Removing these will damage the track. You can remove them from the plaster later.
2. You may not need the cardboard strip, although it is recommended to make a thick cast, especially when using plaster of Paris, which can break and needs the extra thickness to make a sturdier cast. 
3. You can also add dry twigs, wire, or string to the plaster cast to reinforce it. If you use dental stone, you will not need to reinforce the cast as dental stone has a higher compressive strength than plaster of Paris. Less dental stone is needed to make a cast of the same size. Although dental stone seems more expensive, the fact that you use less per cast means it costs probably about the same as plaster.
4. Use your cardboard strip to build a wall around the track. Hold it in place with the paper clip. Be careful not to damage the track when you place this around it. Gently press the strip into 

the surrounding soil so the plaster will not run out from under it when poured.

5. Now mix the plaster. You should use about two parts plaster to one part water. For example, two cups of plaster mixed with one cup water. The consistency should be like that of pancake batter, or thick motor oil. It is recommended that you add the plaster to the water and begin mixing immediately. Plaster begins to set as soon as it comes in contact with water, so work quickly. If you use pre-measured quantities, add the plaster to the water all at one time, and begin stirring immediately, this will give you the best results. Stir it for 3 to 5 minutes and get rid of all the lumps.
6. Tap the mixing container on the ground to remove any bubbles that may have accumulated in the mixture. This will give you a higher quality cast. You will see the bubbles rise to the surface.

7. Carefully pour the plaster into your pre-prepared mold. Do not pour the plaster directly into the track as this can damage it. Pour the plaster onto the ground next to the track and allow it to run into the track. Start with the finer details, such as claw marks, first. An alternative method is to pour the plaster onto a spatula or spoon held low over the print and let it run off into the track. The utensil takes the force of the falling plaster, rather than the fragile track. Make sure you fill in all details of the track with plaster.



8. Pour it relatively thick to make a good strong cast. This is the time to add and reinforcing materials such as string, wire, or twigs. Once you have finished pouring, let the track set for at least 1/2 hour. Some types of plaster may take longer to set.
9. As the plaster dries, it will go from a glossy wet appearance to a dull matte appearance. It will give off heat as the chemical reaction takes place. After about 1/2 hour, you can gently touch the surface of the cast to see if it is dry or still soft. Do not press too hard as you could crack the cast. If it is dry, you can try tapping it gently with your knuckles. If it is firm and has a ceramic ring to it, then it is safe to pick up the cast. Pick it up by reaching underneath it and lifting it. Do not lift by prying under it with a stick. This could crack it. Try to lift it from opposite edges. If it is cast in mud, the mud may hold it firmly. You may need to carefully dig out some of the mud or soil from beneath the cast before lifting it.
10. Your cast is finished.

11. Allow it to dry for several days before cleaning it or painting it. Never wrap plaster casts in plastic bags as this prevents the moisture from escaping. When you clean a plaster cast, do not scrub too hard with a brush as this will erode away the plaster and take the details of the track with it. Plaster is soft and will eventually dissolve if left immersed in water. The best way to clean casts is



holding them under running water and gently rubbing excess dirt away. Do not rub over the details of the track itself, but rather the areas around it. Scrubbing on the details of the track may sand them off. There will be some dirt or sand remaining on the cast. This is normal. If you use dental stone, you can scrub the cast and not lose detail as it is a much stronger material.

**Option:** This is called a negative cast (it shows what the foot looks like). To make an imprint of the exact track how it was seen in the field:

1. Coat the negative cast with Vaseline.
2. Mix up plaster as described above and pour into a container big enough to hold your negative cast
3. Place the negative cast foot shape down into the fresh plaster.
4. Leave to cure
5. Gently remove the negative cast from the new plaster track.

### Discussion/Questions

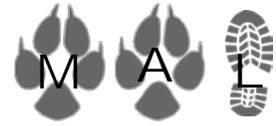
This is an extremely important activity within the Wildlife Tracking project. It allows you to ‘take home’ the track.

- What would you like to cast a track of this year?
- How could this skill be useful?

*To watch how to make a plaster cast you can Google  
or check out on YouTube:  
MyNature Apps; How to make Plaster Casts of an Animal Track.  
Other demonstrations might also be available.*

### Activity 3

## Taking a Print Cast in the Snow!



*Activity adapted from method developed by Louise Forrest in Field Guide to Tracking Animals in Snow*

**Time:** Set aside 2 hours for the activity. Once the skill is learned, it only takes about 20 minutes to actually make a track the next time in the field.

### About

You will learn how to take a plaster cast of a wildlife track in the snow! A plaster cast allows you to maintain a record of your sightings, get a better look at a track, or bring home a track you don't know!

### Materials

- Spray bottle that sprays a fine mist of water
- Ice cold water
- Plaster of Paris
- Cardboard ring (cardboard strip that is held together with a paper clip)
- Mixing container
- Stirring stick
- Paper towel and container to set cast in

### Instructions

1. Heavy wet snow is the best for making a snow track plaster cast. Casting in soft powdery snow is near impossible- do not attempt as it will prove frustrating for you!
2. The temperature must be below 0°C.
3. Either find tracks from wildlife in your local area where you like to track or else practice making these casts from your own prints or a pet's prints.
4. Put ice cold water in the spray misting bottle.
5. Spray the inside of the track with a mist of water and around the track. Let it freeze. Do a second misting of water to make the ice crust thicker. You are better to do fine mist layers letting them freeze between instead of trying to spray too much water at once. Too much water will crush the track/melt it.
6. Place a ridge of snow around your track to keep the plaster in the track or else place your cardboard ring around the track. Be careful not to put pressure on the track or push snow into it/push the edges in on it.
7. Mix up your Plaster of Paris and COLD water. You want it to be like thick pancake batter that will still flow into all the areas of the track. This is where your experimenting with this activity is needed. You will need to figure out what thickness of Plaster of Paris works best for you.

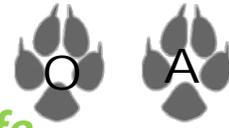
8. Remember though, that water needs to be cold going into the Plaster of Paris or else it could melt the track (you may need to add snow to it to cool it).
9. Gently pour the mixed up plaster into the track getting it into all parts of the track and overflowing it a little bit.
10. Wait for the track to set (20 + minutes).
11. Carefully lift the plaster cast out of the track and wrap it and place it in the box. Likely it will need to set a little more before you can work with it and handle it.
12. Once this 'negative cast' is set you can further preserve it by spray clear coating it if you do not wish to make a positive cast of it
13. See Activity 2 Plaster Casts of Tracks for instructions on how to make the reverse print (positive mould as you have the negative one from the field)
14. Be sure to label your track cast well. On the flat side write the date, where the track was found (place, habitat), and then any information about the track's owner (species?, family?, male/female?).

### **Discussion/Questions**

- Why is this useful?
- What type of prints do you hope to cast this year?
- What did you find hard about this technique?

## Activity 4

# Bring on the Tracks – Attracting Wildlife

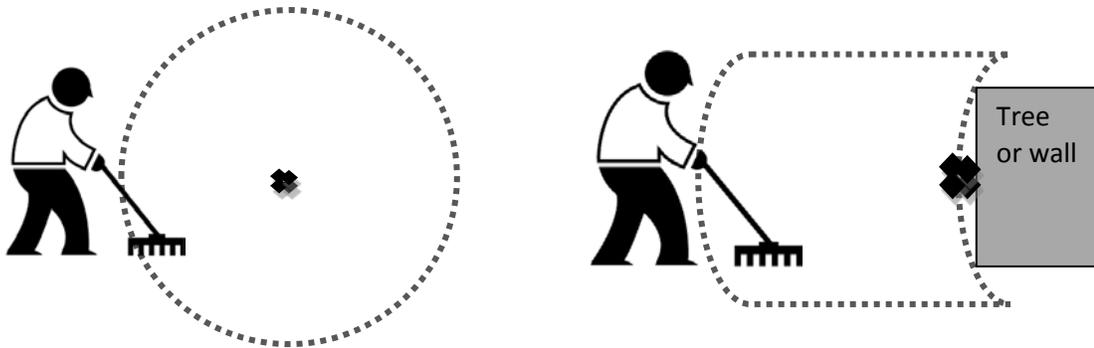


*Activity adapted from techniques in Tom Brown's Field Guide to Nature Observation and Tracking*

**Time:** 30 minutes of pre-dusk baiting (evening); 60+ minutes the morning after to look at the tracks; the sooner the better before the tracks begin to deteriorate. Time for the activity will vary depending on the number of tracks there!

### About

You will attract wildlife to a track box area (an area groomed for showing tracks) so you can study tracks up close and learn about the wildlife in the area.



Bait  should be placed accordingly for attracting wildlife into track box areas.

### Materials

- Food to attract wildlife. Suggestions are: peanut butter (could be put on a little bit of old bread or straight on a rock), honey, salt, grain (or rolled oats like for porridge or cooking if you don't have access to grain), meat scraps\*
- One of a couple area options:
  1. An area where you can rake the ground creating 3-5 cm of loose dirt (or sand) without twigs, leaves, grass, etc.
  2. An area of moistened ground (mud or wet sand) or clean snow without leaves, twigs, etc. that will show tracks well.
  3. An area of cement or on a board where you can pour a layer of flour or soot (this area can be smaller – say if you need to use your backyard or in a park).
  4. Baited box of soft soil in your backyard.
- Shovel and Rake (for area option 1 or 2)
- Flour or soot (if doing area option 3 enough to cover a couple mm thick)
- Wildlife observation notebook
- Camera, casting materials (optional)

## Instructions

1. You can work in pairs or small groups. If you have a small club maybe two spots would be good to do or do the activity for a couple nights in the same location.
2. For a raked track box area, find somewhere that you think wildlife travel frequently (see manual page 24 for ideas). Clear a big enough area that you can see the tracks and track pattern of the wildlife coming to the bait and away from it (3 meters in diameter is a good goal size). Dig into the soil and fluff it up well. Then rake it or smooth it out flat with your hands. Make sure to remove all of the twigs, straw, grass, rocks and leaves.
3. For an area of snow, mud or wet sand place your bait and then remove any twigs, straw, grass, rocks or leaves smoothing out any disturbed areas with your hands.
4. You can have a big box (size of plywood) with soil in it in your backyard to bait and use as a track box area if you want.
5. Flour or soot (ash) can be used to capture the tracks of small animals on asphalt, cement or plywood. Place bait in the middle of the track area or along a wall/solid barrier. Around it place a thin layer of flour or soot so that the wildlife will step in it as they go to smell or eat the bait. As they walk away they will leave flour/soot foot prints.
6. The next morning check your baited track box area. Search every inch of the prepared area for different signs of animals. Get down on your hands and knees- explore the area from different angles.
7. Record in your wildlife observation book what you have seen. Make note of where your baited track box area was, what bait you used, individual tracks, track patterns, other animal signs, and what animals visited your bait if you can tell. If you can only narrow it down to the dog family or squirrel family that is just fine!
8. In your wildlife observation notebook or record book you can do a chart with headings such as: Bait I used; What I expect to show up; These are the tracks or signs I saw.
9. Repeat the activity often throughout your 4-H project. This is an essential activity to practice with. It will demonstrate what animals you really have in your neighbourhood.

**Option:** You can make plaster casts of the tracks in your baited track box area.

**Option:** Make a poster display of this activity for your Achievement Day. Make sure to include a title, good descriptions and drawings, pictures, magazine clippings, or photographs. Good information to include is: how you did the activity, about your bait, about your track box area, what tracks, track patterns and animal signs you saw different times, what you learned about the wildlife, why you enjoyed the activity.

**Option:** Create a baited track box area where your Achievement Day will be held (outside of course). Bait and look at it for a couple nights before Achievement Day. Then, bait the track box

area the night before Achievement Day. At Achievement Day show your parents, family and other attendees what visited your clubs baited area!

### Discussion/Questions

- What animals do you want to attract? What do you think will attract them?
- What animals do you anticipate in the area?(You can list which animals you think might be in the area and then which ones actually show up in a chart).
- What other attractants do you think we could try baiting with?

Once you go back to the spot after the bait has been out other questions to ask are:

- What signs did the wildlife leave?
- Do you think you put your bait in the right spot?
- What do you think would happen if you baited for another night?
- What do you see? What does it tell you?

\* If you are using **meat scraps** be sure you are attracting the wildlife to an area where it is not a concern for a carnivore to revisit in the future or only bait their once or twice. Baiting with meat products will draw in carnivores and omnivores which is very cool, but you do not want to condition them to come into your backyard regularly or associate people with food.



## Activity 5

# Getting up Close and Personal – A Visit to the Zoo

**Time:** ½ day

### About

Visiting a zoo, wildlife park, petting zoo or vacation farm can get you very close to wildlife and farm animals. It provides the opportunity to watch animal behaviours and see those feet actually making the footprints!

### Materials

- Zoo, forestry farm, wildlife park, wildlife preserve, petting zoo, vacation farm
- Leader and parent chaperones

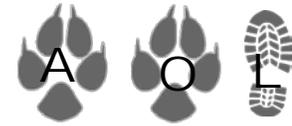
### Instructions

1. Plan the trip in advance so that all of your club members can be prepared, enough parent chaperones can come along and that the facility can be prepared (this will give you the best experience possible).
2. Tell the place you are visiting that you are coming with a Wildlife Tracking 4-H Club. They may be able to arrange some up-close time with some of the animals or for the members to see some cool foot prints (how cool would a track cast of a lion or monkey be?)
3. Prepare for the trip by writing in your wildlife observation notebook or your record book what things you would like to see, or what things you would like to find out on the trip.
4. After the trip send a thank-you note to the facility.

### Discussion/Questions

- ID which gait the different animals you are looking at are using.
- What other animal signs do you see? What do you notice that is unique about a specific animal?
- Is there anything that you thought about the animal that you now see is different (eg: deer look soft from the side of the road but up close they have very coarse hair coats)?

## Activity 6



# *Tracking'em Down (Year-long project)*

**Time:** This activity can be a wrap up Achievement Day type project, or can be done throughout the 4-H year as the project manual is worked through.

### About

Saskatchewan has many animals that were not covered under the key animal species. Some may be in your own backyard! You will pick a species that interests you and track'em down! You will learn about their habitats, signs, tracks, gaits, and track patterns. Hopefully you will be able to work towards viewing the species or documenting its whereabouts.

### Materials

- Books
- Internet access
- Display supplies
- Time!!!
- Outdoor habitat suitable to your species (optional)
- Camera
- Supplies to re-create your wildlife's sign (eg.- creating a log to look like it was chewed by a beaver)

### Instructions

1. Pick a species that you are interested in and if possible that you might come into contact with or be able to find signs of that wildlife (alternatively you can recreate that wildlife's signs). A fairly lengthy list of Saskatchewan Wildlife can be found on page 24 of your Reference Manual. Avoid choosing the 11 key Saskatchewan animal species found in Unit 6.
2. Learn as much about the species as possible. Ensure that the information you are learning is relevant to Saskatchewan.
3. As you work through the 4-H project and learn about habitats find out about your animal's habitats. Do the same when you work through the wildlife signs, tracks, and gaits sections. If the winter section is covered find out the particulars on the species in winter or vice versa in summer.
4. If you have the opportunity to track into an area where your species could be found record any signs you see (written and pictures), along with tracks or track patterns. A plaster cast of the wildlife species' track would be the icing on the cake!
5. Alternatively, if you have chosen a species that does not live in a habitat close to your house many resource people in Saskatchewan may be able to help out you out with signs, tracks, pictures etc....

6. Plan out how you are going to share your information at Achievement Day (poster, display, presentation, etc...).
7. Make your display, poster or presentation for Achievement Day. This may take longer than you think, so make sure to start working on it early!

### **Discussion/Questions**

- Talk to your fellow club members who are doing this project and share information about your different wildlife species. By talking about your species, you will remember more and learn more.

**Activity 41: Wildlife Signs is an activity that can be done throughout the year or at one point in the year. See the Activity for more details.**

## Activity 7

# Animal Tracks Apps



**Time:** 1 hour

### About

You will install a cool animal tracks app(s) on your smart phone or tablet and play around with it. Lots can be learned about Saskatchewan Wildlife!

### Materials

- Smart phone or tablet
- PERMISSION!!! Access to download apps is required

### Instructions

1. Work with your parents to ensure you are allowed to purchase any apps and use it. Always ask permission first.
2. There are many free tracking apps that have a handful of species to look at. Apps may also be purchased that have a full suite of wildlife in them.
3. Install a tracking app. Some include: ***mynature tracking app*** (<http://www.mynatureapps.com/mynature-animal-tracks/>) **and *FalconGuide*** (www.falcon.com). Another app available is the US NPCA National Park Field Guide with every US National Park and all the plants and animals to go with them – this is just fun to check out all the different wildlife and it is free!
4. Go through and check out the key 11 Saskatchewan Species.
5. You can learn about a species that we don't have also if you want!

### Discussion/Questions

- How does the app work?
- How would it be useful?
- What did you learn?
- What's the coolest thing on it?

