



Know Your Environment

Science & Technology Branch – Step 1

Purpose

The “Know Your Environment” Step provides a basic knowledge of outdoor elements that either benefit or hurt people through various types of contacts. Upon completion of this step Trailmen should understand that nature is not always safe and that learning identification and awareness is just the beginning of the journey.

1. What are beneficial plants and which exist in my region?
2. What are harmful plants and which exist in my region?
3. What are beneficial animals and which exist in my region?
4. What are harmful animals and which exist in my region?
5. What is dangerous terrain and which exist in my region?




Notes to the Trail Guide //////////////////////////////////////

1. The goal is not for the boys to be experts on these topics but to gain an increased knowledge and awareness of the Step.
2. Make it relative to your patrol.
3. Remember, these lessons should build from Fox to Hawk and from Hawk to Mountain Lion.
4. See the Leaders Guide for more information on Steps.

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Skills Progression

	<ol style="list-style-type: none">1. Picture matching2. Identification Game3. Nomenclature
	<ol style="list-style-type: none">1. Identification, reaction, communication2. Safety
	<ol style="list-style-type: none">1. Terrain – Navigation and Safety2. First Aid – Animals3. First Aid - Terrain

Helps

1. What are beneficial plants and which exist in my region?
 - a. **Goal:** To understand the purpose of healthy and beneficial plants and the identification of these plants.
 - b. **Lesson:** Plants provide a large part of our nutritional, medicinal, and general wellbeing.
 - c. **Examples:**
 - i. Garden fruits and vegetables: Food
 - ii. Wild fruits and vegetables: Food
 - iii. Grains: Food
 - iv. Trees: Shade, lumber, fruit, ornamental
2. What are harmful plants and which exist in my region?
 - a. **Goal:** To understand that nature also has a dangerous side.
 - b. **Lesson:** Do not touch or consume anything that you are not sure of what it is and where it came from.
 - c. **Examples**
 - i. Poison Ivy
 - ii. Poison Oak
 - iii. Poison Sumac
 - iv. Stinging Nettles
 - v. Wild Mushrooms
3. What are beneficial animals and which exist in my region?
 - a. **Goal:** To understand how animals serve our community and our environment.
 - b. **Lesson:** Animals serve a purpose to humankind, but it is important to know that these animals can still be dangerous to people.
 - c. **Examples:**
 - i. Dogs: K-9, service, companion, farm
 - ii. Cows: Milk, meat, leather, fertilizer from waste
 - iii. Chickens: Eggs, meat, fertilizer from waste
 - iv. Pigs: Meats, fertilizer from waste
4. What are harmful animals and which exist in my region?
 - a. **Goal:** To understand that animals can be dangerous and how to identify and react to these dangers.
 - b. **Lesson:** Learn about harmful animals that exist in your region. Where can they be found? How to identify them. How to react. Who to call?
 - c. **Examples:**
 - i. Dogs (Wild & feral)
 - ii. Bears
 - iii. Cougars/Mt Lions
 - iv. Spiders

- v. Snakes
 - vi. Alligators
5. What is dangerous terrain and which exist in my region?
- a. **Goal:** To understand that our environment also poses risks to our health if not careful.
 - b. **Lesson:** Learn to recognize, interact, and avoid dangerous terrains.
 - c. **Examples:**
 - i. Cliffs
 - ii. Rocky terrain
 - iii. Soft terrain (Sand, Swamp, loose dirt)
 - iv. Construction sites
 - v. Rivers and Streams

Scripture

Genesis 1:12

- Fox – God created all things and provides for us because he loves us.
- Hawk – According to their own kinds and each bearing their own seed means that we can identify plants through not only the plant itself but through their seeds as well.
- Mt Lion – God created the framework of how plants are created and grow. This framework shows that God provides for all things.

Genesis 1:24-25

- Fox – God created all things and provides for us because he loves us.
- Hawk – Creatures each have their kinds which shows that God desires order for not just people but all creation as well.
- Mt Lion - God created the framework of how creatures populate the Earth. This framework shows that God provides for all things.

Genesis 3:17-19

- Fox – Sin has consequences.
- Hawk – Work and struggle has been around since this time and continues until His return. It is important to remember that we serve Him and our families through these struggles and to do so with a **servant's heart**.
- Mt Lion – Sin saturates the Earth in many ways. All of us must be careful that we heed to the warnings of our surroundings so that we do not fall into temptation or harm.

Activity Ideas

- See the relevant patrol and branch section of the activities
- Or, create your own activity relevant to your troop and region

Game Ideas

- Check the games section online for game ideas
- Or, create a game that works for your patrol
- A couple of ideas are listed below

Name of Group Game: Bob the Weasel

Time: 15 – 20 minutes

Summary: Simple circle game, in which the person in the middle has to find a hidden object.

