THE OUTDOORS
FINS, FEATHERS, and FUR

Member’s Manual
Draft 2007

Manitoba Agriculture, Food and Rural Initiatives
www.gov.mb.ca/agriculture/
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 Quality Equation Principles
Quality People
Promote responsibility, respect, trust, honesty, fairness, sportsmanship, citizenship, teamwork and caring.

Quality Experiences
Provide members with personal development and skill development experiences.

Quality Projects
Promote and value quality effort.
Promote high quality, safe food production within industry standards.

Table of Contents

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Completion Requirements</td>
<td>3</td>
</tr>
<tr>
<td>Achievement Ideas</td>
<td>4</td>
</tr>
<tr>
<td>List of Activities</td>
<td>5</td>
</tr>
<tr>
<td>Project Evaluation</td>
<td>8</td>
</tr>
<tr>
<td>Fins</td>
<td>10</td>
</tr>
<tr>
<td>Feathers</td>
<td>30</td>
</tr>
<tr>
<td>Fur</td>
<td>44</td>
</tr>
<tr>
<td>Credits</td>
<td>59</td>
</tr>
</tbody>
</table>

Manitoba 4-H project material is cost-shared between Manitoba Agriculture, Food and Rural Initiatives and Agriculture and Agri-Food Canada.
THE OUTDOORS FINS, FEATHERS AND FUR
PROJECT COMPLETION REQUIREMENTS

For completion of this project, each 4-H members must:

- Spend a minimum of **12 hours** completing their chosen activities. Each activity is assigned an approximate time length to help plan and organize the activity. It is not necessary to take all of the activities in each theme or to take them in a specific order, unless the activity has a requirement activity.

- **Complete any “requirement” activities before attempting the new activity.** It is important to do the requirement activity first as it teaches skills needed to complete the more advanced activity.

- Guidelines are given for approximate age suitability for each activity. Keep in mind that these are only guidelines and may be adjusted according to individual skill levels. The **ACTIVITY**, suggested **AGE**, estimated **TIME** needed for the activity, **REQUIREMENTS** needed before beginning the activity, and the **LEARNING OUTCOME** will appear in a box like the one below.

  **ACTIVITY:** FIRE WITHOUT MATCHES
  **Age:** 14+  **Time:** $\frac{1}{2}$ hour for each method
  **Requirement:** Complete activity “Building a Campfire” before starting this activity.
  **Learning Outcomes:** To learn alternative ways of starting a fire when you have no matches.

- Leaders and members are required to initial each completed activity in the space provided at the end of the activity.

- Check off **completed activities** in the check box provided in the Activity Listing on Page 5/6.

- The Activity Talk and Member/Leader Initial Space will appear in a box like the one below.

  **Activity Talk:**
  Do you know how to use each of the items in the kit?
  Have you taken a first aid course?
  “Make a First Aid Kit” activity has been completed.
  Member’s Initials_______ Leader’s Initials_______
Choose different project activities for each year the project is taken.

Complete the My 4-H Record. (green sheet) Members are required to list the activities they completed in the “Project Meetings” section of My 4-H Record.

Participate in the Project/Club Achievement activities as decided upon by the project group. Ideas for Achievement are listed below.

IDEAS FOR ACHIEVEMENT

The project group can choose one of these ideas or come up with an idea of their own for Achievement, keeping in mind that the purpose of the “Achievement” is to celebrate what has been learned through the project. The celebration could include any of the following: items made, skills learned, a demonstration or presentation about your project or skills, or an outing where skills are actually put into practical use. The achievement could include community members, families, and friends.

If part of a multipurpose club, where other projects will be displaying their achievements, the Camping and Survival Skills could display items used or made in project work, set up a photograph display, or give demonstrations.

Invite friends, family, and community members to an outdoor cook-out and demonstrate some skills learned in the project.

Take an overnight or a several day backpacking or camping trip to practice some of the skills you learned in the project. Make a poster or a write-up for the local paper to inform them about your experiences.
# LIST OF ACTIVITIES
## FINS, FEATHERS AND FURS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>Age</th>
<th>Time</th>
<th>Page</th>
<th>Chosen Activities Completed/</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facts about Fish</td>
<td>9+</td>
<td>.5 hrs.</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Fishing Tackle</td>
<td>9+</td>
<td>1 hr.</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Goin’ Fishin’</td>
<td>9+</td>
<td>2 hrs.</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Filleting a Fish</td>
<td>11+</td>
<td>1 hr.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Canoe and Paddle Parts Relay</td>
<td>9+</td>
<td>.5 hrs.</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Canoeing Skills</td>
<td>11+</td>
<td>1 hr.</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Ice Fishing</td>
<td>9+</td>
<td>4-5 hrs.</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Boating Safety</td>
<td>16+</td>
<td>8 hrs.</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td><strong>FEATHERS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird Watching</td>
<td>9+</td>
<td>3-4 hrs.</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Making a Pine Cone Feeder</td>
<td>9-10</td>
<td>.5 hrs.</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Making a Covered Feeder</td>
<td>11+</td>
<td>2 hrs.</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Making a Milk Carton Bird House</td>
<td>9-10</td>
<td>9-10 hrs</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Making a Bird House</td>
<td>11+</td>
<td>2 hrs.</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Listening for Bird Calls</td>
<td>9+</td>
<td>.5 hrs.</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Making a Bird Call</td>
<td>9-10</td>
<td>.5 hrs.</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>All About My Favorite Bird</td>
<td>9+</td>
<td>2 hrs.</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>The Christmas Bird Count</td>
<td>11+</td>
<td>2 - 5 hrs.</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Migration Monitoring - Songbird Banding</td>
<td>14+</td>
<td>12 hrs.</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>Breeding Bird Survey</td>
<td>14+</td>
<td>4-5 hrs.</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td>Mentored Hunting Opportunities</td>
<td></td>
<td></td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>Age</td>
<td>Time</td>
<td>Page</td>
<td>Chosen Activities Completed:</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----</td>
<td>------------</td>
<td>------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>FURS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mammals of the Land</td>
<td>9+</td>
<td>1 hr.</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Animal Watch</td>
<td>9+</td>
<td>1-2 hrs.</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>Plaster Cast Tracks</td>
<td>9+</td>
<td>1 hr.</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>Judge Nature</td>
<td>9+</td>
<td>1 hr.</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Hunter Education Course</td>
<td>12+</td>
<td>2+ hrs.</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Big Game Hunting</td>
<td>12+</td>
<td>2+ hrs.</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Trapper Education</td>
<td>12+</td>
<td>8-12 hrs</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>Snowshoeing</td>
<td>9+</td>
<td>1-3 hrs.</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>Making Moccasins</td>
<td>11+</td>
<td>5-6 hrs.</td>
<td>54</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
PROJECT EVALUATION
FINS, FEATHERS, AND FURS

Please help us to make sure the 4-H program provides quality projects. Fill out this form as you work through the book. Your answers will be used to improve the project. After you are done your project, mail this form to:

Provincial 4-H Office
Manitoba Agriculture and Food
1129 Queens Avenue
Brandon, MB. R7A 1L9

Who are you? _____ member _____ leader _____ parent

1. Why did you choose to take this project? __________________________
_________________________________________________________________

2. What was the best part of this project? __________________________
_________________________________________________________________

3. In this book, what things were too hard or didn’t work? ______________
_________________________________________________________________

4. What are some neat ideas that would make this book more exciting?
_________________________________________________________________
_________________________________________________________________

5. Anything else you would like to tell us? __________________________
_________________________________________________________________

In case we need to find out more, you may want to add your name:

Name: ___________________ Phone #: ________ Email: ____________
WHAT IS A FISH?