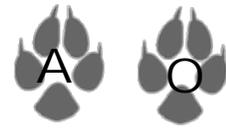
*You can search for other wildlife apps and games using key words: wildlife; tracking; animal tracking; or a species name.*

- *The **Noah Project** allows you to document species encounters. This would be a fun project for your club to get in on.*
- ***Animal Trakrs** has you follow a cartoon animal track with your finger to get points.*
- ***Spot It Out – Wildlife** has you use your observation skills to pick out the differences between two African wildlife pictures.*

*Taking a phone or smart phone with you?  
Put it in a Ziploc bag... you'll still be able to use the touch screen or keypad but won't get it wet or dirty!*

## Activity 8

# Pet Print Project



**Time:** 30 minutes

### About

You will make a permanent imprint of your pets' paw that you can display at Achievement Day, turn into a decoration, or examine to familiarize yourself with the parts of a track (feeling and seeing the print).



### Materials

- ½ cup of salt
- ½ cup of flour
- ¼ cup of warm water (approximately)
- Oven
- Willing pet 😊
- Pie plate or cookie sheet (non-stick or use with parchment paper)
- Paint and/or glaze
- Parchment paper or plastic wrap
- Rolling pin

### Instructions

1. Knead salt, flour and water (add gradually) until dough forms. Knead a long time (like 5 minutes) until the dough is smooth and stretchy. If it is too dry add more water, and if it is too sticky add more flour. Knead well. When you think you are done kneading it, knead it some more!
2. Flatten dough to 20 mm thick (approximately or could be thicker) on parchment paper or plastic wrap. Make the area big enough to accommodate your pets' paw. You can cut out a nice shape with a cookie cutter, or any sized can such as a soup, tuna, or ketchup can. Flip it over so you have a really nice smooth side to work on. You can put the dough onto the baking sheet before or after you take the pet foot print.
3. Now this is the hard part! Get your "willing" pet to step straight down onto your dough. The size of your pet will dictate how hard you need to help them press down. If it doesn't work the first time, smooch up the dough and roll it out again. Hint: If you have enough dough you may want to make a couple cut outs to try to get your pet to step on the first time while they are still willing.
4. Place dough on the baking sheet.

5. If you want to hang your print afterward (Present? Decoration? On your Achievement Day display?) poke a hole in the top for a string. Make sure the hole is far enough away from the edge that it does not compromise the strength of the edge.
6. Bake your paw print in the oven for about three hours at 175-200°F (80-94°C). The cooler the over the better as it will be less likely to bubble the dough and ruin your print. Make sure the dough gets well dried out. You may need to flip it at the end and dry it from the other side if it is thick dough.
7. Once your paw print is done you can paint it or quite possibly prepare a plaster cast from it.
8. If you are displaying this for Achievement Day consider painting the different parts of the paw in different shades of the same colour or different coordinating colours. Have a legend to the colour/part of the track on a paper beside your track.
9. Don't have a pet but still want to do the activity? You can use a prepared plaster cast, a model of a wildlife foot, or your own foot! You may be able to borrow a pet or possibly work with the local animal shelter to do prints. An animal shelter may even want to display the prints at Christmas or sell them as a fundraiser.

### Discussion/Questions

- How are you going to get a perfect print?
- What parts of a print do you think you are going to see?
- Which parts leave the biggest imprints? Why do you think those parts of the foot leave the biggest imprints?
- How would the print look different if your pet was walking? Running?
- What are you going to do with your imprint?

*You may be able to borrow a model of a foot from:*

- *The Saskatchewan Wildlife Federation*
- *A wildlife park, forestry farm or zoo*
- *A University Biology Department*
- *A museum*
- *A park with a nature program*
- *Saskatchewan's Ministry of Environment*

## Activity 9



# Tracking Through Your Imagination

**Time:** 10 minutes at the beginning of the 4-H project; 10 minutes at the end of the 4-H project.

### About

You will create an animal track based on a description your leader reads to you twice this year! You will do it once at the beginning of your project before you start learning, and then at the end of your project once you have learned about tracks.

### Materials

- Plain white paper (to put in Record Book) or your wildlife observation notebook
- Pencils and/or pencil crayons

### Instructions

1. This fun activity is to encourage members and show you how much you have learned about tracks at the end of the year.
2. Everyone should have a piece of paper in front of them.
3. Your Leader will read a description of a fictional animal and what it is up to out-loud to everyone once. Then your Leader will read it a couple more times while you are working on drawing the fictional animal's tracks.
4. From the description you will be drawing the track of the animal which is a front and back footprint and the track pattern which is a whole bunch of tracks in a row that you would find when the animal would be walking in light mud or snow.
5. This is a FICTIONAL animal – have fun with colours and ideas!

#### ***Description of the Fictional Animal***

*I love to bound over the ground but will climb up high in the trees to get away from you. I will then happily come down a different tree! My cousins are cottontail rabbits and jackrabbits. I'm smaller than my Jackrabbit cousin but bigger than my cousin cottontail. I'm a little different though because I have a long tail that sometimes I can't keep off the ground. We get together at Christmas and tell great stories about living in the tree bluffs and trying to get away from the foxes.*



6. DO NOT look at your start of the year track again until you have done the end of the year track. Your Leader may choose to collect everyone's tracks and hold on to them until the end of the year.

7. At the end of the 4-H year your Leader will re-read the description to your club members. Then draw the track and track pattern again while your Leader reads it one more time.

### **Discussion/Questions**

- As a group everyone should describe why they made the track the way they did.



## Activity 10

# Sign Scavenger Hunt

**Time:** The amount of time for this activity can be based on what your club has time for. You are encouraged to explore the area and go where your curiosity takes you!

### About

You will spend some time in an outdoor space where wildlife signs and nature can be observed. You will collect, take pictures of or make jot notes on the wildlife and natural signs for your scavenger hunt list. You may have to use different senses to get all the things on your list.

### Materials

- Outdoor area with a combination of vegetation types. Such as:
  - A park (with natural tree areas, riparian areas, long grass and short grass);
  - Off a hiking trail;
  - Native prairie or cropland (with tree bluffs, road ditches, riparian areas, and grass)
- Flagging tape (optional) from members tracking kits to mark any interesting things they find and want to come back to.
- Small zip lock bags to collect items in
- Camera (optional) to take picture of the scavenger hunt items found
- Box or cloth bag (optional) to put collected scavenger hunt items in
- Scavenger hunt list

### Instructions

1. The leader will decide on the location for the members to use and modify/prepare the scavenger hunt list accordingly. Options for the scavenger hunt list might be: the attached list, a modification of the list depending on the vegetation and habitats available, a list the leader makes up, or a list that the members come up with.
2. Your Leader will set the playing field boundaries with you.
3. You will work in teams of 2 or 3. Every team will be given one list.
4. You are to collect, flag, photograph or draw/write about the items. How you document the sign scavenger hunt items will depend on your location and what you have decided to have on the list!

### Discussion/Questions

- Once the group is all back together sit around and talk about your items. Compare what everyone found for each question.
- Some questions you might answer about your items or think about while you are out searching for them include:
  - Where did you find your items?

- How do you think it got there? What animals do you think this is important to?
- What is the sign telling you? What other signs do you expect to see?
- How does the item feel? What is unique about it?

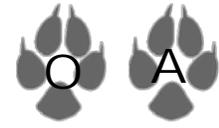
Hopefully this activity will stimulate your exploration of the area you are in and get you looking all around for wildlife signs.

### **Wildlife Sign Scavenger Hunt List**

(List of things that could be included in a sign scavenger hunt based on where your club is exploring, what you have learned in your Wildlife Tracking Project thus far and the amount of time you have.)

- Scat
- Remnants of lunch
- Easy track medium
- Tough track medium
- Grass with a sign
- Something you think is interesting
- Something smooth
- Something rough
- Something fuzzy
- Seeds
- Chewed leaf (or twig/branch)
- Something unknown
- One or all 'signs' from a 30 cm by 30 cm square your leader designates to your group
- Signs of claws
- Something from an edge/transition area
- Footprint
- Track pattern
- Something indicating a predator/prey relationship
- Interesting rock
- A colour that intrigues you
- An indication of the past
- An indication of the future
- Proof we are not alone
- Indication of how humans have impacted wildlife (positively or negatively)
- Trail, travel corridor or escape route
- Proof of a change of the seasons
- Something interesting from the darkness
- Something interesting from the light

## Activity 11



# Recording Tracks – Photography

*Pointers adapted from: Louise Forrest, Field Guide to Tracking Animals in Snow*

**Time:** Flexible depending on your interests. This activity can be used on an on-going basis.

### About

You will learn tips on how to photograph tracks and other animal signs. You will practice your skill. Photographing what you see allows you to reference back in the future, and establish a portfolio of neat things you have seen.

### Materials

- Either an area where there are wildlife tracks or signs or, a location where you can make your own tracks
- Digital camera
- Common object to place in photo to indicate the relative size of the track
- Tag pieces (or wildlife observation notebook for recording track info)

### Instructions

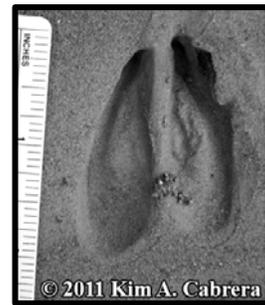
1. Go to an area where there are wildlife tracks or signs. Alternatively choose a location where you can make your own tracks. Get creative and make some funny tracks to photograph!
2. Include something to give 'scale' in the photo such as a Loonie, watch, phone, pen, etc.
3. Include a description of what you are photographing if known and where /when the photo is being taken either in your wildlife observation notebook or on a tag you place in the photo.
4. Try to position yourself so that the sun will cast shadows in the print. It adds depth and definition of the footprint.
5. Take pictures on different angles so you can learn what gives you the best photograph.
6. Take at least one picture of the footprint facing straight down so that if you need to measure from it afterwards or have someone's help identifying the track it is easy.
7. Take nice close photos.
8. Make sure your camera is in focus. Give the digital camera enough time to focus.
9. Take many, many pictures. Compare what looks best.

**Option:** Once pictures are taken you can upload them to a computer and show them all on a PowerPoint. Everyone will be able to see their pictures on a bigger screen learn how they can improve their pictures.

## Discussion

Practice, Practice, Practice! Talk about what is good about your different pictures and what needs work. How do you think that you can improve? What would you like to get a chance to snap a picture of this year?

*Many of the wonderful photographs in your manual and activity guide were taken by Ms. Kim Cabrera. She graciously has shared them! Check out Kim's website for more awesome pictures: [www.bear-tracker.com](http://www.bear-tracker.com)*



## Activity 12

# Mantracker Movie Night



**Time:** 60 minutes

### About

Tracking can be exhilarating. Members will see different tracking techniques used in a real life 'chase', and can see how tracking can become a profession. This activity allows for members to relax and enjoy an evening together possibly as a special club event or wind-up.

### Materials

- A meeting scheduled when Mantracker is on or a recorded episode.
- Snacks and a really comfy location! (May we suggest trail mix...)

### Instructions

1. Schedule a meeting when the show is on or obtain a recorded episode. Mantracker is produced by Bonterra Productions (for OLN and seen on other Canadian Channels) The Mantracker Show can be contacted via: [www.mantracker.ca](http://www.mantracker.ca).
2. Three episodes have been filmed in Saskatchewan as of 2013. One in the Big Muddy Valley on the Burgess Ranch (Michael Burgess/Lane Burgess) and two in the Big River area with Gord Vaadland ([www.sturgeonriverranch.ca](http://www.sturgeonriverranch.ca)). Either of these ranches could also be contacted for an episode.
3. Settle in, get comfy and enjoy the show!

### Discussion/Questions

- During the commercials talk about the 'chase'.
- What was the most exciting part thus far?
- How do you think the 'prey' could deceive or trick Mantracker better?
- What tracking techniques were used?
- What signs are the 'prey' leaving?
- Where does Mantracker start to look for the 'prey'? Is there a method to how Mantracker looks for the 'prey'? Does Mantracker's method of searching help him narrow in on the 'prey'? Do you think Mantracker would be doing as good as he is doing if he didn't have the Local Sidekick with him (why/why not)?
- What sorts of things do you think are going on behind the camera... how is Mantracker picking up the signs?

## Activity 13

# Guess Who?



**Time:** 30 minutes +

### About

Tracking is just like a detective game. The more clues you can analyse the more educated your guess can be! Playing *Guess Who* is a fun way of practicing asking the right questions. If your club wants to set up a *Guess Who* tournament it could be a fun evening!

### Materials

- *Guess Who* board games (enough games so most members can play most of the time)

### Instructions

1. Borrow *Guess Who* games from members or within the community – this is a very common board game.
2. It is fun to play ‘detective’. When you were little didn’t you dream of solving a big mystery like the cartoon characters did on TV? Well, wildlife tracking is a form of detective work. It is about asking the right questions and developing your skills in interpreting the information that animals have left behind. The more clues you find, the more questions you can ask. The answers to the questions might just lead you to more signs/clues! It can be fun to strategize and ask the right questions.
3. Either decide to play for a set time (if this is just one part of your meeting) or set up a round robin tournament.
4. The general rules of *Guess Who* are: ask yes or no questions only; take turns asking questions; and players both get equal number of turns.
5. Use the game worksheet with the matches/games on it. In every match when you ask a question put a tick down in the “My Turns” box for the match you are in. Start a new row for each match.



**Option:** Hasbro, the makers of *Guess Who*, have free printable character sheets available at: [http://www.hasbro.com/games/discover/guesswho/Guess-Who-Characters-en\\_US.cfm](http://www.hasbro.com/games/discover/guesswho/Guess-Who-Characters-en_US.cfm)

### Discussion/Questions

- You were a detective in ‘Guess Who’. How are you a detective wildlife tracking? You asked questions playing *Guess Who*, what questions should you ask when you are out in nature observing.
- Did you notice anything about your questions after you played a couple of matches?

- Look at you game worksheet. Do you notice anything? Do your fellow club members notice anything?

*Guess Who?!?!*

Match #/Against	My Turns

## Activity 14

# Wildlife Observation Notebook



**Time:** 20 minutes

### About

A wildlife journal is an important tool for remembering and documenting encounters for any wildlife enthusiast. You will put together your own wildlife observation notebook to take with you on tracking and observation adventures while you do your Wildlife Tracking 4-H project.

### Materials

- A small, sturdy notebook
- Materials to make a hard cover or water resistant cover
- Pens, markers

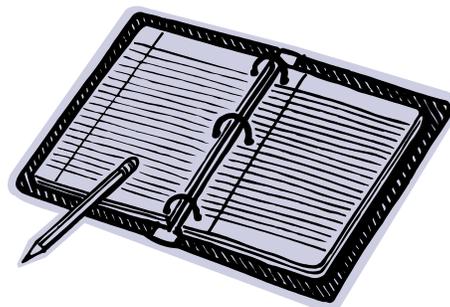
### Instructions

1. On your wildlife observation notebook create a harder cover for it. Putting bright colours on it will help you find it if you end up setting it down when out on an adventure.
2. Make sure to put your name on it. The year is also helpful.
3. On the first page of your notebook or inside cover put your name, a phone number for emergencies and a phone number for if your notebook is found by someone.
4. Leave a couple pages at the front before you start writing observations (you may decide to glue tracking cheat-notes in here later).
5. When you make an observation write the date, time, weather condition, and location before you start writing.

### Discussion/Questions

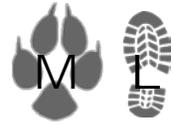
When you are working on your wildlife observation notebooks it is a good time to talk about the upcoming year.

- What do you want to learn?
- What do you want to get out of the project?
- Why do you like wildlife? What do you hope to see for wildlife?
- What are you most looking forward to?
- Have you ever seen any neat tracks before or had an animal encounter?



## Activity 15

# Getting Packed



**Time:** 15 minutes

### About

You will learn about packing your tracking kit or backpack for a tracking trip. You will choose the six things you think you should take and say why you would pack them.

### Materials

- Getting Packed Worksheet
- Pen or Pencil

### Instructions

1. Fill out the activity worksheet. Your Leader might give you a special trip to pack for your let you choose what type of a trip you are taking.

### Discussion/Questions

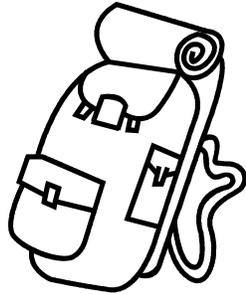
You can prepare a basic kit to have for whenever you go on a trek. It can be stored in a box until you are ready to go (make sure it is non-perishables only). Put a list in the box of the other things you need to add before you go.

- Discuss why you and the other club members chose different things from the worksheet based on where/when they were going tracking. What else would you like to add to their track pack?

## Getting Packed Worksheet

You are going on an adventure to track wildlife. Before you head out to look for signs you need to pack. Your adventure is \_\_\_\_\_  
\_\_\_\_\_ (location/time of year/for how long). Already in your tracking kit you have plaster casting materials, a map of the area and your wildlife observation notebook. Which six other things would you pack with you? Circle them and then write in the space below why you chose them.