Goal: Don't end up in the middle of the circle.

Preparation:

- A small object (marble, ring, coin)

How to Play:

1. Have all the kids create a circle, facing inwards. Choose one person to be "Bob the Weasel." The person needs to stand in the middle of the circle.
2. Explain the rules: The object will be passed from person to person behind their backs. Everyone in the circle needs to say, "Bob the Weasel...Keep it Going...Keep it Going" while pretending to pass the coin behind their backs to the next person's hand, to try and fool "Bob." The coin can be passed in different directions. Bob must guess who has the object.
3. Ask Bob to close his/her eyes. Spin "Bob" around in circles. Have the kids start chanting and passing the object. After a few seconds, tell "Bob" to open his/her eyes and try to guess who has the coin.
4. The game continues until "Bob" guesses the correct person with the coin. The person with the coin gets to be the next person in the middle.

Name of Group Game: Seagulls and Crows

Time: 20 - 30 minutes

Summary: Great active game for kids. Try to tag as many people on the other team- or be tagged.

Goal: Try to tag as many players of the opposing team if their "bird" is called.

Preparation:

- Determine the ending lines/end of the room for the two teams.

How to Play:

1. Split everyone into two teams. Assign one team to be the "crows" and the other team as "seagulls." Have each team line up parallel with each other (facing each other), with about three feet between them.
2. Explain the rules. In the game, you will be telling a story. If you say the word "crow" in the story, the crows have to run back to their ending line/end of the room. The seagulls will try to tag the crows before they reach the end of their line/room- If the seagulls tag a crow, the crow becomes part of the seagulls' team. Same goes vice versa- if you say the word "seagull" in your story, then the crows try to tag the seagulls before they run back to their side of the room.
3. Start with a practice round- tell a story and somehow add the word "seagull" or "crow." (Example: "Yesterday, I went over to my grandma's house. She has 100 cats and 20 seagulls!" or "At the zoo, I see lots of different animals. Crabs, kangaroos, cats...and especially crows.")
4. Start the game- Whoever has the most players on one side at the end of 15 minutes wins the game (or, if one team tags every one of their opposing team, they win the game).

Plants



Figure 1 - Poison Ivy

Poison Ivy is found throughout North America and is usually east of the Rocky Mountains. These plants like to grow in wooded areas and like to grow on exposed rocks, in open fields, as ground cover, as vines, or as underbrush. It can be identified by the following characteristics: a shrub or vine that has clusters of three almond shape leaflets, reddish hairs on the vine and no thorns. It can grow as tall as four feet but is frequently found as ground cover between 4-10 inches high. If you do come in contact with Poison Ivy, it will cause itching, red inflammations and possibly blistering. Medicines like Calamine Lotion and home remedies (oatmeal baths, baking soda) will help to relieve the irritation.



Figure 2 - Poison Oak

Poison Oak can be found from New Jersey to Florida, in the Western US, Oklahoma, Texas, Kansas, Nevada, Oregon, and Washington. These plants like sandy soils and typically grow in thickets, forests, and dry, sandy fields. It can be identified by the following characteristics: has 3 to 5 lobed leaves that usually have a scalloped edge, it bears a fuzzy fruit on the branches, and the leaves can be wrinkled. Poison Oak and Poison Ivy have similar symptoms and treatments. Symptoms include itching, red inflammation, and blistering. Treatments include over-the-counter lotions (Calamine Lotion), oatmeal baths and baking soda.



Figure 3 - Stinging Nettles

Stinging Nettles are not poisonous, but it should be avoided! It grows just about anywhere. This plant has fine hairs on the leaves and stems and contains irritating chemicals which are released when the plant comes in contact with the skin, causing IMMEDIATE irritation. It stings your skin **like crazy and causes blisters. Once you've been stung by Stinging Nettles, wash your hands, the affected areas and then your hands again. Then apply Calamine Lotion or another over-the-counter itch reliever. Just remember to not scratch the infected areas.**

When in doubt, **just don't touch!** If you have questions about plants in your area, get a hold of your local Poison Control Center at 1-800-222-1222.

Animals



Figure 4 – Bears



Figure 5 - Snakes



Figure 6 – Cougars



Figure 7 – Wolves



Figure 8 - Sharks



Figure 9 - Bees



Figure 10 – Scorpions



Figure 11 – Spiders

Terrain



Figure 12 – Cliffs



Figure 13 - Rocky Ground



Figure 14 – Swamp



Figure 15 – Stream



Figure 16 - Construction Site



Figure 17 - River

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