- A fish is the oldest living vertebrate in the world. A vertebrate is made up of small pieces of bone or cartilage called vertebrae.
- A fish lives in water and breathes through gills.
- A fish is cold blooded – their body temperature is the same temperature as the water they are living in.
- A fish balances and moves itself with fins.
Common Manitoba Fish Species

- Walleye
- Yellow Perch
- Bullhead
- Sauger
- Burbot
- Channel Catfish
- Northern Pike
- Carp
- Smallmouth Bass
- Gudgeon
- Freshwater Drum
- Lake Trout
- Mooneye
- White Bass
- Brook Trout

Diagram courtesy of Manitoba Fisheries
Can you find the fish listed below in the Word Search?

Bass Burbot Carp Catfish Crappie
Drum Goldeye Mooneye Perch Pike
Sauger Sturgeon Sucker Trout Whitefish
Walleye

Activity Talk:
How many of the fish in the exercise have you seen? How is the fish body different from the human body? How is it the same?

“Facts About Fish” has been completed.
Member’s Initials______ Leader’s Initials______
Before you go fishing, you will have to get some basic equipment.

- You will need a fishing tackle box, a tough plastic container, or a metal can such as a coffee can to keep hooks and other equipment dry and safely stored.
- There are several kinds of rods to choose from. This diagram shows the basic rod.

- There are also several kinds of reels to choose from. This diagram shows the parts of a spin cast reel, which is a good reel for the beginner.

ACTIVITY: FISHING TACKLE

Age: 9+  
Time: 1 hour  
Learning Outcome: To learn about the basic fishing equipment and how it is used.

Diagrams courtesy of Kansas State University and Cooperative Extension Service
You will want to have a few different hooks. Most hooks have barbs on them when you buy them. Anglers must use barbless hooks, so you will have to use pliers to flatten the barb against the shaft of the hook. You may also want to use live bait which could include minnows and worms.

Other equipment could include bobbers or floaters to keep your hook from sinking to the bottom and sinker or split shot lead weights for holding your hook in a moving stream or getting your hook to go deeper into the water.

Diagrams courtesy of Kansas State University and Cooperative Extension Service
The line for your reel should be about 6 - 10 lb. weight for most fresh water fishing. You will also need leaders. One end of the leader is tied to the end of your line and the other end attaches to your hook. It's useful to learn the following knot for attaching your leader and line.

Diagram courtesy of Kansas State University and Cooperative Extension Service

- Hold the hook securely and put the end of the line through the eye of the hook.
- Still holding the hook, twist the free end of the line around the standing end of the line about six to eight times.
- Put the free end through the loop formed between the eye of the hook and the first twist.
- Bring the free end under the loop just formed by it, between the last twist and the hook eye.
- Holding both the free end of the line and the hook in one hand, and the fastened end of the line in the other, pull the knot tight. You have just completed an improved clinch knot. The free end of the line can now be trimmed, leaving a strong, neat knot.

Your tackle box should also include a first aid kit. You should be extra careful when handling hooks. If you need help making a first aid kit, check out the activity on “Making a First Aid Kit” in the Camping and Survival Skills Manual.
Can you find the words listed below in this fishing tackle word search?

Band Aids  Bugs  Floats  Jigs  Hooks
Knife  Line  Lures  Matches  Pliers
Sinker  Spoons  Swivels  Weights

Activity Talk: What does your tackle box look like? What kinds of fish do you hope to catch?

“Fishing Tackle” has been completed.
Member’s Initials_______  Leader’s Initials_______
**ACTIVITY: GOIN’ FISHIN’**

*Age*: 9+

*Time*: 2 hours

*Requirement*: Complete the “Fishing Tackle” activity so you have everything you need before going fishing.

*Learning Outcome*: To learn the skill of casting, and the principles of catch and release.

---

**Casting**

- You should first practice casting on land where you have plenty of space with no trees to catch your line in.
- Put a lead weight on your line instead of a hook.
- With your thumb holding down the thumb release button, and your line reeled in so that the leader is at the end of your rod, move your rod to the side and slightly behind you.
- With a quick snap of your wrist, bring the rod back around while releasing the release button.
- Practice until you can control the direction of your cast. Now you will be ready to replace the weight with a hook and start fishing!

---

The diagram shows a side cast.
Also try a vertical cast.
Point the rod toward the target, then bring rod toward your body allowing it to flex back over your head. Snap it forward again and release line.

Diagram courtesy of Kansas State University and Cooperative Extension Service
Fishing Tips

- Keep the line taut (no slack). If there is a lot of slack in your line, you won’t be able to respond properly when you get a bite. (You may not be able to tell the difference between a bite, a nibble or a nudge)
- Set the hook. Once the fish takes the bait in its mouth, give the line a quick, firm tug to set the hook in the fish’s lip. If you pull too hard, you’ll pull the hook right out of its mouth. Wait too long, and the fish will decide the hook tastes unwormlike and will spit it out.
- Play the fish. Even if the fish weighs just a few ounces and you have 12-pound test line, don’t force it out of the water. “Playing” a hooked fish-letting it struggle to get free - is a big part of the fun. But it’s also important for tiring out the fish so it can be landed. A fish that is still fighting when brought out of the water is more likely to be hurt when handled than a fish that has been tired out while you played it.

Catch and Release

If you want to eat the fish you catch, be sure to keep them cool in cold water or on ice until you are ready to clean them.

If you are not going to eat the fish, then release it back to the water. The fish has to be released properly or it will probably die.

- Be sure your hands are wet before handling a live fish - the thin protective coating on the fish’s body will stick to dry hands, exposing the fish to bacteria.
- With one hand, firmly hold the fish just behind its head, over its gill covers. Be careful not to touch its gills or eyes.
- Run the other hand down the line to the base of the hook.
- Gripping the hook by its shank, push the hook back through the hole in the fish’s lip.
- If the fish has swallowed the hook, cut the line. You’ll probably have ruined its appetite for a while, but the fish will still survive.
- Try to keep the fish in the water as you work at removing the hook.

Activity Talk:
Has your casting improved? What did you learn while fishing?

“Goin’ Fishin’ has been completed.

Member’s Initials_______ Leader’s Initials_______
When you fillet a fish, you cut the flesh away from the bones and skin. Be sure to keep your fish cool until you are able to fillet and either immediately cook or refrigerate it.

- It's very important to have a good fillet knife; one that has a long, thin, flexible blade, and is sharpened.
- Before you fillet the fish you will need to gut it (take out the internal organs). With the sharp point of the knife, cut the fish open on the underside from the mouth to the vent. Be careful not to puncture the internal organs. If you should accidentally cut open an organ, flush with cold water.
- Make the first cut behind the gill cover, but only until the knife touches the backbone.

Turn the fish the opposite direction and run the knife along the backbone and dorsal fin. Cut deep enough to bounce the knife along the top of the rib cage.