- Snow shoes
- Flashlight
- Personal medication/medical supplies
- Water
- Warm food
- Bear bang-er
- Sunscreen
- Hat
- Compass
- Camera
- GPS
- Sunglasses
- Mittens/toque
- Rope



- Cell phone
- Brush
- Tweezers
- Cool drink
- Mosquito spray
- Scat book
- Chocolate bar
- Running shoes
- Towel
- Ziplock bags
- Timer
- Flagging tape
- Shorts

I would take these things because:

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## Activity 16

# Tuning in your Senses



**Time:** 10 minutes for each of the four senses highlighted

### About

You will work on tuning in your other senses besides seeing to help you become a better observer. You will learn how to apply your senses of touch, smell and hearing. One part of the activity will also help you improve your ability to see what is actually around you.

### Materials

- Outside location (does not have to be a wild land – could be a park, backyard or school yard)
- Appropriate clothing (summer or winter)
- Cell phone or other device to play a sound repeatedly and on-going

### Instructions

#### Sound

1. Try cupping your ear to see how directing the sound into your ear helps. Close your eyes – does it help you focus more on the sounds around you?
2. In this activity you will practice the art of tuning into what you are hearing. The leader will show the members the playing field. A park with some tree bluffs or landscaping, a mixed grassland area or a forest setting will all work.
3. Your goal is to seek out the sound making device (your Leader will play the sound for you first before they hide the device)
4. Your Leader (or parent helper) will then place the sound making device on the playing field while you and the other members turn your backs, close your eyes and cover your ears.
5. When your Leader says, open your eyes and uncover your ears as you turn around.
6. You and the other members then set out to find where the sound is coming from. Walk quietly, stop often, and tune out your other senses.
7. You can play as many rounds as you like.



**Option:** Search for a bird or cricket that is making sounds announcing you are in its habitat.

#### Touch

1. Go out and use your sense of touch on the playing field.
2. Narrow in on some selected elements in your surroundings. Touch objects that go from smooth to rough and from flat to raised within the same object. (e.g. a leaf is flat and then has a raised vein and then goes flat again).



3. Remember that tuning out your other senses (like by closing your eyes) can heighten the sense you are focusing on.

### Smell

1. To tune into your sense of smell form a circle with your other club members and close your eyes.
2. Your Leader will be walking on the inside of the circle doing the 'Leader' part of the activity.
3. After the activity set out to 'smell' your surroundings. A helpful hint is to spritz or dab some water under your nose to heighten the sense of smell.



### Sight

1. Using sight when observing comes naturally to you, but the goal of this activity is for you to start using your peripheral vision and to reference ahead.
2. Line up shoulder to shoulder with the other members about two-arms lengths apart.
3. What do you see a head of yourself? Likely you won't be using peripheral vision. There are lots of things happening to the sides of you and to the edge of where you usually look (including farther ahead of you). Practice looking 'farther'.



### All senses – bring it together

1. Lay on your back on the playing field area where ever you are comfortable at least four arms-lengths away from another member.
2. Use all of your senses to observe what is around you from the big picture stuff to the small stuff happening at the millimetre level.
3. You should be fully absorbed in your surroundings for 3-5 minutes.
4. Once you are done the experience highlight how you can improve your senses in your wildlife observation notebook or 4-H record book.

### Discussion/Questions

- How do you feel with using your senses this way? How could using these senses help when you are tracking or observing wildlife?
- Whenever you, a couple members or the club is out on a trek remember to tune in your senses.

## Activity 17

# We are Where?!?



**Time:** 5-20 minutes

### About

Using an aerial or satellite imagery map can help you in so many ways when on an adventure. It can help you find your way or you can use it to pick out good habitats where you think you could see signs of wildlife.

### Materials

- We are Where?!? Worksheet with aerial maps on them
- Pencil crayons of different colours

### Instructions

1. Finding your way can be difficult if you have never been to an area. A satellite map (also called an aerial map depending on how the photo was taken) can be a great way to reference where you are on the ground in relation to the features you see on the map. You then can tell which way to go or which way might be the easiest to travel.



2. Different things can be seen from a satellite map:
  - Colour the different features different colours on the satellite maps on the worksheet.
3. On the We are Where?!? Worksheet, draw the easiest route for the little person on the map to get back to the car on the picture. Remember, you don't want to go through water or tree bluffs. A forest can be hard to walk through unless there is a trail!

**Option:** Pull up a satellite map of an area you and the other members know. Look at it and pick out the features. It can hit home what you are seeing from above if you are familiar with it from the ground.

### Discussion/Questions

- Do you think it is better to have a more zoomed in satellite map 100m x 100m or one that covers 1 km x 1km? Why?
- When else could you use a map like this?
- Why did you decide to take your little person to the car the way you did?
- How could you tell what were trees? Water? A field? A house?

## *We are Where?!? Worksheet* (page 1)

On the maps below identify these features where you can. Colour them in different colours:

- Yards
- Buildings
- Trees
- Roads
- Farmers' Fields
- Parks
- Water Bodies (rivers, creeks, sloughs)
- Grass

Help the little man get back to his car by finding him the easiest route!



*We are Where ?!?* Worksheet (page 2)



## Activity 18

# Using a Compass



Activity by Department of 4-H Youth Development, University of Wisconsin-Extension

**Time:** 60 minutes

### About

This is an in-depth activity on using a compass to find direction and a specific location. The activity is available from the Wisconsin 4-H Program and attached to the Leader's Section.

### Materials

- See Leader's Section

### Instructions

1. Follow the Orienteering activity from the Leader's Section led by your leader.

## Activity 19

# Wildlife Safety Crossword



**Time:** 10 minutes

### About

Safety around wildlife is very important for both you and the wildlife you encounter. This fun crossword will drive home what you have learned.

### Materials

- Pencil
- 4-H manual
- Wildlife Safety Crossword worksheet

### Instructions

1. Use what you have learned to do the crossword below. All the answers come from Chapter 1.5 – *What to do When Approached by Wildlife*.

### Discussion/Questions

- Have you ever come face-to-face with an animal? What did you do?
- What would be the most exciting thing for you if you saw an animal up close?
- What could you learn about the animal?

## Wildlife Safety Crossword Worksheet

**Down**

- 1) Even small animals or birds can decide to bite or \_\_\_\_\_.
- 2) Call if you find a sick animal.
- 3) Indicates an ungulate is likely to charge you.
- 5) Female is \_\_\_\_\_ over young.
- 7) Skunks do this.
- 10) Porcupines swing this.

**Across**

- 1) Animal that is easily approached.
- 4) When animal will not associate the food found in the track box area with humans.
- 6) Disease of wildlife.
- 9) Meat eater.
- 8) Mating season.

	1		2			5		
								3
		4						
9								
6					7			
					8		10	

## Activity 20

# Habitat Diorama



Thank you to Nebraska State 4-H (Lincoln, Nebraska) for use of this activity from 4-H Wildlife Conservation I: The Worth of Wild Roots

**Time:** 1-2 hours +

If this is used as an Achievement Day Activity starting the diorama and spending a couple hours on it over a number of days will likely prove the best results for members.

### About

You will practice the basics of what you have learned about habitats. Create a diorama of a habitat of your choice and including the elements needed in the habitat.

### Materials

- Cardboard box or flat plywood
- Scissors or knife
- Coloured markers
- Crayons, paint
- Glue, adhesive, clear tape
- Items to put in diorama
- Glass bowl
- Paper towels
- Plaster of Paris
- Bristol board



### Instructions

Read all instructions over well before starting.

1. Find either a box (between 30-60 cm by 30-60 cm) or a piece of plywood or very thick card board slightly bigger. Using a box will allow you to have a background and sides to decorate on your diorama and using a piece of plywood will not have a background.
2. Decide if you are designing a diorama that shows one habitat for a number of animals (such as a slough), or if you are showing a landscape with different habitats (such as a wheat field, road, fence, pasture, river, tree bluff) all in your diorama.
3. Sketch out how you want your habitat diorama to look (decide where things will be placed). Decide what elements you need in your diorama (reference back to Chapter 2.1 on habitat requirements). Consider water, soil/land, plants, animals, and man-made structures. Make a list of what natural materials you want to bring into your diorama, what you want to draw, what you want to make out of craft supplies, and what things

you might look to buy (a 'dollar' store is a good place to look for things). Read the rest of the instructions and think about how you are going to attach things into your diorama.

4. For a box: Cut out one side of the box. This will be the front of your diorama.
5. For a box: Cut a strip of white cardboard or Bristol board the height of the box. Cut the strip long enough to curve form the end of one side of the box to the other side. It will be what you put your background scene on.
6. For a box: Draw the background on the cardboard or place pictures, clippings or other background items on the cardboard. Backgrounds often have sky, trees, hills, clouds, sun. Once done fasten this cardboard strip across the back of the box, curving it at each end so it makes a semi-circle. Attach with transparent tape, cement or glue/adhesive.
7. For a piece of plywood: It will be a flat diorama with additions of features. Be sure to make the plywood big enough to put enough habitat details on it, but not so big you have trouble filling it up or it is overly time consuming.
8. You may want to make hills, valleys, rivers, dams, sloughs or lakes. You may need modeling material. Shred some paper towel in to a very fine fluffy consistency. Combine one part of this fluff with one cup of plaster of Paris in a glass bowl. Mix thoroughly. Add 3 tablespoons of white glue and enough water to make a stiff paste. This will remain workable for about 15 minutes and will harden into an unbreakable consistency, so work quickly (and work where a mess is easily cleaned up!). It will take about 24 hours to dry 100%.
9. You can either glue the objects you are using on afterwards or you can set them in place in the mixture. Dirt, sand or coloured sand can be glued on afterwards by spreading a thin coat of glue over the area with a paint brush and sprinkling with dirt/sand.
10. The paper towel/plaster of Paris modeled areas can be coloured and painted. Be creative! Make your diorama attractive and accurate!
11. If this is an Achievement Day activity you may decide to place labels in your diorama or have a description and/or labels on the outside of your diorama.

**Option:** As a club, spend time outside and collect things to include in your dioramas. If the habitat diorama is not being used for Achievement Day you may decide to skip making the modeled surfaces but still have fun creating a diorama.

**Option:** This activity is intended to be based on Saskatchewan habitat(s). However, if your Leader allows it, **senior members** may want to explore and learn about different non-Saskatchewan habitats or follow their passion for a particular foreign wildlife species. A Senior member may choose to create one of these habitat dioramas. It will require extensive research.

## Discussion/Questions

- What types of vegetation, food, cover, and water have you put in your diorama? What elements of shelter?
- What types of animals have you put in this diorama?
- Analyse your diorama by thinking about taking out the water. What would happen to life? What types of animals would live in this dry desert environment?
- What if you changed the types of plants in your diorama. What difference would this make in the types of animals that live in that environment? What would you have to do to increase the wildlife in the area?



photo credit to Carla Schauer ([www.carlaschauer.com](http://www.carlaschauer.com))

## Activity21

# Habitat – True or False



**Time:** 10 minutes

### About

You will practice up on what you know about habitats through true and false questions.

### Materials

- Pen or pencil
- Habitat – True or False Worksheet

### Instructions

1. Mark the statements on the *Habitat – True or False Worksheet* as true or false statements based on what you have learned about habitats from your *4-H Wildlife Tracking Manual*.

### Discussion/Questions

- What four things do wildlife need from their habitat?
- Do all four things have to be in the same area within the habitat?

## *Habitat – True or False Worksheet*

1. \_\_\_\_\_ Habitat is an area suitable to provide a specific species with all of its needs to survive.
2. \_\_\_\_\_ All animals require four basic things from their habitat – food, water, cover and entertainment.
3. \_\_\_\_\_ Different wildlife have different habitat needs throughout the year or may be able to use/need a variety of habitats.
4. \_\_\_\_\_ Food is the fuel that keeps animals going.
5. \_\_\_\_\_ Some wildlife shift their habitat to be where a food source is. Birds flying south for the winter is an example of **habitat shift**.
6. \_\_\_\_\_ Some animals such as deer and elk go into a sleep phase where they are able to stay in their dens for long periods of time to get through the winter.
7. \_\_\_\_\_ Animals cannot go hungry for very long, but they can go thirsty.
8. \_\_\_\_\_ Ungulates, foxes, and coyotes get enough moisture from the food they eat and from sipping moisture off plants covered with early morning dews.
9. \_\_\_\_\_ Cover is the part of the habitat that provides shelter and a place for hiding.
10. \_\_\_\_\_ The amount of space an animal needs depends on how big it is and what it eats.
11. \_\_\_\_\_ Wildlife Specialists also call space an animal's *home range*.
12. \_\_\_\_\_ The bigger the animal generally the bigger the home range. They require more food than a smaller animal and likely need to cover more area to get that food.
13. \_\_\_\_\_ Carnivores (meat eaters) have smaller home ranges than herbivores (plant eaters) of the same size.
14. \_\_\_\_\_ One animal's home range borders may overlap with another animal.
15. \_\_\_\_\_ Some species are habitat specialists meaning they have a wider spectrum of tolerances to differences in their habitat.

## Activity 22

# On the Edge of it All



**Time:** 10 minutes

### About

By working through pictures of different habitats and highlighting all of the edges between different habitats or vegetation types you will start to become comfortable with identifying edge areas. Edges are the places wildlife use the most and where you may pick up your next track!

### Materials

- Highlighters, pencil crayons, markers or crayons
- On the Edge of it All Worksheet (2 pages)

### Instructions

1. Edge is “the transition area between two habitats or vegetation types”. Wildlife tend to use edge a great deal because it:
  - Facilitates their movement (travel corridors).
  - Provides an area where two habitats they need are close together.
  - Often contains everything they need.

Figuring out where the edges are before you head out to track wildlife or as soon as you get to your location will prove rewarding- you will pick up on way more wildlife signs!

2. ‘On the Edge of it All Worksheets’ you will find scenery pictures and aerial pictures of some of the types of outdoor areas you may end up tracking through. On each image there are different habitats (remember that different types of vegetation are a good indication of a different habitat).
3. Highlight or colour any ‘edge’ that you see in the picture (hint: there will be more than one edge in each picture).
4. Compare with other members once you are done.

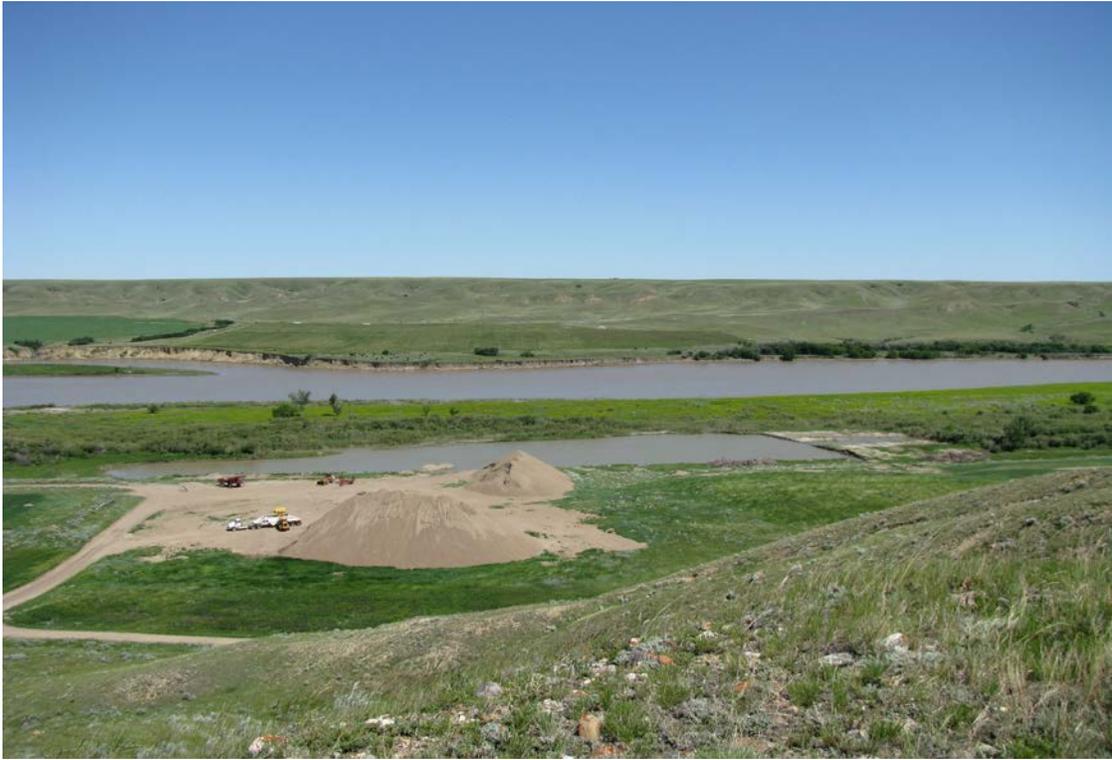
### Discussion/Questions

- Why did you choose to highlight those areas as an edge? What habitats is it a transition between?
- If you entered the picture, how would you approach the edge area?

**On the Edge of it All – Worksheet page 1**



**On the Edge of it All – Worksheet page 2**



## Activity 23

# Travel Corridors



**Time:** 5 minutes

### About

Travel corridors can have barriers placed within them which cause difficulty for wildlife travelling through them. You will compare two mazes with different degrees of barriers.

