NATURE

Camping Without A Trace

As more and more people discover the wonders of the natural areas in our country, the need to have as little impact on them as possible grows. We need to help the girls in our troops and camps learn how to camp softly, leaving no trace of our presence. “Minimal impact use” or “No-trace camping” will help preserve the wild quality of our lands.

Prepare - Teaching the girls to clean up after themselves and leave a place better than they found at meetings, is the first step. Minimal impact camping means advance planning as well as on-the-spot action.
When possible, use areas when they are least crowded. Check with local authorities ahead of time for off peak times.
Plan your meals so that packaging and fuel requirements will be minimal. Repackage food so there will be less garbage to dispose of or bring home. Plan nutritious meals that need little cooking time.
To reduce the need to burn wood, use a camp stove.

On-Site – Remember the saying “Take only pictures, leave only footprints”. Your goal is to leave your campsite to be enjoyed as much by the campers who follow you, as by your group.
Use wood you find on the ground. Never cut from a living tree. Use an existing fire circle when available. When you do need to build one, keep it small. Make the fire appropriate for the time you will use it. You do not want huge logs to be burning hours after the campfire has concluded. Before packing up make sure the fire is completely out and the area, as well as unburned wood, is cool to the touch. Scatter cool ashes and return rocks where you found them. There should be no sign you were there when you leave.
Use biodegradable soap for dishwashing and personal use. Wash at least 200 feet away from water source. When a drain is not available scatter strained wash water on the ground away from bodies of water.
When choosing a tent site, use a well- drained level area. Avoid fragile mountain meadows and areas close to the edge of a stream, lake or trail. Make your camp at least 200 feet from a shoreline.
Even footsteps have impact. Use established trails, don’t make shortcuts on downhill trails.
Dispose of all garbage in proper receptacles or pack out. Take home items you can recycle and pack out all garbage (if there are no receptacles).

For more information on “backcountry camping” consult Outdoor Education In Girl Scouting.

LOOKING, LISTENING, FEELING, SMELLING and DESCRIBING YOUR ENVIRONMENT

There are many ways of sensing our environment, which help tune in our brains and help us perceive more and remember more. These focusing techniques also make us more aware of things we would normally walk by without noticing. Try a few of these on your next outdoor experience. Use them constantly to heighten your awareness. One caution: know the animals and poisonous plants in your area and what they look like in all seasons!

FOCUSING SIGHT

Limit the area of looking.

Use a wire coat hanger stretched into a circle. Put it on the ground

Lie on your back and look up…. and examine carefully what you find clouds, branches, stars and within. meteors

Put a bug in a pill bottle. Look at all its parts, watch its activity and let it go!

Lie on your stomach and look down.

Crawl and look at things from an animal's point of view.

Looking through a cardboard tube helps you focus on a single object or area.

Look for movement, evidence of change, cycles. Take a picture with your eyes. Look at a scene and try to remember everything about it.
Look at a pebble, seed, and bird; try to remember everything about it.
Use a magnifying glass, binoculars held upside down or a water drop to magnify the details of something small.
Try counting the rings in a tree stump.

Look for colors, patterns, textures, curves and lines.

Look for shapes – square, circles, and triangles. Plant stems come in each of these shapes. Can you find one of each?

Look for the same thing in different sizes – shells, waves, clouds and leaves.

Can you follow your own trail back to where you started? What clues did you use?

Try different places – under eaves of buildings, in mud or snow for tracks. At an outside light at night check to see what is attracted.

LISTENING

Sit blindfolded or lie down and close your eyes.

Listen for morning sounds, evening sounds, and day sounds.

Sounds of the season, sounds nearby, and far away.

Occasional and constant sounds. Sounds you like …or dislike.

Sounds that make you feel…angry,…sad,…beautiful,…afraid,…happy,…tough.

Sounds from
living things
and sounds
from machines.

Use a tape recorder to
save your favorite sounds.

Follow a sound to see what makes it.

FEELING

Try the textures of bark, leaves, soil, feathers, pebbles, a turtle shell, your sneakers. Feel with your fingers, the back of your hand, and your cheek.

Feel something inside a paper bag – can you describe it without seeing it?

How do you feel:
in the shade
in the sunlight?

How many ways can you feel the wind? Can you find things the wind has changed?