- When the knife blade no longer contacts the rib cage, push the knife through the width of the fish. The blade will exit on the bottom near the vent. Continue along the back until the fillet is cut off at the tail.
- Remove the skin from the fillet by inserting the knife at the tail, and cutting the meat from the skin. Hold the fillet in place by pressing down on the skin with your thumb.

- Repeat the same steps on the other side of the fish.

Activity Talk:
What was the most difficult part of filleting?
When you ate your fillets, were there many bones in it?

"Filleting a Fish" has been completed.
 Member's Initials_______ Leader's Initials_______
ACTIVITY: CANOE AND PADDLE PARTS RELAY

Age: 9+  Time: 1/2 hour group activity

Learning Outcome: To learn the different parts and the purpose of the parts.

Instructions:
Learn the parts of the canoe and paddle by studying the diagram below.

Set out a canoe and paddle or enlarge these diagrams and post

- Make two lines 25 m from the canoe and paddle.
- The leader calls out a part of the canoe or paddle.
- The first member in each line run to the canoe and paddle and touch the part that was called.
- They run back to their team and tag the next person in line.
- The leader says the next part and the next two go. This continues until all members have had a turn.

Activity Talk:
Why is important to know the parts of the canoe and paddle? Did your group work as a team to help each other in the race?

"Canoe and Paddle Parts Relay" has been completed.
Member's Initials______ Leader's Initials______
What to Wear:
- A life jacket (PFD) certified by the Canadian Department of Transportation (DOT).
- Shoes should be worn in case you have to get out on a rocky shore.
- Hat and sunscreen.

Canoeing Safety Gear:
- An extra paddle.
- A bailer (in case your canoe leaks or gets swamped by a wave).
- A whistle or horn.
- Painters - the buoyant rope (will float), tied to the tip of the boat.
- A flashlight if you are paddling after dark.
- A first aid kit.

Getting In and Out of the Canoe
- Decide who will be in the bow and who will be in the stern.
- If you are launching from a dock:
  - The bow person steps into the center of the canoe while the stern person holds and steadies the canoe by holding the gunnels.
  - The bow person lays their paddle across the gunwales and slides it along while keeping their weight low moving toward their seat.
  - When the bow person is seated they can hold the dock while the stern person gets in.
  - To get out do the same process in reverse.

ACTIVITY: CANOEING SKILLS
Age: 11+  Time:  1 hour
Requirement: Complete the activity “Canoe and Paddle Parts Relay” before beginning this activity.
Learning Outcome: To learn about the safety equipment, and how to get in and out of the canoe safely. To learn the basic strokes of canoeing.
If you are launching from a beach:

• The canoe is placed with the stern part on the beach and the bow end in the water.
• The stern person steadies the canoe by sitting on the deck plate.
• The bow person steps into the center of the canoe at the stern end and lays their paddle across the gunnels and slides it along while keeping their weight low, moving toward their seat.
• When the bow person is seated and their paddle is in the ready position, the stern person puts one foot in the canoe and pushes off the beach.
• To get out do the same process in reverse.

Canoe Strokes:

• Paddlers should always be paddling on opposite sides of the boat.

Moving forward – the forward stroke.

• Grip the paddle with one hand on the butt and one hand on the neck close to the blade.
• Put the paddle in the water in front of you, alongside the canoe, close to your knee.
• Pull the paddle back to your hip in a straight line. This will catch the water on the blade of your paddle and move forward.
• Bring your paddle out of the water and swing it toward the bow, repeat the stroke at a steady pace to propel your canoe.
• The person sitting in the bow does this stoke most of the time.

Moving forward – the J stroke

• This stroke is used to keep the canoe traveling in a straight line while moving forward - it is done from the stern of the boat.
• Begins exactly like the forward stroke, but instead of removing the paddle from the water at the hip, the paddler moves the blade out away from the canoe so it appears they have traced a J in the water.
• The stern person may do the J stroke every time or every few strokes depending on the wind, water and abilities of the bow paddler.
- **Turning the canoe - the draw**
  - This stroke is used to turn the canoe the direction that the bow paddler is paddling. It can be done by the stern person or by both the stern and bow paddlers if a quick turn is needed.
  - Extend the paddle out so the blade is parallel to the gunwale and the blade enters the water at a 90 degree angle. Slip the blade into the water and pull toward the gunwale, remove the paddle from the water and repeat the stroke until the canoe is facing the direction you would like to go.

- **Turning the canoe - the push away**
  - This stroke is used to turn the canoe opposite to the direction that the bow paddler is paddling on. This can be done by the stern person or by both the stern and bow paddlers to turn quickly.
  - The paddler starts with the blade in the water parallel and next to the canoe.
  - Move the blade away from the canoe keeping it parallel.
  - Remove the paddle from the water and repeat the stroke until the canoe is facing the direction you would like to go.

**Activity Talk:**
Did your canoe members communicate effectively? How?
What have canoes been used for in the past?

"Canoeing Skills" has been completed.
Member's Initials_______ Leader's Initials_______
Fishing doesn’t have to end when the water freezes over. Be adventurous, bundle up, and try fishing in a whole new way – through the ice! When you ice fish, you don’t have to cast – your line just has to be dropped into the hole in the ice. Best of all, there are no mosquitoes or flies to bother you. Take along some snacks and a warm drink to help keep your energy up.

**Dress for the Weather**
- Dress in layers. You can always take clothing off if you are too warm, but you can’t put more clothes on if you don’t have them.
- Wear something against your skin that resists moisture. You may sweat while you are walking across the lake or digging your hole and getting set up. If your under layer becomes wet you will feel cold once you sit for a while.
- Take an extra pair of socks and mitts in case the ones you are wearing get wet.
- Wear warm, insulated boots.
- Take sun glasses for the glare off the ice and snow.

**Stay on Top of It!**
- Be sure the ice is safe. It should be at least 4 inches thick. Check ice conditions before heading out, and follow a path if there is one.
- Ice thickness can vary – check more than one spot.
- If you are using a snowmobile, the ice needs to be thicker.
- Remember this rule: “Thick and blue, tried and true. Thin and crispy, way too risky.”
- Check the weather forecast before you leave, and tell someone where you are going.

**Ice Fishing Tools**
- A toboggan or sled is a good way to haul equipment onto the ice.
- An ice auger is a tool for drilling your fishing hole in the ice.
- A skimmer is used for scooping out slush or ice chips from your fishing hole.
- Ice Chisel, which is also called a spud can be used for chopping holes early in the season when the ice is thinner.
- You could use a bait bucket for bait such as minnows.
**Ice Fishing Tackle**

- **A Jigging Rod** is a light, flexible rod used for fish like walleye. A short, firmer rod is better for fish like perch.
- **A stationary or set-line** can be made with a 3 foot slender willow or dogwood branch anchored in the frozen slush, centered over the hole.
- If you use a **Tip-up** you will know when a fish is on your line. A flag tips up when the fish strikes.
- Small number **10 or 12 barbless hooks** are good for panfish like small trout, short shank **number 3 hooks** are good for walleye, and northern pike go for large **2/0 to 6/0 hooks**. Other popular jigging spoons are Luhr Jensen Crippled Herrings, Mr. J’s Swedish Pimples and Williams Whitefish.
- **Lures** - Teardrop lures with live bait work well for panfish.
- Walleyes can sometimes be caught on minnow imitation **jigs**.
- You will want to use a **light monofilament line** (thin plastic for cold weather), with a **2 to 4 pound test** for panfish, and a **10 pound test line** for bigger fish.
- **Floats** and sinkers.
- Your **leader** (short wire that the hook is attached to) should be an **8 – 12 pound** test depending on the size of fish you are fishing for.
- **Pliers** for removing hooks.