### Materials

- Pencil
- Travel Corridors Worksheet

### Instructions

1. Do the two mazes on the worksheet.
2. Discuss with the other members about how travel corridors can be like the mazes.

### Discussion/Questions

- Travel corridors are used by wildlife to move from one area to another. They are often found on the edge between two habitat types. Humans can cause barriers in wildlife's travel corridors. What sorts of barriers might people cause?
- Animals may decide to take a different route or they may ignore the barrier. Travel corridors are different widths depending on the type of wildlife. Which width of maze was hardest for you to do? Why? How does this relate to travel corridors?



## Activity 24

# Match the Wildlife with the Habitat



**Time:** 10 minutes

### About

Knowing where to look for wildlife will help you have successful tracking trips. You will practice identifying which habitats different Saskatchewan species can be found in.

### Materials

- Match the Wildlife with the Habitat Worksheet
- Pencil or pen or pencil crayons/markers so you can use a different colour for each animal

### Instructions

1. On the following worksheet match the wildlife with their habitats. Match all habitats that the animal may use with the animal's name. Some animals are habitat specialists (having only one or two habitats with specific characteristics they use) while others are habitat generalists (use a wide range of habitats).

### Discussion/Questions

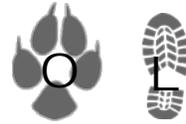
- Which animals were habitat specialists?
- Which animals were habitat generalists?
- Are there any animals that use the same habitats? How do you think they co-exist with each other? Can you think of any other animals that might use these habitats?
- In your area, do you have any of these habitats? (Discuss where they are.)

## Match the Wildlife with the Habitat Worksheet

Beaver	Dry native grasslands
White-tailed Jackrabbit	Riparian areas
Woodland Caribou	Sagebrush flats
Bobcat	Large urban park or green space
Coyote	Bogs
Swift Fox	Sand dunes
Ord's Kangaroo Rat	Low areas
Moose	Mature Forest
	Prairie river valleys
	Cropland
	Open forests
	Brush piles

## Activity 25

# Who Am I?



**Time:** 10 minutes or longer

### About

You will become more familiar with the great animals of Saskatchewan. By using your detective work to ask the right yes/no questions you will be able to guess the animal pinned to your back. This can be used as an icebreaker/warm up activity.

### Materials

- This activity can be done outside or inside.
- Pictures of Saskatchewan wildlife (see page 24 of manual for suggestions). Have at least enough for two per member.
- Clothes pins

### Instructions

1. Members should line up in a row with their backs to the leader or helper.
2. You are going to play a fun game where you and the other club members guess the Saskatchewan animal on your back. You can only ask fellow members yes or no questions about your animal as you try to figure out who you are.  
**Option:** Play the game so that only you will be able to ask yes or no questions about the habitat, feeding behaviors, animal sign, or tracks. You cannot ask about physical descriptions such as am I brown?, or do I have long ears?.
3. The Leader or parent helper will attach the picture to the member's back with a clothes pin. Once everyone has a picture, ready-set-go!
4. Once a you guess your animal return for a new animal.
5. It can be fun to have a huge stack of animals ready to pin on! You'll race around like a chicken with your head cut off trying to guess your animal the fastest so you can have as many pictures in your pile as possible at the end!
6. Your club might choose to play this game often. Your Leader can switch up the animals in the pile, or have you play with different rules about the questions that are allowed to be asked.

### Discussion/Questions

- Afterwards you can quickly debrief. What animals were the hardest/easiest to guess? Why?
- What sorts of questions got you the closest to guessing your animal?

- What questions that you asked playing the game will be similar to the questions you should ask when observing and tracking?

\*\* If you plan to do this activity again another time with your 4-H group or a different audience, laminating the pictures keeps them good for many years of use.

## Activity 26

# *Label the Parts of the Footprint and Track Pattern*



**Time:** 5 minutes

### About

You will practice identifying the parts of a track and a track pattern by labelling them.

### Materials

- Footprint and Track Pattern Worksheet
- Pencil or pen

### Instructions

1. Label the parts of the prints and track pattern with the correct name.

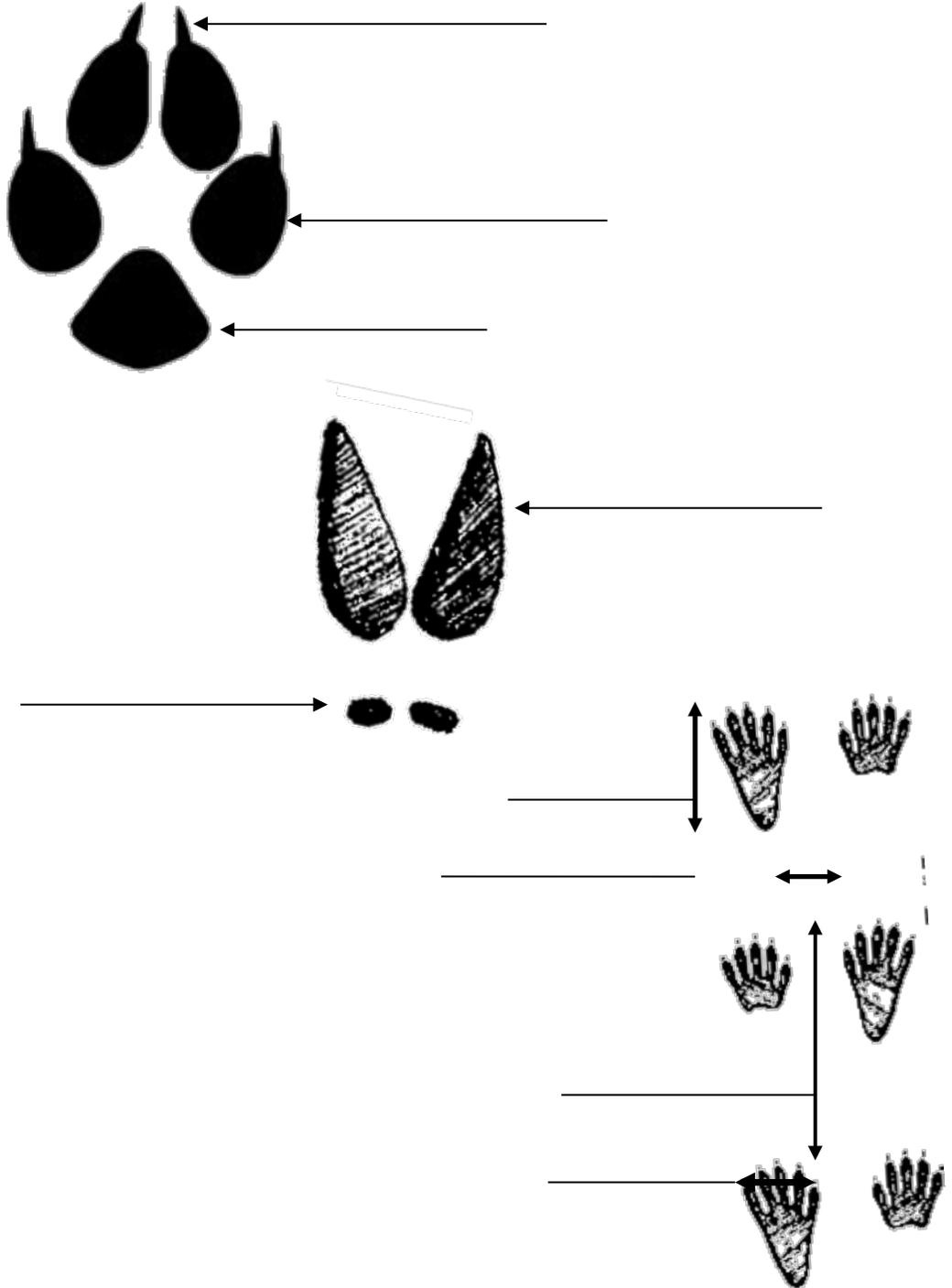
### Discussion/Questions

- Not all parts of a track will show up every time you see a print. They also could be smudged. Being able to pick out the key parts of a track and track pattern is important. It takes lots of practice.

## *Footprint & Track Pattern Worksheet*

Label the parts of the footprints and track pattern with the words below.

- heel
- hoof
- toe
- straddle
- claw
- width
- dew claw
- length
- stride



## Activity 27

# The Four Standard Gaits



**Time:** 10 minutes

### About

In your wildlife observation notebook or on cue cards you will draw the four standard gaits to gain familiarity with them.

### Materials

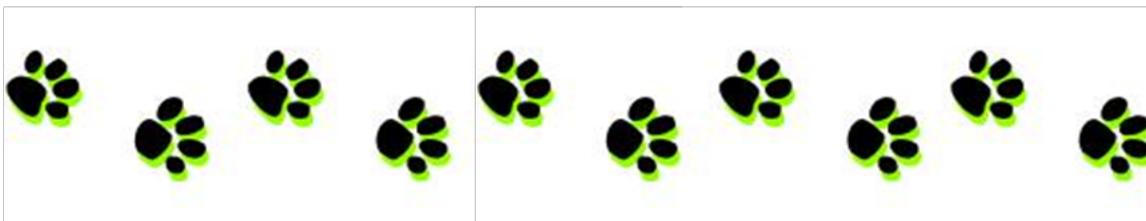
- Your wildlife observation notebook
- Cue cards
- Pencils, markers or pens to draw with
- Your 4-H manual
- Your Animal Tracks of Saskatchewan field guide

### Instructions

1. Draw the four standard gaits (diagonal walkers, pacers, bounders, gallopers) in your wildlife observation notebook or on cue cards.
2. It helps to add names of a few animals to each card so you can picture them walking that way.
3. Any other additional helpful information can be added.
4. Drawing the standard gaits will help you familiarize yourself with them even more, and will allow you to take your cue cards or notebook 'cheat-sheet' with you to the field.
5. It is also worth writing down what 'gait series' occurs for an animal when it speeds up.

### Discussion/Questions

- At a regular slow pace animal species have a standard way of walking. Discuss which animals make what gaits as you are working.
- Using your 4-H Wildlife Tracking Manual, go over the points associated with each gait. Animals will speed up and change up their gait to move faster and more efficiently.
- Revisit your drawings and notes frequently so that you are able to pick up the gait pattern when you come upon a trail.





## Activity 28

# *Animal Gait Charades*

**Time:** 30 minutes

### About

You will become an animal practicing the four standard animal gaits. You'll then take a look at the tracks you made. This is a fun learn-to-do-by doing activity that will help you visualize how the animal moves and picture what is really happening on the ground.

### Materials

- Anywhere your tracks will show up! Such as: tracking box area, garden area, sand box, playground, area with a light dusting of snow, a snow bank
- **Alternatively**, your club can do the activity inside and just get a feel for the way the gait is/how the animal moves (tracks will not be seen)
- Description of the four standard gaits from the 4-H Wildlife Tracking Manual.

### Instructions

1. Read out loud a gait description from the Wildlife Tracking Manual. Everyone should do the gait on their hands and knees and then look at their tracks. Cover all of the standard gaits.
2. Your Leader can help you to get the gaits right so that you are moving the proper hands and knees at the proper times.

**Option:** Have relay races using the standard gaits (in gym setting or outside on grass)

**Option:** Simon says gait style. Call out a gait, and the last person to do it every time is out until you just have one member left in!

### Discussion/Questions

- Is this gait easy for you to do (ask for all four)? Why or why not?

## Activity 29

# Label the Gait



**Time:** 5 minutes

### About

You will label the names of different track patterns. It will help you familiarize yourself with how different track patterns can look depending on the animal which made them, the weather conditions and the medium.

### Materials

- Pen or pencil
- Animal Gait Worksheet

### Instructions

1. You learned about the basic track patterns or “gaits” in your 4-H Wildlife Tracking Manual.
2. Especially when there is not a clear footprint of the animal’s gait and what track pattern is left can help you determine which animal you are tracking. Complete the Animal Gait Worksheet.

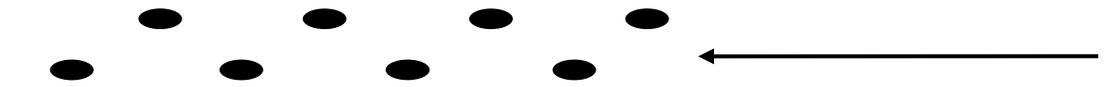
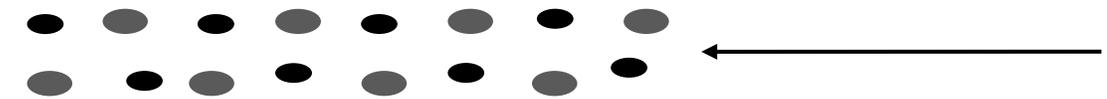
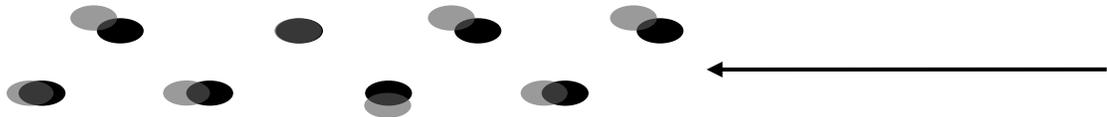
### Discussion/Questions

- Getting good at gait identification only improves with practice.
- What can you do to improve your gait identification?

## Animal Gait Worksheet

Fill in the blank beside each gait illustration below. These gait names may be used more than once:

- Alternate gait (direct registry)
- Alternate gait (indirect registry)
- Pacer
- Bounder
- Galloper



Activity 30

## *Gait Characteristic Matching*



**Time:** 5-10 minutes

### **About**

You will match characteristics to the name of the gait. This will help with learning each gait.

### **Materials**

- Pen or pencil
- Gait Characteristic Matching Worksheet

### **Instructions**

1. Using what you have learned about different gaits match the name of the gait with the different characteristics on the following worksheet.

### **Discussion/Questions**

- This activity is to practice skills.

## *Gait Characteristic Matching Worksheet*

Write the correct name of the gait in the blank beside the characteristic.

Alternate Walkers      Bounders      Gallopers      Pacers

\_\_\_\_\_ Leaves a triangular or u-shaped pattern.

\_\_\_\_\_ Long bodied short-legged animals (mostly of the weasel family) use this gait.

\_\_\_\_\_ Stout, wide-bodied animals walk with this gait. Think of a bear, badger or racoon “waddling” along.

\_\_\_\_\_ The animal moves its back left and front right at the same time and then its back right and front left at the same time.

\_\_\_\_\_ Cats, dogs and hoofed animals walk with this gait.

\_\_\_\_\_ Rabbits, hares and most rodents walk with this gait.

\_\_\_\_\_ Leaves a tight square shaped or rectangular pattern.

\_\_\_\_\_ They move one side of their body and then the other side.

\_\_\_\_\_ The animal lifts its left back foot and left front foot, then right back foot and right front foot.

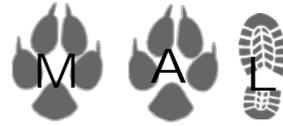
\_\_\_\_\_ The back foot is placed directly on top of where the front foot was (or slightly off).

\_\_\_\_\_ They reach out with their front legs and bring their back legs up behind them.

\_\_\_\_\_ They push off with their back feet, fly through the air land with their front feet and bring their back feet through to in front of the front feet.

## Activity 31

# Tracking Stick



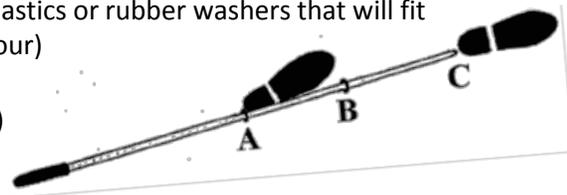
**Time:** 10 minutes

### About

You will make a tracking stick to measure tracks and to help you follow the trail!

### Materials

- Thin stick or wooden doweling (about 1/2 inch or 12 mm diameter) around 1m long
- Three different coloured elastic bands, hair elastics or rubber washers that will fit snug around the dowelling (three of each colour)
- Permanent markers
- Something to sharpen the end with (optional)



### Instructions

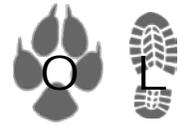
1. Find a stick or sapling outdoors that you can use or purchase a piece of wooden doweling. Willow branches or saplings, or poplar saplings will work. Feel free to strip off the bark.
2. A piece about 1m long will be good for most animals. If you plan on tracking little creature, you can make a shorter stick.
3. You can sharpen one end of the stick. This is the end you will measure from (optional).
4. Place one elastic band of each of the three different colours on your stick. If the elastics are big, you may have to wrap them a couple of times. The remaining elastic bands are extras in case you lose or break one. You might choose to put extra elastics on the top end of your tracking stick or in your tracking pack in case one breaks.
5. You will use the first coloured elastic to mark the span between tracks (stride), the second colour to mark the footprint's width (if desired), and the third coloured elastic to mark the footprint's length.
6. Write your name on your stick so it doesn't get mixed up with other club member's sticks and your mom knows not to throw it out!
7. You may wish to brightly colour or mark the end of your tracking stick so that if you set it down you are able to find it again!
8. Your 4-H Wildlife Tracking Manual will walk you through using your tracking stick. Now you can go ahead and practice!