Lead a blindfolded friend on a trust walk to feel things.

When trying to get closer to an animal for a good look, try hiding crawling, and walking slowly. Straight toward it, diagonally toward. Get a “feeling” for when the animal senses that you are in its territory.

Smelling

Inhale deeply outdoors.
Smell a flower, leaf, soil, mud, water, bug, and a fern.

Follow a scent where does it lead?

What does rain smell like?
How does your world smell after a storm or shower?

Pinch a leaf, stem, or root, then smell it.

DESCRIBING

The crow (43 cm), robin (22 cm), and sparrow (13 cm) are common birds used for size comparison. Try making mental comparisons with other birds seen. For example, a jay is larger that a robin, but smaller than a crow.

Imagine a tree or bush as a clock face. You can tell someone else where a squirrel, bird, nest, or something else is located by saying, “It is near two o’clock.”

One member of the group describes an object that can not be seen by the group. The others draw a picture of the object from the description.
Compare drawings!
Compare drawings to the real thing!

Drop a stick or leaf into a stream. Follow it down stream; see where it speeds up, slows down, and gets caught.

What other things are floating on the water? What happens to them?

Describe the “feeling” of a favorite place.

FUN WITH NATURE

Strawberry – box wild garden
Seeds and tiny plants are everywhere. Line boxes with wax paper or foil and pierce it in several places. Then fill boxes with woods earth. Water gently and see what comes up. Mark names.

Treasure Hunt
Make a list of things to see. Send two patrols off in opposite directions to see which can find them all first. Examples: plant growing in water, bird, hollow tree, bird's nest, flower, white stones, tall fir tree, beetle, anthill, spider web, etc. Make increasingly difficult lists. As the girls gain knowledge, have them prepare lists.

Plant Race
Two patrols hike in different directions, to return at a given time. Each keeps a list of the kinds of plants seen. Longest list wins. Each member of the patrol must see each plant. The girls should describe a plant or sketch it if they do not know its name.

Collages and Mobiles
Make interesting or amusing collections of materials – bark, sticks, lichens, toadstools, acorns, fallen leaves or flowers, etc. Use no live material. Arrange in flat boxes or on bark platters or small lashed trays for temporary centerpieces, a "flower show" or to take home later. Try mobiles with the same materials. Labeled cardboard cutouts of leaves on a mobile will help to identify them.

Plan an "Accident Cases" Expedition
See how many examples you can find of natural accidents, such as –

an anthill that has been stepped on
a leaf chewed by an insect
a broken spider web
a tree stump
a wilted flower
a feather lost by a bird
an empty shell

A Special-Interest Walk
Try looking for seeds that travel in different ways,
signs of each season,
natures miniatures (moss-like flowers, plants, seeds, tiny flowers),
plants and animals that climb.

Go on an “Oddities” Walk
Look for everything you can find in nature that is unusual – such as-

a knot on a tree,
a leaf shaped like a mitten,
a tree trunk growing at an unexpected angle,
a stone that looks like a frog.

Organize a Bring-Them-Back-Alive-Trip
An ant – a worm – a beetle – a firefly – a caterpillar
study them for a few minutes, learn their names and release them.

Nature Table
Many camps set aside a table or area for nature displays. This can be very effective so long as the display involves the girls and does not become an adult project that is “hands off” for girls. Many campers seem to have the “collecting instinct” and are happy to share their treasures for the nature display. Girls who contribute should have their names posted alongside. A bulletin board near by may have a daily question on nature with an answer box for campers to submit their answer.

Sample question: A rock differs from a mineral because it is composed of more than one material. This one is quartz (1), and this one is granite (2).
Which is the rock?

Another sample question: A conifer is a kind of tree that bears cones. Here is an oak leaf (1) and here is a pine needle [or fir needle] (2).
Which one comes from a conifer?

Bulletin Board
The bulletin board may also serve as a newspaper for such questions as: Have you seen the anthill down by the bridge? Or have you seen the baby birds in the salmonberry bush near the Skogly Unit?
Exhibits or displays must be changed frequently or the campers will lose interest and come to disregard the board altogether. Groups may volunteer to be in charge of the display.

Mystery Box
Campers can be drawn into nature area with a mystery box. This box has a hole in it just large enough for a hand. Each day someone puts in an unbreakable object from nature (turtle shell, snake skin, feather, etc.) and the campers are to feel and guess what it is, with the option to pass.