**Sit Back, Relax, and Fish**

- Make the hole with your auger (or get an adult to help you if necessary). First clear the area of all snow, and then apply pressure to the top of the auger while turning. Use the skimmer to get rid of the ice chunks and slush.
- Attach your leader and hook/bait (if you are using bait) to your rod or set line.
- Attach the Tip-up and lower your line into the hole.
- You may want to experiment with different depths. Floats and sinkers will be helpful for holding your line at a certain depth.
- Sit back on your chair or pail and wait for the tip-up to move.

**Activity Talk:**
Did you catch fish - what kind? What was the most difficult part?

“**Ice Fishing**” has been completed.

Member’s Initials_______ Leader’s Initials_______
AGE RESTRICTION FOR OPERATION OF PWCs (pleasure water crafts)

Only persons 16 years of age or older are legally entitled to operate a PWC. These operators are subject to the Proof of Operator Competency law. A passenger under 16 must be supervised by an operator who meets the age and proof of competency laws.

PROOF OF OPERATOR COMPETENCY is now a legal requirement in Canada for all persons born after April 1, 1983, to operate a recreational boat with a motor. This includes Personal Watercraft, such as jet skis, Sea-Doos, etc.

BY SEPTEMBER 15, 2002, all operators of PWCs (16 years old or more), must also have Proof of Competency.

Proof of Competency must be carried at all times during the operation of any power boat, including PWCs. It can be demonstrated in any one of 3 ways:

- By showing a Pleasure Craft Operator Card which can be obtained by passing a boating test approved by the Canadian Coast Guard. The test is comprised of 49% knowledge elements and a passing mark is 75%. Upon passing the test, the boater is issued a Pleasure Craft Operator Card which is good for life.
- By showing proof of having taken a boating safety course prior to April 1, 1999.
- By showing a completed rental boat safety checklist, in the case of rented PWCs.

MANDATORY SAFETY EQUIPMENT. The following list indicates the minimal safety equipment required by law in the operation of a PWC on Canada’s waterways:

- Vessel license (Make sure your PWC is properly licensed and marked!)
- Canadian-approved personal flotation device (PFD) or lifejacket of appropriate fit for each person on board (Choose a bright one for best
visibility.) Inflatable PFDs are not approved for personal watercraft activities.

- Buoyant heaving line (15 m).
- Watertight flashlight or 3 Canadian-approved flares of type A, B or C.
- Sound-signaling device.
- Manual propelling device or anchor with not less than 15 m of cable, rope or chain*.
- Bailer or manual pump*.
- Fire extinguisher (Class 5 BC)*.
- *If all people on board are wearing Canadian-approved PFDs of appropriate fit, then the last three items are not mandatory.

THE BOATING SAFETY – ONBOARD PROGRAM will help you learn how to meet the new requirements, and to learn new boating safety practices.

You can contact the Canadian Red Cross for more information at 1-877-356-3226 or at www.redcross.ca.

Activity Talk:
Did you do the Boating Safety course online, as a home study, or in a classroom setting?
What did you learn that you were unaware of before?

“Boating Safety” has been completed.
Member’s Initials_______ Leader’s Initials_______
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird Watching</td>
<td>32</td>
</tr>
<tr>
<td>Making a Pine Cone Feeder</td>
<td>35</td>
</tr>
<tr>
<td>Making a Covered Feeder</td>
<td>35</td>
</tr>
<tr>
<td>Making a Milk Carton Bird House</td>
<td>37</td>
</tr>
<tr>
<td>Making a Bird House</td>
<td>38</td>
</tr>
<tr>
<td>Listening for Bird Calls</td>
<td>39</td>
</tr>
<tr>
<td>Making a Bird Call</td>
<td>39</td>
</tr>
<tr>
<td>All About My Favorite Bird</td>
<td>40</td>
</tr>
<tr>
<td>The Christmas Bird Count</td>
<td>40</td>
</tr>
<tr>
<td>Migration Monitoring--Songbird Banding</td>
<td>41</td>
</tr>
<tr>
<td>Breeding Bird Survey</td>
<td>42</td>
</tr>
<tr>
<td>Mentored Hunting Opportunities</td>
<td>43</td>
</tr>
</tbody>
</table>
BIRDS

Birds can be found in every country of the world. Some are very small, and some are larger than a person. Birds can be found in deserts, jungles, the frozen north, prairies, on mountains and on lakes and oceans. Many birds fly, but some don’t fly. Some can swim and some have very large strong claws on their feet. Birds come in many sizes and shapes, but they all have one thing in common - they all have feathers. The diagram below shows the different parts of this bird.

Photo courtesy of Alberta Junior Forest Warden Association
Use the following Six "S" System for identifying birds. Try to find at least six different birds. A bird book and binoculars would be helpful for this activity.

1. **Sight:** The colors, markings, bill and foot of each bird is unique.
   - Plumage is the first thing you notice on most birds. Slight changes in color can signify a different species. Look for color changes during different seasons as well.
   - Bills vary in shape with different birds. Noticing the shape of the bill helps with identification.
   - Feet help in identification.

2. **Shape:** Many birds are grouped by their shape; for example, ducks and hawks.

3. **Size:** The size of a bird aids identification. A small thrush is easily distinguished from the larger hawk.

4. **Sound:** Songs tell a difference. Many birds sing and each one has its own song or sound. Sometimes just hearing a bird's song can lead to identification. Listen to the robin's song; listen to a meadowlark. Is there a difference? Try and remember each one's song.

5. **Site:** Where you find the bird. Each bird has preferred habitat areas where it is usually found.

6. **Season:** The time of year that you are most likely to find some bird.

Activity courtesy of Alberta Junior Forest Warden Association.

On the following clue pages, write down as much information as possible about each bird you see, and either sketch a picture or attach a photo of each bird.

**Activity Report:**
Which bird were you able to get the closest to?
Did you hear any of the birds sing?

"Bird Watching" has been completed.