### Discussion/Questions

- This is a great time to chat with everyone else about what sorts of things they have seen lately and if they have had any wildlife encounters.

## Activity 32

# Track and Seek



Idea adapted from Tom Brown's Field Guide to Nature and Survival for Children

**Time:** 30 minutes+ (travel out to Sasquatch site additional)

### About

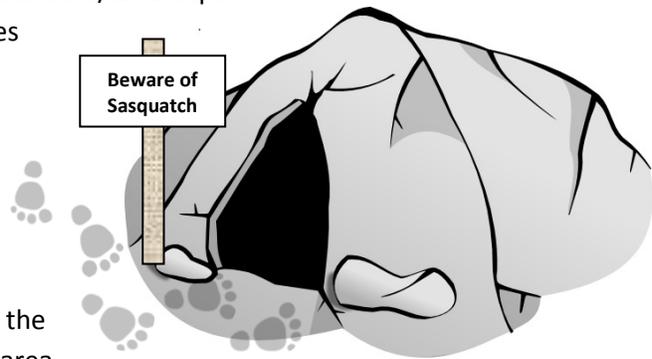
You will practice following the track left by a 'Sasquatch' using your tracking stick. It will allow you to feel confident using your tracking stick on other track trails. Following the trail over and around different terrain will lead you to a great surprise.

### Materials

- Outdoor location with a variety of surfaces/landscape
- Supplies listed in the Leader's Notes
- Tracking stick made in Activity 31
- Wildlife Tracking Manual
- A Sasquatch

### Instructions

1. You will be practicing using your tracking sticks by tracking the imaginary Sasquatch through the area.
2. Either before you get to the site or when you first arrive, your Leader will go over how to use a tracking stick with your club's members again.
3. Your leader will help find the first set of Sasquatch tracks for you. Those first tracks and the start of the track pattern are sure to show up well and make it easy for you to get established.
4. Using the instructions in your Manual set up your tracking stick on the Sasquatch trail.
5. You will likely have to follow the trail over different surfaces and in a gentle meandering pattern around objects.
6. You'll know you have come to the end of the trail because you will run into a big pile of yummy Sasquatch scat. Even if you see the scat on the trail ahead, **MUST** find each Sasquatch foot print on the trail – no rushing ahead!



**Option:** Get the members to do up different trails for each other for practice.

### Discussion/Questions

- Where was/is the easiest place to track? Where is the hardest?
- How did the tracking stick help you?

- Before or as the Sasquatch changed directions how did the foot print change?
- What other things did you observe on the 'trail'? Did you learn anything else about the Sasquatch?
- How could you use the tracking stick with a real animal?

### Activity 33

## *What else can you tell from a track pattern?*

### *Word Search*



**Time:** 10 minutes

#### **About**

You will search for words that are associated with ‘things you can learn from a track pattern’.

#### **Materials**

- Pencil
- What else can you tell from a track pattern? Word Search Worksheet

#### **Instructions**

1. Do the Word Search on the following page.

#### **Discussion/Questions**

- While you are doing the Word Search, chat with your leader and other members about what else you can learn from a track pattern and how you can learn it.

*What else can you tell from a track pattern?*

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

Alone	Direction
Explore	Female
Injured	Limp
Male	Mother
Pattern	Pelvis
Running	Track
Urine	Wandering
Young	

Crossword built by: Build a Word Search program by Discovery Education a subsidiary of Discovery Communications, LLC. <http://puzzlemaker.discoveryeducation.com/code/BuildWordSearch.asp>

## Activity 34

# Walk, Watch and Learn



**Time:** 10 minutes a day for a week preferably or 1 hour once

### About

You will watch how different animals walk and get to the track pattern as soon as it is made. It can be hard to figure out a gait just by watching in regular speed – you might need to slow it down. Both of these will help you get a feel for what you will see in the wild.

### Materials

- A pet to watch, farm animals, or local wildlife
- Internet access (to view videos in slow motion of wildlife walking, horse races, equestrian events, animals running)
- Walk, Watch and Learn Worksheet

### Instructions

1. If you can, observe domesticated animals and look at the tracks they leave when they move in different ways.
2. View videos or clips online of wild and domestic animals move to see how they place their feet in relation to one another. There are many awesome clips of animals moving in slow motion out there.
3. Fill out the Walk, Watch and Learn Worksheet when you view an animal or watch a clip.
4. By spending 10 minutes every day for a week observing you will be training yourself to pick up on an animal's gait by the way it is moving.
5. Even if you are having troubles identifying the gait, don't get too hung up on it. The goal of the exercise is to start watching animals and to train your to be observant and enjoy the experience.

### Discussion/Questions

- Discuss with your leader and fellow members:
  - What did you find tough about this activity? What did you find easiest to pick up on?
  - What did you notice about how animals move?

### Ideas for 'watching':

- Dogs at dog park or local zoo
- Farm animals (watch horses, sheep or cows from outside the fence with a farmer's permission)
- Neighbour's pet (like a rabbit, lizard, guinea pig, hedgehog, etc.)

- Watch slow motion online videos – on YouTube search for:
    - London 2012 jumping horses
    - London 2012 dressage
    - Horses Super Slow Motion Race Track
    - Horse slow motion (galloping on track)
    - Bear slow motion
    - Rabbit slow motion
    - Try to see a whole variety of gaits by picking out different animals to watch
- key word in search “slow motion”!!*

*“Watch animals – watch their gait, then go look at the track they left. Touch it, get down on your hands and knees and take it all in. Enjoy!”*

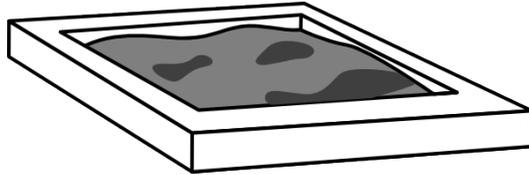
## Walk, Watch and Learn Worksheet

Date	Animal/Source	Gait	What I Saw...
<b>Example:</b> <i>April 1st</i>	<i>4 Grizzly bear videos- from YouTube</i>	<i>Pacers then when they charged the galloped</i>	<i>The bear lumbered along, but awkwardly galloped through the water to get away from the people. When the grizzly charged it took 2 bounds, a gallop with the feet pushing off and was right at the vehicle! It looks like their feet roll from the heel through the toe when they walk</i>

## Activity 35

# How You Move'n?

**Time:** 1/2 hour to 1 ½ hours



### About

In sand, wet dirt or a tracking box you will observe how individuals move differently and how tracks can look different.

### Materials

- Sand, light mud, wet or light snow, wet dirt, cultivated field or garden or tracking box area
- 4-H members with similarities; alternatively pets of the same species may be fun to use

### Instructions

1. This activity lets you explore the concept that two animal of the same species may have variations in their footprints even when they have many similarities between them.
2. Ensure that you have a good area/medium to create tracks on (a track box area is best-see Activity 4 – Bring on the Tracks)
3. Your Leader will ask for three volunteers (the 4-Hers) that share a specific characteristic. Can you suggest a specific set of characteristics the volunteers should share? For example, males who are able to ride a bike or teenagers in 4-H.
4. The group of three volunteers will walk one-at-a-time across the area at a normal pace in their bare feet (summer) or snow boots (when too cold to go bare foot!). Volunteers will walk about 30 cm (1 foot) to the side of any track put down by a volunteer who went before them.
5. Step back and look at the tracks. Get down on your hands and knees and look at the tracks. What things are different between them, what things are the same?

**Option:** If you can get a couple willing pets of the same species to make tracks for you they can be compared for similarities and differences.

**Option:** The members making the tracks can take 3 steps and then gradually veer to the right or left. Alternatively they can start veering right at the start. Interesting tracks may be made.

**Option:** Members can add a very unique characteristic to their tracks:

- Bandage one member's two toes together
- Make them leave one shoe on and one shoe off
- Tape a marble/rock to the bottom of their one foot (or have all members wear socks and stick something in one of the member's socks).

Don't let the members examining the prints see who made each print. You will have to explore the prints and figure it out who made which prints based on their 'injury'.

### **Discussion/Questions**

Make sure you step back and look at the tracks, then get down on your hands and knees and look at the tracks.

- What things are different between them, what things are the same?
- How are the stride lengths different?
- Are the shapes of the tracks different? How?
- Are they a different depth? What does that indicate?
- Are the footprints turned in/out differently?
- Can you tell any characteristics from the footprints (limp, longer legs/bigger stride)?

Although they are all tracks of 4-H members there are differences. This is the same with wildlife too. Discuss why wildlife might move differently. How are tracks affected?

## Activity 36

# Antler Rub



**Time:** 1 hour to set up rub; 10 minutes every week to visit it

*Note:* It is best to start this activity mid-fall (September) and it may take until February for you to get your antlers with perseverance! If you don't get the project set up right away, that's okay – you can still be successful any time before January.

### About

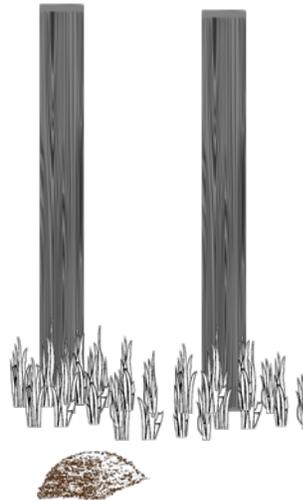
You will set up an antler rub location for bucks in hopes that you will get to see wildlife signs first hand. Hopefully you will encourage a buck to rub on your posts and drop his antler(s) there!

### Materials

- Two wooden fence posts
- Hand post pounder or tractor post pounder (posts may be pushed in with a front end loader if the ground is soft enough)
- Salt block, loose salt or a little feed occasionally

### Instructions

1. Find a location that you think will be attractive for deer. Look for an area where you have seen deer in the past more than once, transition areas between vegetation, or areas where there is shelter/cover for the deer to feel safe.
2. Pound two posts 30 to 45 cm apart. If you have skinny posts you may be able to pound them by hand. Larger posts 3-4 or 4-5 size will need a post pounder (adult help!). The larger sized posts will stand up better to the rubbing. The deer will put head in the middle of the posts and rub away! A little something for the deer at your rub once you put it up will let them know it is there (salt, salt block, loose feed)!
3. Don't visit your antler rub too often because your scent will linger. Try not to touch the posts when they are up as they will hold your scent.
4. Some salt or feed *occasionally* at the posts will encourage deer to visit and rub on your posts.
5. The Saskatchewan Ministry of Environment discourages feeding of deer because of chronic wasting disease.
6. In Saskatchewan anyone is allowed to possess shed antlers.



### Discussion/Questions

- What wildlife signs are you seeing around your antler rub?
- How/why did you choose your location?
- If you find an antler identify if it is mule deer or whitetail deer. Are there missing tines?  
Why is the antler so smooth? Is it smooth everywhere or just on certain spots?

## Activity 37

# Who Left the Poop?!?



**Time:** 10 minutes

### About

You will match the shape of the scat with the animals that left that sign behind. Practicing identifying scat will help you determine which animals have been in the area.

### Materials

- Pen or pencil
- Who Left the Poop Worksheet

### Instructions

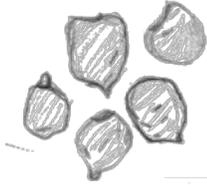
1. Practicing identifying scat shape will help when scat is encountered in the field.
2. Match the name of the wildlife family with the shape of the scat on the worksheet.

### Discussion/Questions

It is important not to touch scat with bear hands, but use a glove or poke it with a stick if you need to touch it.

- How could scat help you identify an animal?
- What can scat tell us about wildlife?
- Where would you expect to see scat?
- Have you ever seen scat – could you identify what animal it was from?

## Who Left the Poop?!? Worksheet



Dogs, Coyotes, Wolves,  
Raccoons, Bears and Skunks



Cat Family



Weasel Family



Rabbits and Hares



Deer



Rodent Family



Fox

## Activity 38

# Bedtime



**Time:** As short as 10 minutes – can go as long as members want it to or until they get bored.

### About

You will learn what bedding looks like in different vegetation. Practicing will help you pick out bedding spots when you are tracking wildlife.

### Materials

- An outdoor area with a variety of vegetation lengths and vegetation types in the summer or a variety of snow types in the winter.

### Instructions

1. This is a great activity for members to get out and roll around outdoors!
2. Your Leader will instruct you to sit or roll around in different places in the vicinity. Then everyone can tramp around and check out the places where you and the other members have been.
3. Make sure that many different vegetation types, vegetation heights, and soils are used by the members (or snow conditions if in the winter).
4. The goal of this activity for you is to see how vegetation looks when it has been pushed down. Get down on your hands and knees to do some close examination.

**Option:** Alternatively, this activity can be a game for your club members! One ‘wildlife member’ will go out into a designated area (the game field) and make a bedding mark. Remember, if you don’t bed down for long, the mark won’t stay for long generally – the other members will have to track quickly! When your leader says go the members who have had their backs turned go out in search of the bedding spot made by the ‘wildlife member’. Once the bedding spot is found, get the ‘wildlife member’ to say why they chose that location to make their mark and how they made it. Then let the next member have their turn at being the ‘wildlife’. You may need to move to a new ‘playing field’ in a couple of turns if the amount of walking and lying down on the ‘playing field’ is causing everything to look like a bedding spot.



### Discussion/Questions

- How did the vegetation press down?
- What do you see?
- Why did you choose a specific location to bed down yourself?
- Where would you normally look for bedding spots?

## Activity 39

# Pellet Picking



**Time:** 45 minutes for collecting pellets and 45 minutes for dissecting pellets

A modified activity can be done in the winter (45 minutes dissecting and discussing).

This activity can be broken into two sessions where members collect pellets on a club outing and then dissect them at a later date.

### About

You will use what you learned in the section on other signs about pellets to search out hawk or owl pellets. You will collect them and then dissect the pellets to see what you can learn about the bird's lunch.



(C) R. Dudley. Used with permission.

### Materials

- Outdoor location to look for pellets (summer) or purchased sterilized owl pellets
- Bags for picking up pellets
- Paper towel
- Latex or plastic gloves
- Dissecting kits or tweezers
- Sticks to poke with and pull with such as popsicle sticks or wooden skewers
- Water to drip on pellet
- Paper plates
- Magnifying glass (available at dollar stores)
- Camera

### Instructions

1. Search out locations where you many find pellets. Some suggestions: farmer's fence lines at the base of fence posts, under power poles, under trees with nests in them, in old buildings where owls roost. Your Leader may ask you to watch for locations you have seen hawks or owls perching or else your Leader may have an area scoped out. Please use caution and safety wherever you go.
2. Use a camera to document where the pellet was found, how you took it apart, and what was found. Photos are especially useful if this activity is going to be used for Achievement Day or included in your Record Book.
3. Pick up pellets and any bones found on the ground (skulls are often not consumed). Make sure to use gloves or a plastic bag turned inside out (pellet will end up in the bag).

Wrap the pellet within the bag in paper towel to absorb any moisture especially if it is fresh. Picture references/records are good. Label the bag with the location where the pellets were found.

4. If your pellets are fairly fresh and you are not going to dissect them right away freeze them to preserve them and keep them fresh and mold free. Fully thaw them before you want to dissect it.
5. If this activity is done in the winter sterilized owl pellets can be purchased from many companies for a reasonable price. Check online searching "Purchase Owl Pellets". You may also contact obdk.com, your local zoo, a wildlife park or the Saskatchewan Burrowing Owl Interpretive Centre in Moose Jaw as resources.
6. When you are ready to dissect your pellet place it on a paper plate. Wear latex gloves. Gently start pulling it apart. Use a dissecting kit (older members might have them for school) or tweezers (can be purchased from a dollar store). Sticks to poke with and pull with such as popsicle sticks or wooden skewers work well too.
7. You may have to place a few drops of water on the pellet to loosen it apart.
8. As you pull the pellet apart start to divide the fur, hair and feathers into a separate pile from the bones and also any insect parts.
9. Take pictures of your activity as you go.
10. Lay everything you have found out onto a separate paper plate.
11. Use your magnifying glass to help you do the tedious work of separating the pellet and also to look closely at the bits and pieces you have separated out of the pellet.
12. Can you identify anything you have found? What do you think your bird of prey ate?
13. There are a couple different things you can do from here:
  - a. You can take a picture of what you have found in your pellet and write about it in your Record Book or on a loose leaf.
  - b. You can save what you have found and create an Achievement Day display. It is best to make sure it is well dried so it does not mould. You may choose to just save the bones or larger insect parts. Once they are dry you can glue them onto a paper plate with clear craft glue or glue that is highly adhesive. Cover the display and place in a safe place until Achievement Day.

**Option:** Take it one step further and try to identify some of the bones. Are there ribs, jaws or leg bones?

**Option:** You know where you found your pellet, right? Well stalk out the area. Do you see any hawks or owls in the area (remember owls are nocturnal)? Can you identify what species of hawk or owl you have seen? There is a good chance your pellet was from a bird still in the area!