Water – Life
With a dip net or strainer, collect some fresh water life and keep in a shallow white pan for one day and report what happens. How and why do they eat? How do they move around? Handle carefully and return to the water at the end of the day.

NATURE MAP

Using your map and compass skills learned, make a map or sketch of your campsite, identifying the trees, plants, etc. Mark a nature trail for others in your unit or camp. Include plants of interest, unusual rocks, or rock formations, animal homes, places to stop and listen to a nearby creek, view points, etc. Place all of these things on your map and make it available to others to use. Try not to mark the trail itself, for that destroys the beauty of the natural area.

IDEAS FOR UNSCHEDULED TIME

Some girls will enjoy time to experience nature without anything specific to do. For these who need to keep busy you might try these. Adopt something out-of-doors – such as a tree. Keep a record of everything that happens to it daily – caterpillars, birds and other visitors; buds, disasters, such as cracking bark; what is over it; direction of wind blowing branches etc. Keep wind records; watch campfire smoke. Record direction of wind. Notebooks might follow temperature can be recorded; shadows can be measured for different times of day. Make a sun dial.

Leaf and flower prints might be added.
Experiment with various ways to produce rainbow colors, as soap bubbles, oil on water, etc. Pick up small things noticed by the girls.

EXPANDING OBSERVATION SKILLS

Impress upon your campers that they are viewing someone's home or food store and that they should not touch the things being explored. (i.e. would you want some giant to pull the roof off your house?).

-Explore mushrooms – DON'T PICK OR EAT THEM. Talk about color, shape, size and where they are growing.

-Explore the forest floor – examine the different layers and talk about the different stages of decomposition. Look for different types of plants, bugs, and animal traces

-Explore a rotten log or stump – look for signs of how different animals, bugs and plants have used the log for shelter. Discover how they all make use of different parts

-Explore tree bark – find different things that rest or hide in the tree bark. Discover how it hides things. Check under bark of dead trees for animals.

-Find an ugly plant – ask the campers to find a plant that they think is ugly. Then examine it more closely and look.

NATURE SCAVENGER HUNT

This scavenger hunt is played without collecting things. You tell what you found and where. Designate an area of camp for hunting. Some possibilities:

Something red	Something cold	Something that smells sweet
Something warm	Something moist	Something shaped like an oval
Something that clicks	Something flat	Something that smells moldy
Something that rustles		

NATURE TREASURE HUNT

More elaborate than the Scavenger Hunt and must be carefully worked out ahead of time. The purpose is to teach children to differentiate between similar objects. The object is not to name the item, but to discover its characteristics. For example:

Starting at the fire ring, walk toward the flagpole. Stop at the first maple tree.

Clue: Maples have palmately-veined leaves, that is – the veins come together like the veins in your hand. Search around the base of this tree for your next direction.

WEATHER STUDY

Learn about weather forecasting. Make a barometer, a rain gauge, a weather vane, and a wind gauge. Perhaps you would like to post your weather forecast on the camp bulletin board; or maybe even, make and fly weather flags. Study the different cloud formations, how can you forecast the weather from studying clouds?

CREATIVE DRAMATICS

Take turns acting out:

You're on the last mile of a very long hike and you are very tired.
You must cross a stream by jumping from rock to rock.
On a hike you have to cross a very wet soggy swamp.
On a hike it starts to rain, then it really pours!
On a hike you "discover" a skunk and whew!

THE WEATHER

Troops or camps can have their own weather station and each camper can be weather person. An official weather person who keeps a written record (log) for her “official” forecast each day can be elected. She should add a sentence to the log the next day, telling what the weather really was. Forecast should be made at the same time each day. Camps can set up a weather station and use it to teach ways of forecasting weather and increasing observation.

THE BAROMETER

Air has weight. A barometer measures this weight, called pressure. Campers can prove this by making a simple barometer. All that is needed is a bottle, a cork to fit it, a piece of glass tubing, and some water.

Fill a clear glass bottle about one-fifth full of water. Run a piece of glass tubing ¼ inch in diameter through a cork that fits the bottle top tightly. The glass tube must be long enough to reach down into the water.