Member's Initials_______ Leader's Initials_______
<table>
<thead>
<tr>
<th>SHAPE:</th>
<th>SIGHT:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feathers:</td>
</tr>
<tr>
<td></td>
<td>Feet:</td>
</tr>
<tr>
<td></td>
<td>Beak:</td>
</tr>
<tr>
<td></td>
<td>Wings:</td>
</tr>
<tr>
<td></td>
<td>Markings:</td>
</tr>
<tr>
<td>SIZE:</td>
<td>SOUND:</td>
</tr>
<tr>
<td>SITE:</td>
<td>SEASON:</td>
</tr>
<tr>
<td>WHAT AM I?:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHAPE:</th>
<th>SIGHT:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feathers:</td>
</tr>
<tr>
<td></td>
<td>Feet:</td>
</tr>
<tr>
<td></td>
<td>Beak:</td>
</tr>
<tr>
<td></td>
<td>Wings:</td>
</tr>
<tr>
<td></td>
<td>Markings:</td>
</tr>
<tr>
<td>SIZE:</td>
<td>SOUND:</td>
</tr>
<tr>
<td>SITE:</td>
<td>SEASON:</td>
</tr>
<tr>
<td>WHAT AM I?:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SHAPE:</th>
<th>SIGHT:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feathers:</td>
</tr>
<tr>
<td></td>
<td>Feet:</td>
</tr>
<tr>
<td></td>
<td>Beak:</td>
</tr>
<tr>
<td></td>
<td>Wings:</td>
</tr>
<tr>
<td></td>
<td>Markings:</td>
</tr>
<tr>
<td>SIZE:</td>
<td>SOUND:</td>
</tr>
<tr>
<td>SITE:</td>
<td>SEASON:</td>
</tr>
<tr>
<td>WHAT AM I?:</td>
<td></td>
</tr>
</tbody>
</table>
ACTIVITY: MAKING A PINE CONE FEEDER
Age: 9-10  Time: ½ hour
Learning Outcome: To learn a simple method for feeding birds while using natural materials.

You will need a large pine cone, peanut butter, string, butter knife, shallow pan, and birdseed.

- Use the knife to spread peanut butter all over the pinecone.
- Place a layer of birdseed in the shallow pan.
- Roll the pinecones in the birdseed until all of the peanut butter is covered.
- Tie the string around one end of the pinecone, and hang them in an area where you would like to attract birds.

ACTIVITY: BUILDING A COVERED FEEDER
Age: 11+  Time: 2 hours
Learning Outcome: Learning to measure, cut, and assemble a bird feeder made of wood.

Back 16" x 10"
1 Front 2" x 10"
1 Roof 12" x 12"
2 Sides 12" x 10"
1 Bottom 10" x 10"
Directions for Making the Bird Feeder

1. Cut the wood to the dimensions in diagrams. You can have the lumber yard cut the pieces if you want.
2. For the feeder sides, just make sure the back height is 12" and the bottom length is 10". Measure up 1.5" for the bottom front. From the top back corner, measure down 8" with about a 70 degree angle. This is NOT an exact angle; just get it approximately 70 degrees. This will slope the roof. Find something round and use it to trace around from the end of the 8" to the top of the 1.5" at the front.
3. Attach the back to the bottom of the feeder, using wood glue and either wood screws or nails.
4. Attach the sides to the bottom and back pieces, using wood glue and either wood screws or nails.
5. Attach the front to the sides and bottom pieces, using wood glue and either wood screws or nails.
6. Attach the roof to the back and side pieces, using wood glue and either wood screws or nails. You may miter the back of the roof piece to make it fit flush against the back. If you do not miter the back of the roof piece, use silicone caulk to keep the rain from dripping into the feeder.
7. Drill a hole in the center of the back, near the top.
8. Stain, paint or put a finish on the outside of the feeder if desired.
9. Hang your feeder and fill it with food.

Activity Talk:
Which bird feeder did you make?
What kinds of birds visit your feeder?
“Making a Pine Cone/Covered Bird Feeder” has been completed.
Member’s Initials_____ Leader’s Initials______

36
ACTIVITY: MAKING A MILK CARTON BIRD HOUSE
Age: 8-10  Time: 1 hour
Learning Outcome: To understand that bird houses can be made from everyday materials. To make a house that fits in with the surroundings.

You will need a two litre milk carton, stapler, brown shoe polish, paper towels or a rag, masking tape, wire, and a pencil.

Directions:

- Get an empty paper 2 litre milk carton. Open up the top of the carton and wash and rinse it thoroughly. Let it dry.
- Re-close the milk carton and staple it shut.
- Using a roll of masking tape, tear off 1-2” pieces of the tape and cover the entire milk carton. Overlap the pieces so that none of the carton shows.
- Get brown shoe polish and a paper towel or rag. Rub the polish over all of the tape to make it look like brown bark. Let it dry thoroughly.
- Decide what type of bird you want to use the birdhouse. Cut the entrance hole in the birdhouse so that it is big enough for the bird you have in mind.
- Using a pencil, make several holes in the bottom of the carton for any rain to drain out. Also make several holes in the top of the carton to let heat and condensation escape.
- Make a hole through the top of the house near the staples. Put a short piece of wire (perhaps from a clothes hanger?) through the hole to make a loop. Hang the birdhouse on a tree branch.

Activity Talk:
What kind of bird do you hope will use your house?
Did the brown shoe polish make it look like bark?

“Making a Milk Carton Bird House” has been completed.
Member’s Initials______ Leader’s Initials______
Activity: Making a Bird House

Age: 11+  Time: 2 hours

Learning Outcome: To practice wood working skills. To create a quality nesting box for birds.

1. Cut the wood as shown in the diagram. Everything can be cut from a 6 ft. 1"x6" piece.
2. Cut the front entrance hole. This is an oval shaped hole that is 1 3/8" wide and 2 1/4" long. To begin cutting this hole, mark the dimensions on the front. Then drill one 1 3/8" circle at the top. Repeat at the bottom of the hole, overlapping the drilled holes.
3. Drill two small holes near the top of each side for ventilation.
4. Drill four small holes on the bottom for drainage.
5. Using finishing nails or wood screws, secure one of the sides to the bottom. Then secure the front and back to the same side.
6. Slip the 2nd side into place. Secure using two nails, one near the top on each side. These nails will be pivots so make sure they are across from each other.
7. Reach inside the box and push the bottom of the 2nd side outwards, making sure it can pivot outwards. If it is too tight, remove the nails and sand the edges so it is a bit smaller. Repeat until the 2nd side will pivot outwards.
8. Screw the eye screw near the bottom of the 2nd side. This screw is to make it easier for you to open the box occasionally to monitor it as well as to clean it out at the end of the season.
9. Drill a small hole through the front near the bottom into the 2nd side. Push a bent nail into the hole to keep the 2nd side closed. If you wish, use a small wood screw instead of the nail.
10. Nail or screw the roof to the nest box.
11. Mount the nest box to a pole, fence post, or tree.

Activity Talk:
What kind of bird do you think your house would be best for? Why?

"Making a Bird House" has been completed.

Member’s Initials______ Leader’s Initials______
Listening for bird calls can help you to become more aware of the birds and sounds around us and to appreciate nature. Pick a spot (forest, park, meadow) away from traffic and crowds of people.

- Lie down on your back and relax.
- Listen to the environment around you for different bird calls.

**Activity Talk:**

How many different sounds did you hear? Do you know what they were?

*"Listening for Bird Calls"* has been completed.

Member’s Initials______ Leader’s Initials______

---

**ACTIVITY: MAKING A BIRD CALL**

**Age:** 9-10  
**Time:** ½ hour  
**Learning Outcome:** To try to attract birds by sound, using your own bird call.

To attract birds by sound, try making this bird call. You will need 2 popsicle stick, blades of grass and an elastic band.

- Sandwich grass blades between two popsicle sticks.
- Secure one end of the popsicle sticks with an elastic band.
- Blow into the popsicle sticks as if you were playing a harmonica.
- Keep repeating the same rhythm.

**Activity Talk:**

Did any birds answer your call? Could you identify any of the birds?

*"Making a Bird Call"* has been completed.