**Option:** As noted above this activity can lead to an Achievement Day display such as a picture board of your pellets/what you found or the actual pieces of remains found in your pellet. Alternatively, you could demonstrate taking apart a pellet you have previously collected at Achievement Day.

### **Discussion/Questions**

- Where do you think you should look for wildlife signs, pellets?
- What other hawk/owl signs are you seeing/did you see where you found your pellet?
- What do you think your bird ate? Can you narrow it down to a specific animal?

## Activity 40

# Wildlife Sign Matching



**Time:** 15 minutes

### About

You will match the wildlife sign with the name of it and fill in the blank of where you think that sign can be found. Practicing identifying signs will help you become familiar with them before you head outside.

### Materials

- Pencil
- Wildlife Sign Matching Worksheet

### Instructions

1. Work through the worksheet on wildlife signs. Match the picture of the sign to the name of the sign and then write where you think you might find that sign. For example you may see bedding under a tree, in tall grass, or in a clump of bushes.
2. Remember there are many different places a sign might be found, so feel free to provide more than one location, but don't feel you have to list all of them.

### Discussion/Questions

- As a group, discuss which animals you think will leave which signs? What times of year do you think you will see these signs?

## Wildlife Sign Matching Worksheet



### Feathers

Can be found \_\_\_\_\_

### A Cache

Can be found \_\_\_\_\_

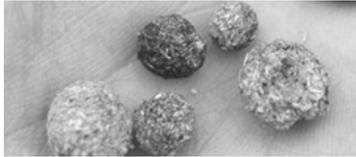
### Scat

Can be found \_\_\_\_\_



### Claw Marks

Can be found \_\_\_\_\_



### Hair or Fur

Can be found \_\_\_\_\_



### Rubbing

Can be found \_\_\_\_\_

### Browsing

Can be found \_\_\_\_\_



### A Den or Burrow

Can be found \_\_\_\_\_

### Trail

Can be found \_\_\_\_\_



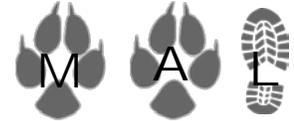
### Pellets

Can be found \_\_\_\_\_

*Photos courtesy of K. Cabrera, J. MacKenzie and R. Dudley*

## Activity 41

# Wildlife Signs



*Adapted from Wildlife Conservation I: The Worth of Wild Roots, Nebraska State 4-H, University of Nebraska, Lincoln, Nebraska. (pg. 41)*

**Time:** Members can do this activity on-going over the year or set out specifically to achieve this activity (2 hours+).

### About

Wildlife signs are just as important as an actual footprint when tracking wildlife. You will document the wildlife signs you see in four to six different places or habitats. This activity will help you practice picking out wildlife signs all around you. This activity can be used as a demonstration for Achievement Day.

### Materials

- Four to six different habitats to look for wildlife signs in two or three habitats visited twice during your 4H project year
- Wildlife observation notebook
- Camera
- Zipper lock bags

### Instructions

1. Observe animal signs in the different habitats. For example: a riparian area, wooded area in a park, grassy areas, cropland, a trail, your backyard, along fence lines, along tree rows or shelterbelts, a low area, along edges, low growing bush areas, a park, or a walking path. Search in four to six different habitats to look for wildlife signs. Alternatively, you may decide to look at the same two or three habitats twice during your 4-H project year and see what different wildlife signs you see each time.
2. If you choose to use only a few habitats visit them a couple times (two-three) during the 4-H year. You could visit the habitat before it snows, after it snows, first thing in the spring, mid-summer, after a rain, in the morning, or in the evening. Each of these 'times' will put a different spin on the signs you see! For example, in the spring you may find part of an egg shell and in the summer you may find moulted feathers.
3. In your wildlife observation notebook write a detailed description of each sign. For each sign note the habitat, the location in the habitat, and what animal(s) could have made it. You can include any other interesting information that you might think of.
4. You can take pictures of the signs you see, make drawings of them, or if they are 'collectable' you may choose to take them home (like feathers, seed shells or antlers etc.).

5. If you are just including this activity in your Record Book you can make a chart of the sign, habitat, or location in the habitat from the information you wrote in your wildlife observation notebook. Take a look at your chart and note similarities. For example, all the signs found in the park were by puddles not on the path.
6. If this activity is used for an Achievement Day display include all of the information you would for your Record Book plus some extras. Make a poster or a display board. You may want to include:
  - a. Where you expected to find most of your signs.
  - b. Where you actually found most signs.
  - c. Why the signs were located where you found them.
  - d. Your experiences and adventures in finding the signs.
  - e. Any other interesting facts.
7. Enhance your poster or display to make it interesting for the people coming to your Achievement Day and to teach them more about wildlife signs.
8. You may add interest to your Achievement Day display with:
  - Magazine clippings or computer print-outs of animals
  - Pictures you took of the signs
  - Re-creations of the signs (drawings, clay models, paper models)
  - A nice chart of the signs you saw and your observation data
9. If you collected any signs such as feathers, antlers, twigs or scat be sure to have them well dried out and in see-through bags. Don't forget good labels, a title and your name on your display!

**Option:** Senior Members can use this activity as a jump off point for public speaking, or as a verbal presentation to your club or Achievement Day crowd. "Wildlife signs tell a story", "How to recognize wildlife signs" or "Tips for finding wildlife signs" could all be titles of talks. Don't forget to use your display in your talk!

### Discussion/Questions

Do not be so focused on WHAT made the sign, but explore the sign in general and take pride in just having found it!

- Where did you find the most signs within a habitat?
- Where did you look for wildlife signs and why did you look there?



## Activity 42

# *Rules of Tracking Fill in the Blank*



**Time:** 10 minutes

### About

These simple ‘rules’ of tracking will help you out in the field and make your tracking experience even more enjoyable! Fill in the blanks to complete the sentences.

### Materials

- Pen or pencil
- Rules of Tracking Worksheet

### Instructions

1. On the Rules of Tracking Worksheet fill in the blanks from the list of words at the bottom of the page. A word is only used once. This worksheet should help you remember the rules even better than before.

**Option:** You may want to write the basic rules of tracking in your wildlife observation notebook to help you remember them.

### Discussion/Questions

Discuss the answers with your group.

- What does each of the rules mean to you in your own words.
- Is there a scenario that you could think of where this rule would apply?

## Rules of Tracking Worksheet

Use the words below to fill in the blanks. These simple 'rules' will help you out in the field and make your tracking experience even more enjoyable!

1. No matter what the \_\_\_\_\_ track down is the \_\_\_\_\_ track made.
2. \_\_\_\_\_ point in the direction of travel.
3. As soon as a track is made the \_\_\_\_\_ start to change it.
4. The \_\_\_\_\_ you track in will impact the way the track \_\_\_\_\_.
5. Look from at all different \_\_\_\_\_ and angles.
6. Tune in all of your \_\_\_\_\_.
7. Take what you know about \_\_\_\_\_, how wildlife are drawn towards using \_\_\_\_\_ and which tracking mediums show the best \_\_\_\_\_ and put them all together. There, you will be able to tune in your senses and find animal tracks and \_\_\_\_\_.

### Fill in the Blank Words

elements

signs

habitats

first

senses

cold

first

last

moose

edges

heels

parks

toes

lengths

heights

looks

muscles

mediums

tracks

plaster

## Activity 43

# Tracking Through Time



**Time:** 10 minutes each time you go out to check your tracks (with rechecking tracks at 1-2 hours, 4 hours, 24 hours, 48 hours)

### About

Tracks start changing as soon as they are made. You will see firsthand how the elements change the tracks you make over a period of time. This activity will help you gauge how old a track is. Is the owner of the track long gone or just around the corner?

### Materials

- Outdoor location that:
  - Has a good tracking medium or track box area (see Activity 4).
  - Is close to home.
  - Won't likely be disturbed by other people.
  - Is large enough you can make a couple tracks each time.
- Wildlife observation notebook
- Popsicle sticks, bright golf balls, stacks of rocks, spray painted rocks, etc. to mark your tracks

### Instructions

1. The purpose of this activity is to see how your tracks change over time as they are exposed to the natural elements.
2. Find an outdoor location with a good tracking medium. Alternatively, you can create a track box area (see Activity 4) or groom an area by loosening and raking the soil, sand or light snow.
  - You want the area to be close to where you can go back by yourself easily (close to home) and it won't likely be disturbed by other people. You could use: a garden, the sandbox, a field, the far end of the playground, an unused baseball field, or spot on the driveway where no cars will be driving)
  - The area needs to be large enough you can make a short track pattern each time.
3. Prepare the area (loosen soil, smooth snow or mark off an area if needed).
4. Walk across the area making a track pattern (series of footprints). You will want to make sure there is enough space to the right or left of you to make more footprints the next time you visit the area.
5. Place a marker at your footprints or track pattern.
6. Come back in 1-2 hours. Make another track pattern (series of footprints) beside your first track pattern.

7. Get down on your hands and knees and see how the two track patterns are different. Check for weathering on the first set of prints. Check for slumping in of ridges and widening or narrowing of the track.
8. Document how the footprints are different in your wildlife observation notebook. Make note of the mediums (types of ground) you made tracks in and what the weather was like over each time period (rain, light wind, sunny, hot, etc.). You may also want to take a picture of the track.
9. Revisit the site again at 4 hours, 24 hours and 48 hours after you made the first footprints. Every time make a new set of footprints and record how you have seen the first footprints change. Even include how you see the other footprints you made on your re-visits changing.

### Discussion/Questions

- How can you use this activity when you are out tracking wildlife to see how long ago the animal passed by?
- What did you see change the fastest and why do you think it changed the fastest? What changed the slowest and why do you think it changed the slowest?
- What was left of your track pattern after two days of weathering?
- What weather do you think would have the greatest impact on what is left of the track pattern after two days?

*Note:* Choose intervals between re-visiting the tracks that are most convenient for you. You can still see how tracks change over time even with a slight change in the intervals between visits.



## Activity 44

# Tracking Mediums



**Time:** 15 minutes

### About

You will think about what tracking mediums are in which locations. Some mediums make it easy to see the tracks that are left while others are more difficult for many different reasons.

### Materials

- Pencil or pen
- Tracking Mediums
- Worksheet

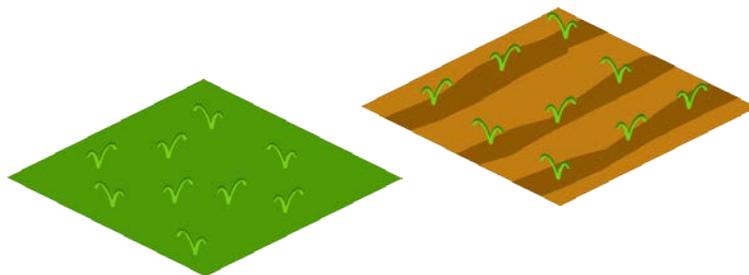
### Instructions

1. Work through the worksheet. Answer what the most common track medium is at the location and if it is relatively easy or hard to track across. An example is provided.

**Option:** Each member can do a line and then share the answers with each other.

### Discussion/Questions

- If you did not write down why you thought it was an easy or hard tracking medium discuss it as a group.
- How does the tracking medium influence where you start looking for tracks?
- What could you expect to see of a track in the different mediums?
- Which of these locations do you think you could look for tracks in?



## Tracking Mediums Worksheet

Location	Medium? (what is the ground like)	Easy or hard to track across? Why?
<b>Garden</b>	<i>Deep tilled or lightly loosened dirt</i>	<i>Easy. Animal sinks in slightly leaving a good impression</i>
<b>Park</b>		
<b>Riparian area</b> (transition area between water and upland)		
<b>Frozen slough or lake</b>		
<b>Forest in the winter</b>		
<b>Field in March</b>		
<b>Gravel road</b>		
<b>Across a city street or highway</b>		
<b>Native grassland</b>		
<b>Farmer's field in early May</b>		
<b>Hiking trail</b>		
<b>Beach</b>		

## Activity 45

# Where in the World? Cool Tracking Adventure



**Time:** 15 minutes for your Leader to introduce the activity. You can do this activity a few minutes every couple of days or spend about an hour on it one day.

### About

Can you think of what the most difficult tracking mediums are? Air and Water! You will see how wildlife in the air, freshwater and oceans are tracked by following along on a cool tracking adventure.

### Materials

- Computer or device with internet access (home, school, library)
- Wildlife observation
- Notebook

### Instructions

1. Choose a website with a species or individual to watch in real-time or take a look at an animated map of past animal movements. Some options are:
  - Go to The Center for Innovation in Engineering and Science Education website and look at a long list of national tracking projects (American based). For some suggested tracking projects to look at <http://ciese.org/nationalprojects.html>
    - The Sea Turtle Migration- tracking education program
    - Journey North: A Global Study of Wildlife Migration (monarch butterflies, whales, robins)
  - Go to The Ocearch Global Shark Tracker powered by CAT: <http://sharks-ocearch.verite.com/> to watch the tracked journeys of tagged sharks
2. Use your home computer or one at the local library.
3. Read how the animal is tracked and what technology is used.
4. This is an exercise of exploration! Explore!!
5. In your wildlife observation notebook make notes about any cool things you learn or the progress of your air or ocean wildlife. You may want to print off a map or two.
6. Stick with viewing the ocean tracking for the time from one club meeting to the next for the most rewarding learning.

**Option:** Your Leader may want to have you write a short free-form essay on the trek of your animal or how it is tracked to be included in your Record Book.

**Option:** Can you find another species that is tracked electronically and displayed online?

**Option:** Turkey Vultures are tracked from Saskatchewan to South America. Can you find maps of their progress with a little detective work? (key words: Dr. C. Stuart Houston, Nature Saskatchewan, turkey vulture tagging)

### Discussion/Questions

- What surprised you about the animal? How did the scientists track the species? What was the coolest thing you saw/learned?



## Activity 46

# Your Saskatchewan Animal Signs



**Time:** 10 minutes

### About

You have learned about 11 key Saskatchewan animals and their signs. Match the wildlife sign with the Saskatchewan animal that it probably came from to follow their trail!

### Materials

- Pen or pencil
- Your Saskatchewan Animal Signs Worksheet

### Instructions

1. Match the animal sign with one of the 11 key Saskatchewan animals you have learned about.

### Discussion/Questions

- Have you ever seen any of these animals? Where?
- Have you ever seen some of these animal signs? Where?
- If not, where might you look for them?

## Your Saskatchewan Animal Signs Worksheet

Write the name of the animal from the list below beside the correct sign.

Domestic Dog	Domestic Cat	Red Squirrel	Red Fox
Whitetail Deer	Black Bear	Deer Mouse	Raccoon
Coyote	Cottontail Rabbit	Gopher (Richardson's Ground Squirrel)	

- \_\_\_\_\_ sits high up in a tree and drops shells into midden piles.
- \_\_\_\_\_ when they run 2 dewclaws show up just slightly behind the print.
- \_\_\_\_\_ have 4 toes on each foot but often only the 2 middle toes show up.
- \_\_\_\_\_ prints look like an upside-down exclamation mark.
- \_\_\_\_\_ dig up insects and leave holes with lots of scratch marks.
- \_\_\_\_\_ footprints come in many different sizes with small shape variations.
- \_\_\_\_\_ sharp retractable claws that only extended to climb or kill prey.
- \_\_\_\_\_ bite off branches leaving ripped tips.
- \_\_\_\_\_ bite off twigs and buds at 45° angles.
- \_\_\_\_\_ make a soft ball sized covered nest with a side entrance.
- \_\_\_\_\_ small twisted scat is hard to find because they bury it.
- \_\_\_\_\_ scat the size and shape of a dull pencil lead.
- \_\_\_\_\_ scat is tubular – about the diameter of a fat hotdog.
- \_\_\_\_\_ leaves the smell of urine near or on the trail (smells skunky).
- \_\_\_\_\_ leaves footprint that looks like a little kid's handprint in the dirt.
- \_\_\_\_\_ in deep snow tracks look like two diamonds right next to each other.
- \_\_\_\_\_ likes to dig and burry things.
- \_\_\_\_\_ has lots of holes in the ground all in the same area.
- \_\_\_\_\_ in/out of its hole so much that track patterns are hard to figure out.
- \_\_\_\_\_ only member of the dog family that direct registers.
- \_\_\_\_\_ surprisingly can climb trees and can move at a very fast pace.
- \_\_\_\_\_ use their front paws like hands to open and close garbage cans.

## Activity 47

# *Animal Track Match*



**Time:** 10 minutes

### **About**

You will match the footprints to the eleven key Saskatchewan animals you have learned about. Matching common footprints with their owners will increase your confidence when you are out tracking.

### **Materials**

- Pen or pencil
- Animal Track Match Worksheet

### **Instructions**

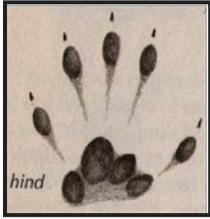
1. Match the footprints of the 11 key Saskatchewan animals with their owners.