Mark the water level with a fine, thin line of paint, or a string. Then look at the bottle every day. When it fair, the air pressure pushes down on the only opening – in the glass tube – and makes the water level rise because of the pressure on it. As long as it stays high or rises, the weather will be fair.

If the weather is changing, the air pressure gets lighter and the level of the water will fall, meaning rain is ahead.

WHICH DIRECTION IS THE WIND BLOWING?

Each camper can make her own personal weathervane by these simple directions:

Assemble a pencil with an eraser on the end, a soda straw, a paper feather, and a straight pin. Stick the pin carefully through the soda straw, and into the eraser of the pencil. Stick the paper feather into one end of the straw. Make sure the straw moves easily around the pin. Hold the pencil up in the air, and the open end of the straw will point in the direction the wind is coming from.

(Wind is always named for the direction it blows from, not to.)

You could tie wind direction in with compass reading and could make a simple windsock. A natural weathervane at camp could also be observed. If there is smoke from a tall chimney or a flag flying on a high pole, campers can check the wind’s direction from these.

HOW HARD DOES THE WIND BLOW?

The Beaufort scale will give a good and accurate reading. Using this scale encourages observation, interpretation, and correct usage of words.

WHAT THE WIND DOES	MILES PER HOUR	NAME OF THE WIND
Smoke goes straight up	Less than 1	Calm
Smoke bends slightly	1-3	Light air
Leaves rustle, weathervane moves	4-7	Light breeze
Leaves and twigs in constant motion	8-12	Gentle breeze
Raises dust and paper, moves small branches	13-18	Moderate breeze
Small trees sway	19-24	Fresh breeze
Large branches in motion	25-31	Strong breeze
Whole trees sway, walking difficult	32-38	Moderate gale
Breaks twigs off trees	39-46	Fresh gale
Damages chimneys and roofs	47-54	Strong wind
Trees uprooted	55-63	Whole gale
Widespread damage	64-75	Storm
Most destructive of all winds	over 75	Hurricane

RAIN GAUGE

Campers can set up their own rain gauge and keep record of how much rain fell. Day Camps can set up an official one for camp and encourage campers to make individual ones for home. The gauge needs a can about eight inches wide, a tall narrow bottle (like an olive bottle), a ruler, a bit of paint and a fine paint brush. Pour water into can until it measures one inch. (Be accurate. Stick the ruler in the water and hold it straight.) Then funnel the water carefully into the bottle, put a thin line of paint on the bottle, and write “1 inch “. Repeat this process, this time for inches.

Then empty the can and set it in an open place, braced so it won’t fall or blow over. After the rain, funnel the contents into the olive bottle and find out how much rain fell. Keep a record. Find out which day had the most rain.

SHORTCUT TO MEASURE HEIGHT

“How tall is the flagpole?” “How tall is that tree?” Campers can find out by applying a very simple formula.

Start from the tree, or flagpole, or whatever is being measured, and walk eleven steps. Push a stick onto the ground at that point, or get someone to hold it. (The taller the object being measured the longer the stick should be. The line of vision from the ground line to the top of the tree of flagpole must cross the stick so that the crossing point can be marked on it.)

Then walk one more step away from the object being measured and mark the point. Lie down on the ground with your eyes as near that point as possible and sight across the stick to the top of the flagpole or tree. Note and mark where the line of vision crosses the stick.

Measure the stick from the ground up to where the line of vision crossed it. That distance in inches is the height of the flagpole or tree in feet. This works because of the ratio of the congruent triangles when the steps are approximately equal to 1 foot each.

WATER

How much easier could a troop project be than one that relies on water for its main ingredient? The following are 3 quick and easy ideas that will help girls to understand that water is more than a liquid that flows from a faucet.

WATERSCOPE utilizes water's magnifying ability to explore everyday surroundings.
MILK CARTON BOAT is an imaginative way to introduce simple design principles as well as wind and weather facts.
SOAP BUBBLES will likely prompt girls to experiment with making bubbles blown from different found objects.

If your troop enjoys these activities, why not think about earning the Water Wonders or Science Sleuth badge?

WATERSCOPE

There is a mysterious world under the water, which remains hidden by the light reflections on the water's surface. Even if you try looking straight down into the water, the little you do see is often blurred. The WATERSCOPE eliminates the reflections to reveal the sights below the water's surface. Depending on what's down there, you may be able to see fish and other sea creatures, plant life, rocks, maybe even sunken treasure.