Member’s Initials______ Leader’s Initials______
Learn as much as your can about your favorite bird in the world. Report on your bird by using the following headings:

BEAK   FEET   COLOR   SIZE   WHERE IT LIVES   WHAT IT EATS
NEST OR HOME   COLOR OF EGGS   NUMBER OF EGGS
A PICTURE OR SKETCH   SOUND OR SONG

Activity Talk:
Did you learn anything new about your favorite bird? What do you think your bird’s best feature is?

“All About my Favorite Bird” has been completed.
Member’s Initial______ Leader’s Initials______

Start a new Christmas tradition on your own or with your group or family.

In 1900 an American ornithologist, Frank Chapman asked birders across North America to go out on Christmas Day and count the birds in their home towns and submit the results. This has become one of the biggest organized birding events in the world with over 50,000 birders each year. Participants include amateur and skilled birders and naturalists. Knowledge of birds by sight and song is required.

The Christmas Bird Count fits very well with the mission of Bird Studies Canada, which is “to advance the understanding, appreciation and conservation of wild birds and their habitats, in Canada and elsewhere, through studies that engage the skills, enthusiasm and support of its members, volunteers, staff and the interested public.”

ACTIVITY: THE CHRISTMAS BIRD COUNT
Age: 11+   Time: 2-5 hours
Learning Outcome: To better understand the birds that live in your area during the winter. To enjoy birds with other people.

ACTIVITY: ALL ABOUT MY FAVORITE BIRD
Age: 9+   Time: 2 hours
Learning Outcome: To learn from research all aspects of your favorite bird.
Participation in the count includes:
- Picking a day between December 14 and January 5\textsuperscript{th} to do the count.
- Setting a 24 km diameter circle as your counting area.
- Recording types and numbers
- Submitting information

For more information phone 204-943-9029 or email dickcannings@shaw.ca

The web site can be viewed at \url{www.audubon.org/bird/cbc/}

Activity Talk:
How many birds did you see? How many different species of birds did you count?

“The Christmas Bird Count” has been completed.
Member’s Initials______ Leader’s Initials______

ACTIVITY: MIGRATION MONITORING – SONGBIRD BANDING

Age: 14+ Time: 12 hours
Learning Outcome: To gain a better understanding of Manitoba songbirds by volunteering to help with the annual monitoring program, and to learn new skills by apprenticing to catch, band, and count program birds.

The Delta Marsh Bird Observatory monitors songbird migration annually. Training for songbird banding is provided to volunteers who can commit time on a regular, ongoing basis. Banding is an acquired skill and volunteers must apprentice prior to handling birds. Duties include removing birds from mist net, banding and recording daily bird counts. A workshop is held annually in April.

For more information contact Heidi den Haan at 204-239-4287, or email her at hdenhaan@cc.umanitoba.ca. Delta Marsh Bird Observatory website is \url{www.dmbo.org}.

Activity Talk:
What did you like best about your apprenticeship? Would you like to do it again?

“Migration Monitoring–Songbird Banding” has been completed.
Member’s Initials_____ Leader’s Initials_____
The Breeding Bird Survey is conducted each year at the height of the breeding season (June and the first week of July). Volunteers should be able to identify birds by sight and song and commit to a specific survey route, on a long-term basis.

If you cannot commit to a long term, then you might want to consider being an assistant that accompanies an observer and records data.

- The survey routes are established along roadsides.
- Each route is 39.4 km long; with three-minute point counts conducted at 0.8 km intervals, for a total of 50 point count stops.
- All birds heard or seen within a 0.4 km radius of each stop is recorded.
- Surveys begin 30 minutes before sunrise and normally require 4-5 hours for completion.
- Sky condition, wind speed, and temperature are also recorded at the beginning and end of each survey.
- Traffic conditions are recorded throughout.
- Participants submit data forms to data center by mail or over the internet.

For more information phone 204-945-5439 or email kdesmet@gov.mb.ca

Activity Talks:
What factors do you think affected how many birds you saw in your area? Are you planning on participating again next year?

“The Breeding Bird Survey” has been completed.
Member’s Initials_______ Leader’s Initials_______
Manitoba Conservation, in co-operation with the Manitoba Wildlife Federation and the Delta Waterfowl Foundation, is offering young and first-time hunters the opportunity to take part in the following "mentored hunts":

- **Waterfowler Heritage Days**
  Provides youth aged 12 – 17 with the opportunity to hunt ducks and geese during a special season. The program introduces youth to the concepts of ethical practices and stewardship of waterfowl and other natural resources. Participants must pass the Manitoba Hunter Education course prior to attending. (see ACTIVITY: HUNTER EDUCATION COURSE in FURS section)

- **Youth Waterfowl Hunts**
  Manitoba Conservation, in co-operation with several non-government organizations and groups, offers Manitoba youth the opportunity to participate in an organized mentored waterfowl hunt at several locations in the province. Youth must register and participate in an education and training session prior to the actual hunt and are accompanied in the field by an experienced mentor.

- **Mentored Wild Turkey Hunts**
  Manitoba Conservation, in co-operation with the Manitoba Wildlife Federation and the National Wild Turkey Federation, offers a mentored youth wild turkey hunt during the wild turkey season. By attending a seminar, youth are introduced to ethical and safe practices for hunting wild turkeys and have the opportunity to go on a mentored hunt with an experienced wild turkey hunter.

For more information call the Manitoba Wildlife Federation at 204-633-5967
[www.mwf.mb.ca](http://www.mwf.mb.ca) or the Delta Waterfowl Foundation at 204-956-7766
[www.dmbo.org](http://www.dmbo.org) and the National Wild Turkey Federation at 204-667-8500.

---

**Activity Talk:**
What activity(s) did you take part in? Did you shoot any birds? What did you learn?

"Mentored Hunting" has been completed.
Member’s Initials _____ Leader’s Initials _____
# FURS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammals of the Land</td>
<td>46</td>
</tr>
<tr>
<td>Animal Watch</td>
<td>46</td>
</tr>
<tr>
<td>Plaster Cast Tracks</td>
<td>47</td>
</tr>
<tr>
<td>Judge Nature</td>
<td>48</td>
</tr>
<tr>
<td>Hunter Ed.</td>
<td>49</td>
</tr>
<tr>
<td>Big Game Hunt</td>
<td>50</td>
</tr>
<tr>
<td>Trapper Ed.</td>
<td>51</td>
</tr>
<tr>
<td>Snowshoeing</td>
<td>52</td>
</tr>
<tr>
<td>Making</td>
<td>54</td>
</tr>
<tr>
<td>Moccasins</td>
<td></td>
</tr>
</tbody>
</table>
MAMMALS OF THE LAND

There are about 4000 different kinds of mammals in the world. Mammals are different from other creatures of the animal kingdom in the following three ways. Their babies drink milk from their mothers, they are warm blooded (their bodies stay the same temperature all of the time, if they are healthy), and they have fur or hair on their bodies.
Find as much information as you can about your favorite mammal, and report on it under these headings:

- **COLOR**
- **SIZE**
- **FUR OR HAIR TEXTURE**
- **FEET**
- **TAIL**
- **TEETH**
- **WHAT IT EATS**
- **NUMBER OF BABIES**
- **HOW OFTEN DOES IT BREED**
- **DOES IT HIBERNATE**
- **WHERE DOES IT LIVE**
- **SOUND IT MAKES**

**Activity Talk:**
Is there something unique about the mammal you chose? Why is it your favorite?

"Reporting on Your Favorite Mammal" has been completed.