### **Discussion/Questions**

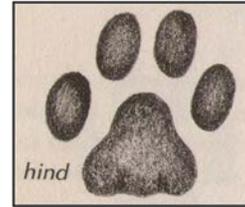
- This activity is to boost your confidence identifying tracks.

## Animal Track Match Worksheet

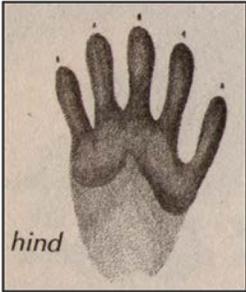
Match the footprint with the correct animal.



Raccoon



Black Bear



Red Fox



Cat

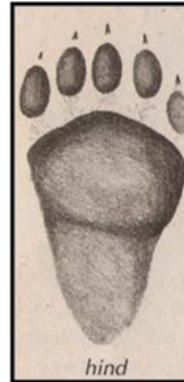


Red Squirrel

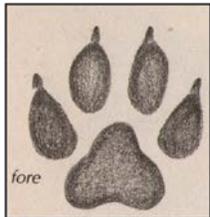


Coyote

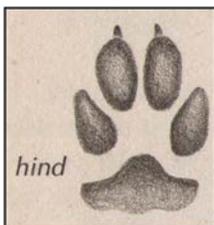
Richardson's  
Ground Squirrel



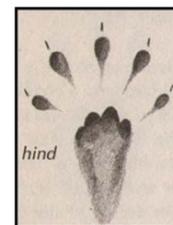
Deer Mouse



Cottontail Rabbit



Dog



## Activity 48

# Fox and Goose – Winter or Summer



**Time:** 30 minutes

### About

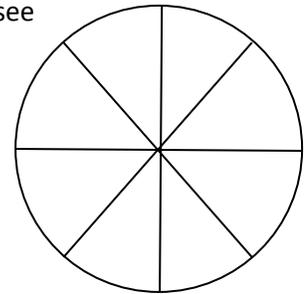
Fox and goose is a fun winter game where the geese must stay on the travel corridors but avoid being eaten. This game shows you just how tough it can be getting around in winter. But, it can be a lot of fun in the summer too!

### Materials

- Large outdoor area with pristine (or fairly pristine) snow. A backyard, empty lot, baseball field or school playing field is perfect with nothing beneath the snow to trip on. The deeper the snow the more fun the game can be!
- Warm clothes and good warm footwear for everyone
- Five to eight players are a good number

### Instructions

1. Your Leader will stomp out the playing field in the snow (see below for summertime playing field suggestions). **NO ONE** is to go off the playing field. The playing field is a circle with spokes and crosses in it (about 20 m). The more people (or older the players) the bigger the playing field should be (30 m+). It should be smaller for younger players. The playing field should look something like the image at right.
2. One 4-H member is designated as the fox. The rest of the 4-H members are geese. The fox and the geese must stay on the tracks. As soon as a goose is tagged they become the fox and the old fox becomes a goose!



### Alternative game rules:

1. The fox starts by standing in the centre of the circle (the hen house), and tries to tag any "goose" that strays from his safety zone. All other players are geese, who stand at various places along the outside circle. The geese try to make it to the hen house (centre) without getting tagged by the fox. The first goose to make it to the hen house

without getting tagged becomes the fox in the next round. (suggestion from: [escapadedirect.com](http://escapadedirect.com))

2. Have a safe zone. (suggestion from: [fun.familyeducation.com](http://fun.familyeducation.com))
3. Play it on the beach at low tide! (suggestion from: [fun.familyeducation.com](http://fun.familyeducation.com))
4. Play on a field and mark playing circle with track-and-field chalk.
5. Have more than one fox.
6. Have a 4 foot safe zone in the middle that fox can run through but not stop in and the geese can stop and rest in. (suggestion from: [grandmaideas.com](http://grandmaideas.com))
7. Instead of making a wagon wheel shape in the snow, make paths that go every which way. Paths that zig. Paths that zag. Paths that curve all over the place. This adds challenge to the chase! (suggestion from: [grandmaideas.com](http://grandmaideas.com))
8. Spray paint on the grass for playing in the summer. (suggestion from: [grandmaideas.com](http://grandmaideas.com))

### **Discussion/Questions**

Fox and Goose is not only a really fun game but has a lot of wildlife points in it. Think about it!

- There was an activity predator/prey relationship
- You only used travel corridors
- Those travel corridors were pretty important
- Tracking in the winter can be fun.

## Activity 49

# Winter Tracking Crossword



**Time:** 10 minutes

### About

This crossword puzzle will quiz you up on what you have learned about winter tracking.

### Materials

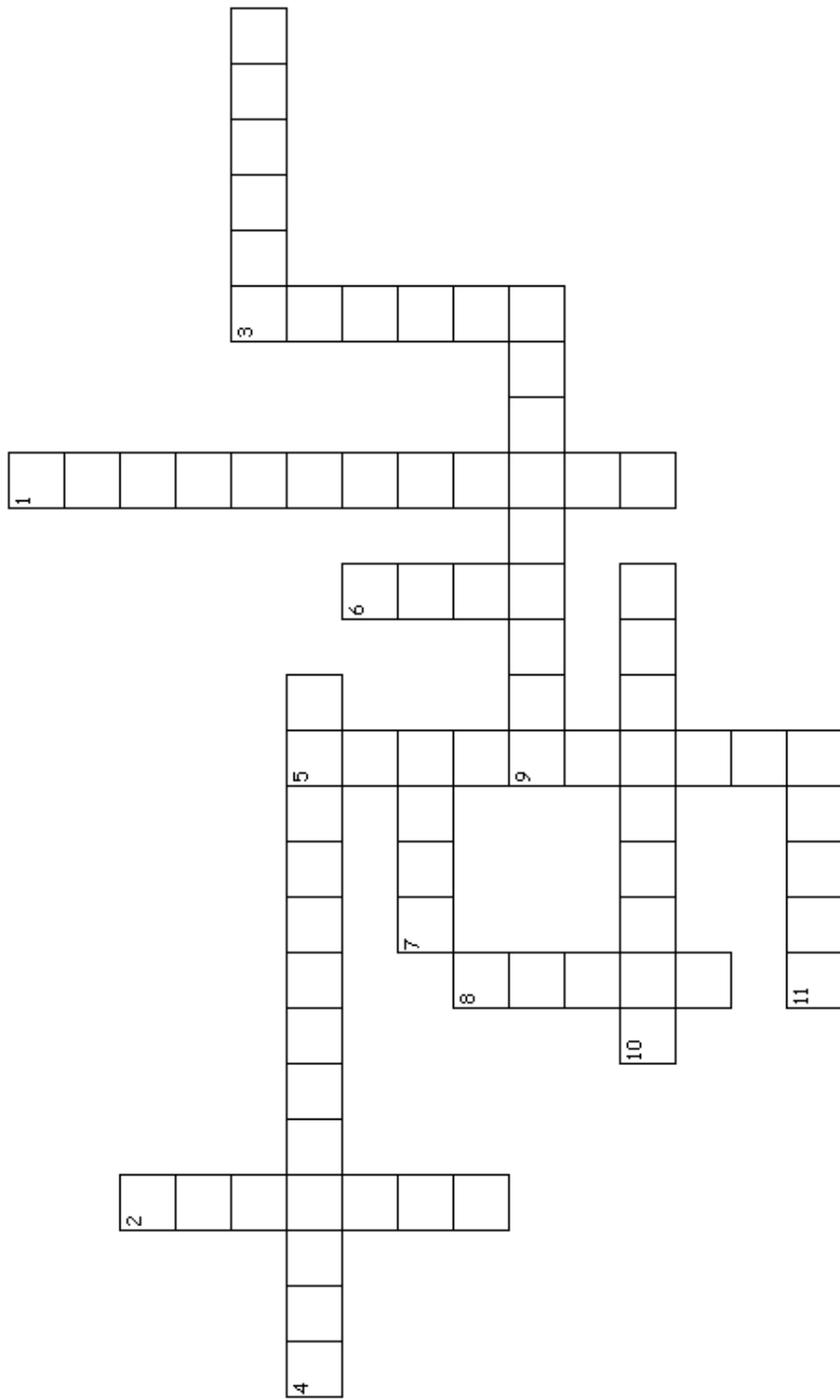
- Pen or pencil
- Winter Tracking Crossword Worksheet

### Instructions

1. Using what you have learned in the Winter Tracking Unit work through the winter tracking crossword.

### Discussion/Questions

- What things make you excited about tracking in the winter?
- What safety things do you think you will need to pay special attention to?
- Which habitats would you like to try tracking in? Which wildlife do you hope to find signs of in those habitats?
- Have you seen any specific winter wildlife signs ever? Which ones?



**Down**

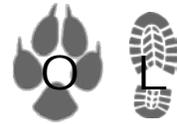
- 1) An animal is looking for a place to bed with \_\_\_\_\_ and good protection from the wind very close to food.
- 2) Weather can change \_\_\_\_\_.
- 3) An animal's goal during the winter is to expend as \_\_\_\_\_ energy as possible.
- 5) Fresh browsing is \_\_\_\_\_.
- 6) Ice can be \_\_\_\_\_.
- 8) \_\_\_\_\_ shows up fantastic against snow.

**Across**

- 3) Tracks often appear \_\_\_\_\_ than they really are.
- 4) Learning about \_\_\_\_\_ for winter tracking is so important because footprints become weathered in an extremely short amount of time.
- 7) \_\_\_\_\_ can absorb moisture from its surroundings making it swell up larger than it really is.
- 9) and 10) Look for rodent holes and places where \_\_\_\_\_ have pawed the ground or a \_\_\_\_\_ has gone digging looking for mice under the snow.
- 11) Food that was collected in the summer and early fall.

## Activity 50

# Winter Tracks Fallen Phrases Puzzles



**Time:** 15 minutes

### About

You will do fallen phrases puzzles with phrases that are key to trekking out on a winter tracking adventure.

### Materials

- Pencil
- Winter Tracks Fallen Phrases Puzzles Worksheet

### Instructions

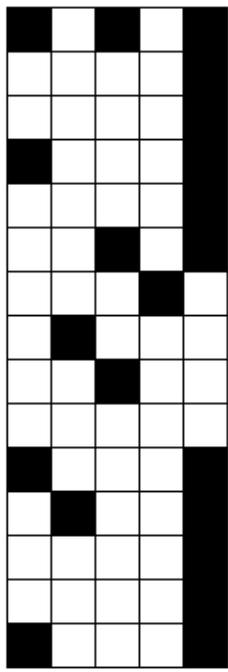
1. Take a letter from the column directly below the space to fill in the blanks and form words in a key winter phrase.
2. An example is provided.

### Discussion/Questions

- What parts of tracking in the winter are you looking forward to?

H	E	A	D	I	N	G		O	U	T		I	N	
T	H	E		W	I	N	T	E	R			C	A	N
B	E		L	O	T	S		O	F			F	U	N
			A	N	D		G	R	E	A	T			
			E	X	E	R	C	I	S	E				
			<del>I</del>		N		<del>O</del>		A					
			N	X	<del>M</del>	R		I	<del>U</del>					
<del>H</del>	<del>H</del>	<del>A</del>	E	O	E	S	R	O	S	<del>T</del>		A	N	
T	<del>E</del>	<del>E</del>	<del>D</del>	<del>W</del>	<del>T</del>	<del>S</del>	C	E	R	E	F	<del>U</del>	<del>N</del>	
B	E	A	L	D	I	G	T	E	F	T	C	<del>I</del>	<del>N</del>	

2

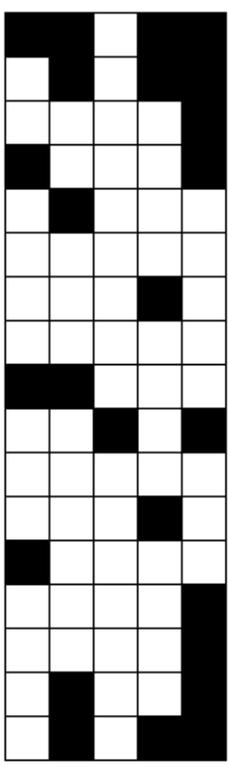


A crossword puzzle grid with black squares indicating non-letter positions. The grid is 10 columns wide and 10 rows high.

**Across:**  
 1. THYETUASC HANG  
 2. PRESTSLAMCSNGFS  
 3. CRINSA NRMT HNOEE

**Down:**  
 1. F  
 2. WORS H OW  
 3. T H

1

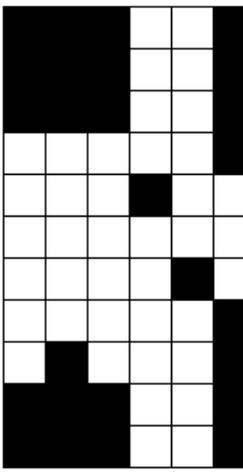


A crossword puzzle grid with black squares indicating non-letter positions. The grid is 10 columns wide and 10 rows high.

**Across:**  
 1. SEU LLE E O O L T T P S  
 2. S W M P N T L E N C R O C N I I E  
 3. U H U A L H Y D T W A O K T O S S

**Down:**  
 1. H  
 2. F  
 3. L  
 4. O R E T S  
 5. O U I A T

4

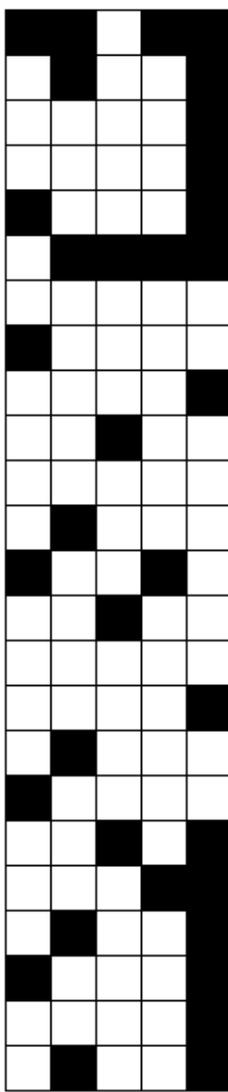


A crossword puzzle grid with black squares indicating non-letter positions. The grid is 10 columns wide and 10 rows high.

**Across:**  
 1. O A R A T  
 2. E Y F C K A  
 3. A R E R E S  
 4. L A R P A E E N L A Y  
 5. T H T G P T E R H L N

**Down:**  
 1. R

3



A crossword puzzle grid with black squares indicating non-letter positions. The grid is 10 columns wide and 10 rows high.

**Across:**  
 1. R I L L H A I P S T K A L S Y A E E T S A C  
 2. I I O T T H P T O A E E L L R G C S T H E T  
 3. W F N N T E F O E R M W A A O T I E S T H A N K

**Down:**  
 1. P  
 2. R

## Activity 51

# Summer Tracking Crossword



**Time:** 10 minutes

### About

This crossword puzzle will quiz you up on what you have learned about summer tracking.

### Materials

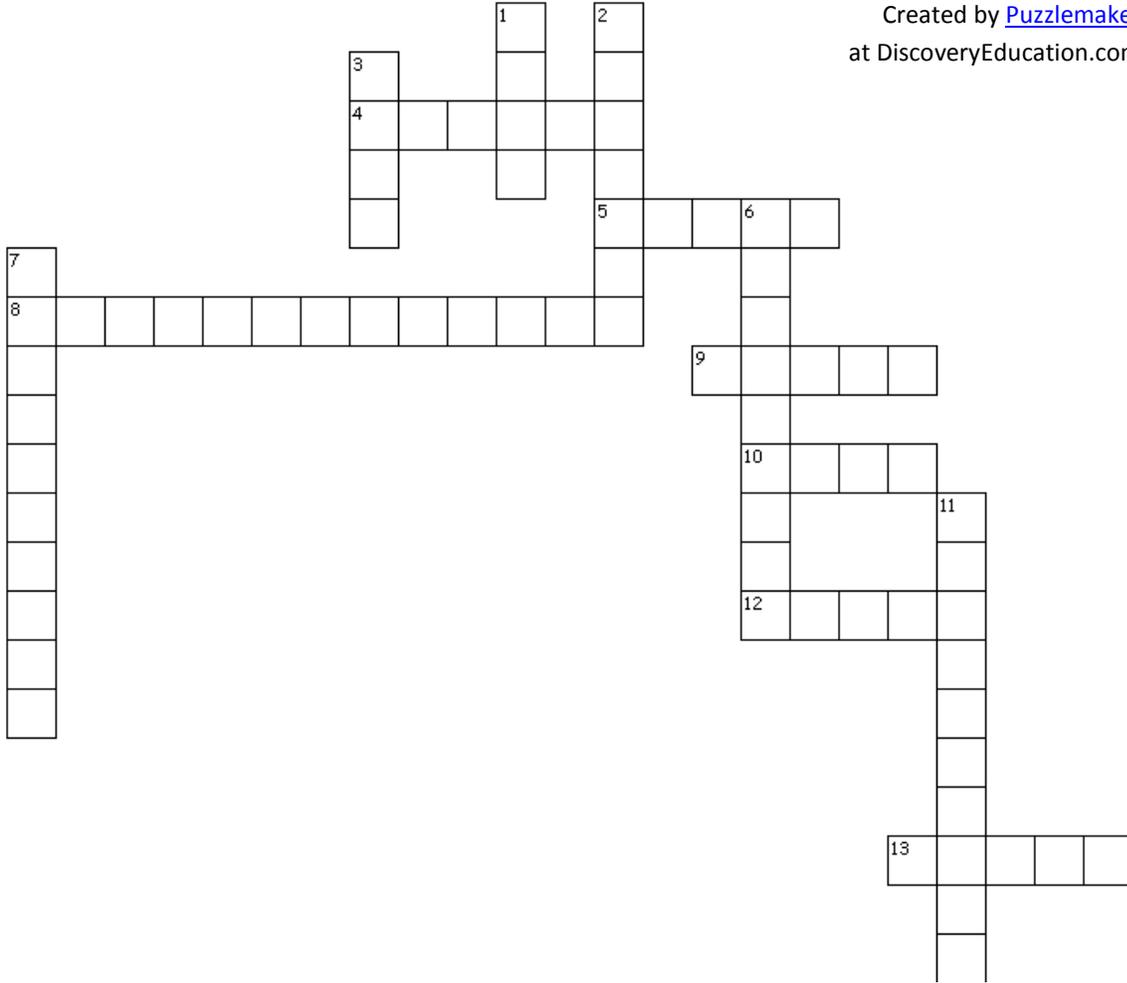
- Pen or pencil
- Summer Tracking Crossword Worksheet

### Instructions

1. Using what you have learned in the Unit on Summer Tracking work through the summer tracking crossword.

### Discussion/Questions

- What things make you excited about tracking in the summer?
- What safety things do you think you will need to pay special attention to?
- Which habitats would you like to try tracking in? Which wildlife do you hope to find signs of in those habitats?
- Have you seen any specific summer wildlife signs ever? Which ones?