The WATERSCOPE will work in any body of water – pond, ocean, lake, river or bathtub – but if the water is cloudy or choked with algae, you may not be able to see anything.

The WATERSCOPE is also an underwater magnifier that will make things at the sea bottom appear larger. As you put the scope in the water, the water pressure causes the clear plastic to push up, forming a magnifying lens. The deeper you put the scope, the stronger the water pressure, and the more powerful the magnification. Never put the WATERSCOPE completely below the water surface, or it will fill with water and not work. If water does get inside the scope pour it out.

MATERIALS

Small plastic bucket
(if you use a large can, spray paint the inside with black paint)
Plastic wrap
Elastic

TOOLS

Penknife
Scissors

CONSTRUCTION

Any small plastic bucket will do. You can also use a plastic jug or a tin can with both ends cut out. Cutting carefully with a penknife, remove a big circle from the bottom of the bucket. Cut a piece of clear plastic food wrap or clear plastic clothes wrap from the cleaner's – it should be large enough to cover the top of the bucket. Secure the plastic in place over the bucket with a big rubber band or a piece of elastic; see illustration. If you're using a plastic jug, cover the cutout hole in the bottom. The elastic must be tight to keep the water from leaking in.

MILK CARTON BOAT

A kid's sailboat is one of the oldest of the traditional toys. It can be anything from a three-masted schooner model to a wooden shingle with a handkerchief sail. Without much difficulty, a kid and a boat somehow always find a pond, puddle, or park fountain. And two kids with boats will always devise races or imaginative ways of transporting goods from one shore across to the other.

The MILK CARTON SAILBOAT design is clearly as simple and elegant as it is seaworthy. The two halves of the milk carton act as large pontoons to keep the boat upright and sailing straight – they also make good compartments for carrying cargo. Milk cartons are made of plastic – coated paper, which is waterproof, but most paper plates are not. If you accidentally get the sail soaking wet, you had better have a spare handy. Unless you intend to sail in a puddle or small pond, it's a good idea to tie a length of sewing thread to the end of the boat so you can pull it back. Be sure to clean up your boat and sail when you are done.

Materials	Tools
Milk carton	Penknife
Paper plate	

Construction

Save a paper milk carton – either the quart or half-gallon size will do. Rinse it out thoroughly. Using a penknife, exacto knife, or scissors cut down one long edge of the milk carton, and diagonally across the top and bottom, Fig 1. Hinge open the carton, Fig 2. Continue to fold the carton back on itself and make a knife cut about one-third of the way back from the front of the boat to accommodate the paper plate sail, Fig. 2. The slot should go halfway down through the two thickness of the carton, and be angled slightly to match the angle of the paper plate edge.

Fold open the two boat halves and fit the paper plate into the slot to form the sail. Many boats have sails with colorful decorations. That's easy enough. Just use crayons, paints, or use color markers to create a sail design. Now take to the water and wind.

SOAP BUBBLES

What is more fun on a hot summer day than gathering around with friends and blowing bubbles. A bubble blowing can make a pleasant change or a surprise. Make up a formula ahead of time so that it will be available when you need it.
To make bubble mix:

Mix together in a flat pan:
1 gallon water
40 drops of glycerine (available at most pharmacies)
½ cup (125 ml) dishwashing liquid
Stir slowly. If you can, set aside for one day.
The glycerine will make stronger bubbles.

If ingredients for the bubbles aren't available, or there isn't time to prepare the mixture, the old formula of soap mixed with water, about one-part soap to eight-parts water, makes perfectly satisfactory bubbles, although not so strong or so large.

Experiment with different sizes and shapes of blowers. Use a drinking straw. Split one end in four places, spread out the cut pieces, dip this end into the solution, and blow through the other. Spools make fine blowers. Cut off the tip of a cone shaped paper cup, dip the wide end in the solution, blow through the pointed end. A funnel makes a big, beautiful bubble, but it takes a long, steady breath. These glycerine bubbles are tough. If a finger is dipped into the solution, it can be poked into the bubble without popping the bubble.

Try fanning the bubbles, trying to keep them in the air. Look at the delicate colors, the reflections. What makes a bubble? Will it float in water? Try and see.