**Member's Initials_____ Leader's Initials_____

---

**ACTIVITY: ANIMAL WATCH**

**Age:** 9+  
**Time:** 1-2 hours  
**Learning Outcome:** To learn about and identify different kinds of signs that indicate animals have passed through the area.

You can tell where people live by looking around for things like houses, hydro lines and roads. You can tell where animals live by looking for signs. Signs might include footprints, droppings, scratches on trees, holes in the ground and pathways. Go for a hike and see how many different signs of animals you can find.

**Activity Talk:**
What signs did you see? Can you tell what animal made each sign?

"Animal Watch" has been completed.

"Member's Initials_____ Leader's Initials_____

---

ACTIVITY: MAMMALS OF THE LAND  
**Age:** 9+  
**Time:** 1 hour  
**Learning Outcome:** To use research skills to learn and present knowledge about a favorite animal.
ACTIVITY: PLASTER CAST TRACKS

Age: 9+   Time: 1 hour
Learning Outcome: To learn how to make a cast of a wild animal track.

You will need heavy cardboard (5 cm x 20 cm), a paper clip, water, a margarine tub, wall plaster, and a stick.

- Find a clear animal track in the soil or sand.
- To create a mould for the plaster, form the cardboard into a ring and secure it with a paper clip. Place the cardboard around the track and push it gently into the soil or sand.
- Pour enough water into the margarine tub so that there will be enough to fill the cardboard mould halfway. Add the plaster a little at a time, stirring with a stick until smooth. The mixture should be as thick as pancake batter. It should pour but not be too runny.
- Pour the plaster into the cardboard mould.
- Let is set for several hours until it's very hard.
- Remove the plaster cast from the ground.
- Remove the cardboard mould from the plaster.
- Highlight the tracks natural shape with paint or ink and decorate with glitter or other materials.

Activity Talk:
Where do you think the animal was going when it made this track?
What time of day/night do you think the track was made?

“Plaster Cast Tracks” has been completed.
Member’s Initials______ Leader’s Initials______
This game will help members to gain an understanding of the hardships and challenges animals experience in their quest for survival, and create a sense of empathy and respect for the resiliency and natural design of wild animals. Compile a list of “action calls” similar to the sample below. Feel free to adapt the list to suit your group size, target age, and playing environment. You may need to add actions to the list for a longer game.

You will need name tags, a hula hoop, markers, and “action calls”.

**GAME RULES:** Every player chooses the name of an animal they would like to represent, and writes it on their name tag. You may also want to review the habits of the animals in the game so that the members have a good sense of how to act upon hearing the “action calls”. One player is chosen to become Judge Nature and to call out the “action calls”. Animals follow the “action calls” given by Judge Nature.

- **“Survival of the fittest”:** Players run around a designated tree and touch Judge Nature. The first four players live, the rest are “out”.
- **“Drought”:** players hop to an area designated as the water hole and back (i.e. a different tree, a hula hoop, a bag on the ground) and touch Judge Nature. The first three players to make it back, and not run, live. The rest are “out”.
- **“Hunter coming” “Attention all game animals”:** Those players that chose to represent a game animal have fifteen seconds to run and hide from the sight of Judge Nature. If they are seen, they are “out”. Judge Nature must remain stationary while visually searching for the animals.
- **“Illegal hunter”:** All animals must run and hide because the hunter will shoot any animal they see. After fifteen seconds, any animals that can be seen by Judge Nature, are “out”. Judge Nature must remain stationary while visually searching for the animals.
- **“Famine”:** Players must find another animal, that in nature, they would naturally eat. If they cannot find one, they are “out”. You may want to allow herbivores to survive for this action.
- **“The hunt”:** This is the reverse of “Famine”. If a player is a natural food source for any other animal in the group, they are “out”.

**Activity Talk:**

Did playing the game give you a better idea of the hardships animals face in the wild? Would you really want to be your favorite animal?

“Judge Nature” has been completed.

Member’s Initials_______ Leader’s Initials_______
The Hunter Education Course is mandatory for all first-time hunters. The course promotes safe and ethical hunting practices and introduces new hunters to wildlife management, hunter responsibilities and how to prepare for the hunt.

Topics covered in the course include:
- About Hunting
- Modern Firearms
- Ammunition
- Firearm Safety
- Shooting Skills
- Hunting Safety
- Special Concerns
- Advanced Hunting Techniques
- Hunting Skills
- After the Shot
- Outdoor Skills and Safety
- Hunter Responsibility/Ethics
- Wildlife
- Wildlife ID

Activity Talk:
What kind of safety tips did you learn at the course?
Did you learn any new hunting skills?

“Hunter Education Course” has been completed.
Member’s Initials_______ Leader’s Initials_______
To be eligible for a Manitoba hunting license you must be 12 years of age or older. Licenses are required for the species you are hunting. You must carry the license and game tags with you while hunting. Licenses are not required for small game such as rabbits and gophers. Any person born on or after Jan. 1, 1951 and any first time hunter must be a graduate of the Manitoba Hunter Education course. Big game includes deer, moose, caribou, elk, and black bear. Plan to hunt with some experienced hunters.

Activity Talk:
What kind of game did you get a license for? Were you successful in your hunt? Did you help tag/skin/cut your animal?

“Big Game Hunting” has been completed
Member’s Initials______ Leader’s Initials______.
Trapper education is an important part of furbearer management in Manitoba. Any Manitoba resident wishing to obtain a trapping license is required by regulation to complete the Trapper Education Course. Training can be completed through a home-study course or in a class setting. Subject areas covered include:

- History of the Fur Trade
- Trap Line Management
- Furbearer Biology
- Public Awareness
- Animal Rights
- Trapping Equipment
- Boarding (forming)
- Fur Marketing
- First Aid
- Humane Trapping
- Problem Animal Control Methods
- Furbearer Management
- Acts and Regulations
- Trapper Ethics
- Skinning
- Fur Grading
- Trap Research
- Video Presentations

Contact your nearest Manitoba Conservation Office for more information.

**ACTIVITY: TRAPPER EDUCATION**

**Age:** 12+

**Time:** 8-12 hours

**Learning Outcome:** To learn more about the history, equipment, marketing and ethics of fur trapping.

**Activity Talk:**

What kinds of animals do you plan to trap? What were some of the things you learned by taking the course?

"Trapper Education" has been completed.

Member's Initials______ Leader's Initials______
Note: Snowshoes can sometimes be rented from a local school or sports store.

Snowshoes have been around a long time - longer than skis. The earlier versions of snowshoes were made of wood with rawhide-lace lattice-work inside the wooden frame. The bindings were made of leather. They were much longer, heavier, and bulkier than the newer snowshoes. They were used mainly for traveling and hauling loads through deep snow.

Talking about Snowshoes
- **Bindings:** Attach the snowshoe to your boot.
- **Frames:** Made of wood or metal. The frame is what defines the snowshoe shape and size.
- **Decking:** The decking is what allows the snowshoe to "float" on the snow. It can be made of lacing or a solid material.
- **Flotation:** This term means to stay on top of the snow.
- **Traction:** The newer snowshoes come with toad and/or heel clamp-on claws that allow for better traction on icy surfaces and hard snow.