**Down**

- 1) Carefully lift a \_\_\_\_\_ to see the imprint of tracks in the soft soil below.
- 2) Some animals may have access to \_\_\_\_\_ and eggs that are only available in the summer.
- 3) Dawn and \_\_\_\_\_ are the most active times of day for wildlife.
- 6) Flowing water, swift currents and thick muddy bottoms can be \_\_\_\_\_.
- 7) All mothers with young will be \_\_\_\_\_ of their babies.
- 11) Select the foods that are most \_\_\_\_\_.

**Across**

- 4) 10:30 a.m. until 3:00 p.m. – the most intense \_\_\_\_\_.
- 5) In the summer, animals such as squirrels, gophers, badgers, and red foxes will collect food and \_\_\_\_\_ it for later.
- 8) Mud around \_\_\_\_\_ is a great place to look for tracks.
- 9) Bed down close to the \_\_\_\_\_ during the heat of the day.
- 10) Grass might be slightly pushed \_\_\_\_\_ in the direction of travel.
- 12) Scat will be way looser and may land with a \_\_\_\_\_!
- 13) A set of large tracks with smaller tracks beside them are more than likely \_\_\_\_\_ on an outing with mom.

## Activity 52

# Summer Tracks Fallen Phrases Puzzles



**Time:** 15 minutes

### About

You will do fallen phrases puzzles with phrases that are key to trekking out on a summer tracking adventure.

### Materials

- Pencil
- Summer Tracks Fallen Phrases Puzzles Worksheet

### Instructions

1. Take a letter from the column directly below the space to fill in the blanks and form words in a key summer phrase.
2. An example is provided.

### Discussion/Questions

- What parts of tracking in the summer are you looking forward to?

	T	H	E		L	O	N	G		
C	O	L	D		W	I	N	T	E	R
I	S		O	V	E	R		A	N	D
	T	H	E		B	I	R	D	S	
A	R	E		S	I	N	G	I	N	G

~~T~~                      ~~B~~ ~~I~~    ~~A~~

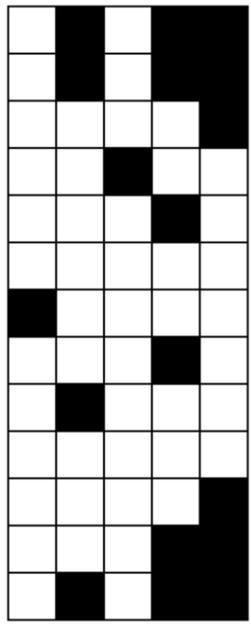
~~R~~ ~~H~~ ~~D~~            ~~E~~ ~~R~~ ~~R~~ ~~I~~ ~~S~~

~~A~~ ~~T~~ ~~L~~ ~~E~~            ~~W~~ ~~I~~ ~~N~~ ~~T~~ ~~E~~ ~~D~~

~~C~~ ~~S~~ ~~E~~ ~~E~~ ~~S~~ ~~L~~ ~~O~~ ~~G~~ ~~G~~ ~~N~~ ~~G~~

~~I~~ ~~O~~ ~~H~~ ~~O~~ ~~V~~ ~~I~~ ~~N~~ ~~D~~ ~~N~~ ~~R~~

1

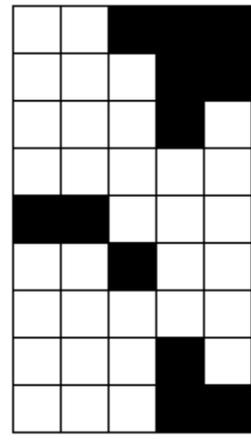


A crossword puzzle grid with 10 columns and 10 rows. Black squares are located at (1,2), (1,4), (1,6), (1,8), (1,10), (2,1), (2,3), (2,5), (2,7), (2,9), (3,2), (3,4), (3,6), (3,8), (3,10), (4,1), (4,3), (4,5), (4,7), (4,9), (5,2), (5,4), (5,6), (5,8), (5,10), (6,1), (6,3), (6,5), (6,7), (6,9), (7,2), (7,4), (7,6), (7,8), (7,10), (8,1), (8,3), (8,5), (8,7), (8,9), (9,2), (9,4), (9,6), (9,8), (9,10), and (10,1).

Word list for puzzle 1:

O R R P T B R V U T  
 A  
 R O N D I D R B S E L  
 C S N V I S I E L E S A Y  
 E A C A T E O R O A M E S

2

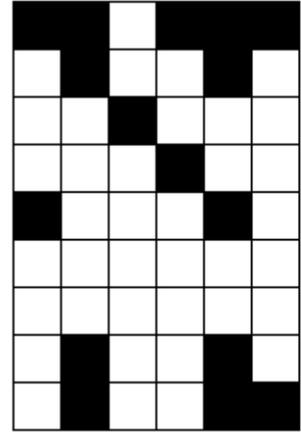


A crossword puzzle grid with 10 columns and 10 rows. Black squares are located at (1,2), (1,4), (1,6), (1,8), (1,10), (2,1), (2,3), (2,5), (2,7), (2,9), (3,2), (3,4), (3,6), (3,8), (3,10), (4,1), (4,3), (4,5), (4,7), (4,9), (5,2), (5,4), (5,6), (5,8), (5,10), (6,1), (6,3), (6,5), (6,7), (6,9), (7,2), (7,4), (7,6), (7,8), (7,10), (8,1), (8,3), (8,5), (8,7), (8,9), (9,2), (9,4), (9,6), (9,8), (9,10), and (10,1).

Word list for puzzle 2:

I O D S  
 L O A D S  
 B T N W C W N L  
 A N R N T K I R L  
 W I D S A I D T

3

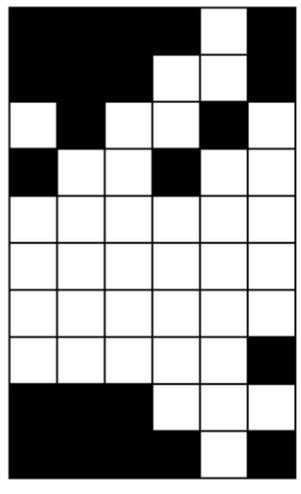


A crossword puzzle grid with 10 columns and 10 rows. Black squares are located at (1,2), (1,4), (1,6), (1,8), (1,10), (2,1), (2,3), (2,5), (2,7), (2,9), (3,2), (3,4), (3,6), (3,8), (3,10), (4,1), (4,3), (4,5), (4,7), (4,9), (5,2), (5,4), (5,6), (5,8), (5,10), (6,1), (6,3), (6,5), (6,7), (6,9), (7,2), (7,4), (7,6), (7,8), (7,10), (8,1), (8,3), (8,5), (8,7), (8,9), (9,2), (9,4), (9,6), (9,8), (9,10), and (10,1).

Word list for puzzle 3:

I N  
 A C C I  
 R U M K B E T  
 R A L R P R A D  
 S B O U R S E N  
 T L C A U S E N O

4



A crossword puzzle grid with 10 columns and 10 rows. Black squares are located at (1,2), (1,4), (1,6), (1,8), (1,10), (2,1), (2,3), (2,5), (2,7), (2,9), (3,2), (3,4), (3,6), (3,8), (3,10), (4,1), (4,3), (4,5), (4,7), (4,9), (5,2), (5,4), (5,6), (5,8), (5,10), (6,1), (6,3), (6,5), (6,7), (6,9), (7,2), (7,4), (7,6), (7,8), (7,10), (8,1), (8,3), (8,5), (8,7), (8,9), (9,2), (9,4), (9,6), (9,8), (9,10), and (10,1).

Word list for puzzle 4:

I A L  
 S G R T  
 I M B L L T  
 I I N D E N A  
 A S N L A C K O  
 V M O T H Y E B E F

## Activity 53

# *Agriculture and Wildlife – A Producer Perspective*



**Time:** 30 minutes to ½ day

### About

You will talk to a farmer or rancher about how they view wildlife and learn about the interactions their agricultural operation has with wildlife.



### Materials

- A producer to interview in person or on the phone (farmers and ranchers can be young, old, male or female!)
- Prepared list of questions (the worksheet can provide a starting point)
- Camera (optional)
- Tape recorder or video recorder (optional)
- Wildlife observation notebook

### Instructions

1. Find a producer to interview or ask a friend or neighbour who may know of someone.
2. Come up with a list of questions you would like to ask the farmer/rancher. Some suggestions are on the following worksheet to get you started. Ask questions that you are genuinely interested in knowing the answer to. Don't be afraid to ask questions on the spot based on what the producer is telling you or if there is something you want to know more about.
3. Ask the producer ahead of time when would be a good time for you both to chat in person or on the phone. Set up a time to have the interview.
4. Interview the producer. It may be helpful to make quick notes while they talk, but don't do so much writing that you can't enjoy your conversation. A tape recorder can be useful to go back and listen to answers again. Make sure to let the producer know if you are tape recording and that you are only using it so you can listen to their answers again.
5. Write down what the producer said (summarizing it in your own words is just fine).
6. Share what you have learned with your fellow 4-H members.
7. Send a thank-you note to the producer for their time. Make sure to mention one thing in particular that you enjoyed about your conversation with them.

**Option:** For an Achievement Day project or public speaking topic: Meet face to face with the producer and go on a tour of their operation to see how wildlife interact with the agriculture

operation. You can take photographs, draw pictures, record video or write a longer essay to build up this activity for Achievement Day. Before you share your interview at Achievement Day share it with the producer as a courtesy.

### **Discussion/Questions**

- Has your opinion on agriculture and wildlife changed at all... explain why or why not?
- Did anything really surprise you about your interview?
- Do you think agriculture should help wildlife more... why (and how) or why not?

## *Interview Questions: Agriculture and Wildlife – A Producer Perspective*

1. What is your favourite wildlife species? Why?
2. How do you think your operation benefits wildlife?
3. What is your most favourite wildlife story?
4. Do you do anything in particular for wildlife on your farm?
5. What does the word 'habitat' mean to you?
6. What do you want people who are not from a farm to know about farms, farmers, habitat and wildlife?
7. Where are the best places on your operation to see wildlife (which types of wildlife)?
8. Do you ever see wildlife tracks or signs on your farm? Tell me about it.

Come up with **at least** two to four more questions of your own.

## Activity 54

# Wildlife Professional Visit



*This is a good club activity to include in your Record Book*

**Time:** 30-60 minutes depending on how much time you have. Ensure that the guest speaker knows how long he/she has in advance of coming.

### About

You will learn what a wildlife professional in your area does. They can share some of their experiences with wildlife and why they enjoy wildlife.

### Materials

- Guest speaker
- Refreshments
- Computer and projector if the speaker needs
- Thank-you note

### Instructions

1. Before deciding on whom to approach to speak to your club, your Leader will ask you and the other members what sorts of things you would like to know or hear about. Are you interested in big game, birds, waterfowl, research, habitat enhancement, or conservation?
2. A list of possible organizations/individuals is listed at the end of the activity.
3. Invite a guest speaker to your club meeting. Most people need about a months' notice to make time for a presentation. Remember that many people in the wildlife field only present to adults on technical scientific information. Remind them of the age category of your members, how long you would like them to speak and give them general guidance on what you would like them to talk about. If they are doing a power point presentation, encourage them to use lots and lots of pictures and tell stories about their experiences or jobs.
4. As the guest speaker talks, come up with some questions you would like to ask at the end.
5. Your Leader should designate a member to thank the presenter at the end. A nice touch is to send a thank-you card afterwards or present the speaker with a small gift. A track cast made by your club is a really nice idea. A presenter that feels appreciated will be more likely to help out again!

## Discussion/Questions

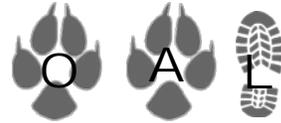
- Question the presenter about their career, the wildlife they work with and what parts of their job uses wildlife signs when the presenter is there.
- Afterwards as a group talk about:
  - What were your favourite parts of the presentation?
  - Were there things about the presenter's job that you didn't expect?
  - Were there things about their job you would like to do, things you wouldn't?
  - How do you feel the presenter uses wildlife signs?
  - What would be good to write about the presentation for your Record Book entry?

Possible contacts for presentations include:

- Canadian Wildlife Service (researchers, ecologists)
- Conservation Officers (Saskatchewan Environment)
- Water Security Agency (Species at Risk/habitat enhancement, wetland biologists/ecologists)
- Oil and Gas reclamation firms or Consultants
- Trapper
- First Nations Elder
- Hunter or Hunting Guide
- Ducks Unlimited Canada (habitat people & bird biologists)
- Agriculture Canada
- Professors
- Wildlife biologist (private consultant, teacher, tracker)
- Park Warden
- Zoo or wildlife park person
- Nature Saskatchewan
- Saskatchewan Wildlife Federation

## Activity 55

# Where to go from here? Further Exploration



**Time:** It will take members 1-2 hours to research their ‘Where to go from here’. For presenting to the group leave about 5 minutes/member.

### About

You will explore some of the neat things that await you with tracking (Chapter 7.4) including different fields of tracking. You will share what you have learned with the other members.

### Materials

- Computer with internet access, books, magazines, personal interviews
- Laptop and projector to show images in presentations (optional) for a small group and a PowerPoint projector might be needed for a larger group)
- Where to go from here? Further Exploration Worksheet

### Instructions

1. Pick one of the *Where to go From Here* ideas below or use one of your own.
  - Tracking camps/courses (many out of the northern USA)
  - Track plates
  - How to start a tracking club and how to develop tracking scenarios
  - Learning the art of stalking
  - Learn about other tracking elsewhere in the world
  - Learn about non-land tracking (whales, turtles, seals, fish)
  - Tracking birds (whooping cranes, turkey vultures, waterfowl)
  - Tracking with technology (GPS collars, radio frequency)
  - How are species at risk tracked? Which species at risk are tracked in Saskatchewan?
  - Choose one of the careers involving tracking and find out more
  - Learn about an elusive animal or an animal of great interest to you (tracks, signs, habitat)
  - Explore further how tracking is used in wildlife photography
2. You can do your research online, talk to someone in person or read books and magazine articles. You may want to capture images to show your fellow 4-H members (if this is the case a computer to look at the images might work well for a small group and a PowerPoint projector might be needed for a larger group).
3. The worksheet can help you find out the important points so that you are familiar with your topic.

**Option:** As a component of public speaking the Leader(s) may ask you to prepare public speaking on the 'where to go from here' topic you have. You are encouraged to use visual aids and add interesting facts and points to your speech.

### **Discussion/Questions**

- When the other members are presenting pay attention to their talk. Think of questions you would like to ask them at the end.

## *Where to go from here? Further Exploration Worksheet*

These questions can help you make sure you get enough information about your topic so that you can talk about your topic and answer any questions.

My Topic is: \_\_\_\_\_

I am interested in this topic because: \_\_\_\_\_

\_\_\_\_\_

When I started researching my topic I thought that I knew \_\_\_\_\_

but found out that really \_\_\_\_\_ .

The neatest thing I found out was \_\_\_\_\_

\_\_\_\_\_ .

My topic builds on/uses the skills I learned in the Wildlife Tracking 4-H project by (terminology you learned, techniques, etc...) \_\_\_\_\_

\_\_\_\_\_ .

Now that I have learned about my topic where will I go from here? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





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