Getting the Right Fit
- **Weight:** The more you weigh, the bigger your snowshoe should be to help you stay "floating".
- **Type of snow:** Light, dry snow requires a bigger snowshoe to keep the snowshoer from sinking. Heavy, wet snow requires a smaller snowshoe.
- **Where you are snowshoeing:** If you are snowshoeing on steep terrain, you should use smaller snowshoes for good traction. If you are traveling on flat ground, you should use larger snowshoes for good flotation. For long distances, the lighter the snowshoe, the better.

Breaking the Trail and Staying Safe
- Be sure that everyone is dressed in layers, appropriate for the weather.
- If you are with a group, take turns leading. It gets very tiring breaking the trail.
- When leading a group, the leader must take into consideration the pace of the slowest member of the group (everyone else should move as fast as the slowest person).
- When leading the group, the leaders should make sure that their steps are short enough so that everyone in the group can follow in the same trail.
- As a follower in the group, try to stay in the leader's footsteps as much as possible. This will conserve energy and maintain a well-defined trail for those behind you.
- As the leader, make sure the group is taking breaks when necessary to drink water or have a snack.
- Carry a first aid kit.

Try this game to practice your skills:
- Create a circle pattern in a large area of snow by breaking a trail. Add spokes to the circle pattern.
- Once the pattern is created play a game of tag with the group. The members must stay on the trail pattern as they play.

Activity Talk:
What was the most difficult part of snowshoeing? Did you see any signs of animals when you were snowshoeing?

“Snowshoeing” has been completed.
Member’s Initials______ Leader’s Initials______
Leather
- Elk, deer or moose hide makes the best moccasins. The leather is softer and has more stretch than some other kinds of leather.
- Deer is easiest to gather and stitch because it is thinner.

Stroud
- Also called Melton cloth is a wool blend that can be used for the vamps of the moccasin. It is easy to sew beads into.

Fur
- There are several furs that are suitable for trimming moccasins. Rabbit fur is not very expensive but wears easily. Fox is long and comes in white, grey, and black. Mink is very durable and is usually brown or black. Muskrat is much like mink but is less expensive. Beaver is thick and is a traditional fur for moccasins. Coyote is long and comes in blacks or browns.
- You will need two strips of fur. Each should be 1 - 2 inches (2 ½ - 5 cm) wide and about 16 - 18 inches (40-45 cm) long.
- Don't use scissors to cut fur as you will snip the fur and make it ragged. Hold the fur up off the table and carefully cut through the skin only with a knife.

Artificial sinew
- Sinew works best for sewing leather because it is strong and waxed so that it slips easily through the leather. It can be split into strands and you should use 1 or 2 strands to sew the moccasins.
- If you can't find artificial sinew, use a strong thread such as quilting thread.

Leather Needle
- A leather needle makes sewing leather easier. It cuts the leather instead of piercing it. Be very careful because leather needles are very sharp.
Moccasin Lining

- The lining for the moccasin can be made of soft materials like fleece. The fleece can be sewn with regular thread.

Making a Pattern for Your Moccasins

- Use a piece of paper to make a pattern for your moccasins. Be sure it is larger than your feet. See diagram below.
  - Fold the paper in half.
  - Place feet one on each side of the center line.
  - Leave 1 inch between your heels and the edge of the paper.
  - Your heels should be ⅛ inch away from the centre line.
  - The balls of your feet should be ⅛ inch away from the centre line.
  - Draw a curve around the top of the foot, ⅛ inch from the toes. Extend the curve to the point just above the little toe.
  - Measure a ⅛ inch straight out from the ball of the foot on the little toe side and a ⅛ inch straight down from that point.
  - Bring the curve of the toe around to the B points.
  - The dotted lines show where the moccasin cuff at the heel will be folded. The other dotted line from point B show where the cuff will be folded.
  - The front corners of the cuff should be 2 inches from point B.
Using the Pattern on Leather

- Check the leather for holes or markings on the hide.
- Put the pattern on the wrong side of the leather and draw around it with a pen or soft pencil.
- Try to make the direction of the leather with the most stretch go across your foot instead of from heel to toe.
- The lining will also have to be cut out.

Sewing Stitches

- Use a whip stitch. (below) Tie a secure knot at the start and end of the seam.
- Stitch two pieces together inside out, with the right sides of the leather facing each other. When finished, turn the pieces right side out.
- Try to make the stitches about 1/8 inch apart and 1/8 inch from the edge of the leather.

 ![Whip Stitch](image1)
 ![Welt in Seam](image2)

Sewing Vamp

- Sewing the vamp is the hardest part of making moccasins. You have to gather the bottom of the moccasin to fit the vamp. It is difficult to get the gathers even.
- Match the centre fronts of the vamp and bottom, right sides together.
- Insert the welt between the vamp and the bottom, matching up the edges. The moccasin can be sewn without the welt, but the welt does strengthen the moccasin.
- Put the three layers together at the centre front.
- Tack Point A on the vamp to point A on the bottom, and Point B on the vamp to point B on the bottom.
Start at the centre front and sew the seam back to point A, and then back to point B. You will only have to make tucks part way down as it will begin to fit together without tucks.

With each stitch make about a 1/8 inch tuck in the bottom piece

When you have sewed both sides, turn the moccasin right side and trim the welt with scissors.

Sewing the Lining

- Sew the lining inside out and leave it that way.
- Begin by sewing the heel piece to the top on both sides using a ¼ inch seam.
- Sew the top to the foot piece forming a slipper shape.
- Put the lining on your foot and then put your foot into the moccasin.

Making the Heel

- With your foot in the lining, put on the moccasin. The back of the leather should just meet at your heel. Take the moccasin off.
- Find the middle of the back edge and mark it.
- Measure ¾ inch on either side of the centre and mark these points.
- Measure ¾ inch towards the toe at the two points and mark them.
- Cut from the edge to the 2 points as shown in the diagram.
- Sew the back seam from the top down to the two cuts.
- Sew the top of the T seam, then cut off the extra flap.
- Sew the bottom of the T.
- When finished, the back seam will form an upside down T.
Adding the lining
- Put the lining into the moccasin.
- Trim the lining to fit exactly around the top edge and stitch it to the moccasin.

Cutting the fur trim
- Measure around the top of the moccasin to see how much fur you need.
- Cut the fur.

Sewing on the fur trim
- With the right side of the fur facing the right side of the moccasin, sew from the heel seam all around the foot. Use an overcast stitch.
- Sew the two ends of the fur together.
- Turn the moccasin inside out and stitch the fur to the inside of the moccasin.

Activity Talk:
What was the most difficult part of making moccasins? Did your moccasins fit?

"Making Moccasins" has been completed.
Member’s Initials_______ Leader’s Initials_______

Activity Information and Diagrams courtesy of Tara Prindle.
CREDITS

Thank you to the following for sharing their information and resources.

Manitoba Agriculture, Food and Rural Initiatives
Delta Waterfowl
Manitoba Conservation
Manitoba Fisheries
UW Sea Grant Institute
Manitoba Wildlife Federation
National Wild Turkey Federation
Alberta Junior Forest Warden Association
Canadian Red Cross
Kansas State University and Cooperative Extension Service
Tara Prindle