PLASTER CAST OF ANIMAL TRACKS

Importance of Tracks

Trying to observe the activities of wild animals is very difficult. This is why we rely on their tracks to tell us where the animal goes or what he does. After you learn where to look for tracks and who made them, you will be well on your way to discovering the many activities of wild animals.

Finding Tracks

The first thing to do is to find a track made by a common wild animal (raccoon, elk, deer or seagull) and make a track cast. Some places to look would be in mud along streams and pond banks, beside roads, in dirt trails or even in gardens.

Make a Negative Cast

Materials needed:

a. Two inch wide, two-foot long strip of cardboard or heavy paper
b. Paper clips
c. Package of Plaster of Paris
d. Container of water
e. Container in which to mix the plaster
f. Mixing Spoon

Step 1.

With the strip of cardboard, make a circle around the track. Press it into the soil or mud to make a form to hold the plaster. Use paper clips to hold the ends of the cardboard together.

Step 2.

Add approximately two cups of plaster to the mixing container. While stirring, add water until you have made a fairly thick batter that can be poured into the track. Smooth the top of the plaster cast and wash the plaster off the mixing container and spoon. You must work quickly because plaster hardens fast.

Step 3.

After the plaster has hardened, lift the cast, carefully remove the cardboard and clean the cast gently with a cloth or brush. You now have a negative cast.

Making a Positive Cast

To make a positive cast, cover the negative cast with a thin film of vaseline and repeat the casting procedure. When the plaster is hard, take off the cardboard and separate the negative cast from the positive cast. The positive cast is a duplicate of the original track.

Making a Collection

Now you know how to make an animal track cast, try making a collection of tracks.

IDEAS: Good demonstration: how to make an animal track cast
Good exhibit: collection with labels
Fun: See if others can recognize unlabeled track casts

GETTING TO KNOW A TREE

Put on blindfolds to heighten other senses. After a short spin (just like pin-the-tail-on-the-donkey) to erase the sense of direction, guide each participant to a tree. Any tree. Ask her to explore it. Explore its “skin” with fingers, nose, her own skin. Check out its base –where it grows. Is anything living on it? After each gets to know her tree, lead her away again. Then, take the blindfold off, return to the general area, and let each person try to find “her” tree. She probably will. Some make a beeline for it right away, some scratch their heads and run a gamut of tests – size, shape, texture, moss on the trunk - but they always end by patting the trunk and affirming: “THIS IS MINE!”

Challenge group to:

Discover objects relating to texture which can be described as slick, hard, rough, soft, slimy, velvet, coarse, knobbed, ribbed, furry, hairy, waxy, or make up your own list.

Discover objects relating to shape which can be described as small, large, oval, round, oblong, lobed, ridged, smooth-edged, triangular, pointed, curved, billowy, horizontal, expansion, contraction, or whatever you can think of.

Discover objects relating to density which can be described as spongy, solid, thick, lumpy, hollow, compact, porous, non-porous, or whatever else you can think of.

Discover objects relating to temperature which can be described as hot, cold, damp, clammy, moist, dry, wet, lukewarm, or whatever else you can think of.

Discover objects relating to size, which can be described as narrow, large, small, tall, short, thick, heavy, bulky, miniature, or whatever can be thought of.

Discover objects relating to color. Try to find every color and as many different shades as you can.

A key helps you identify things by looking carefully at all its parts. Learning tree names is fun and easy if you take it one step at a time.

If the tree has needles, it is a conifer tree; continue to A.
If the tree has leaves, it is a deciduous tree; continue to B.

Trees with needles

A. If the needles are in bundles . . . . . Pines
   a. if there are 5 needles in a bundle (2-4 inches long), it is a . . . . . Western White Pine
   b. if there are 2 needles in a bundle (1-3 inches long) it is a . . . . . .Lodgepole Pine

AA. If the needles are separate in the twig
   a. And are stiff, sharp and 4 sided; can be twirled between the thumb and finger; and leaves the stem rough like a saw when they fall off it is a . . . . . .Sitka Spruce
   b. And are flat, bendable and blunt, and cannot be twirled between thumb and forefinger,
   c. And are ½ inch long and leave the twig rough when they fall off, it is a . . . . . .Western Hemlock
   d. and are 1 inch long, smell fragrant, and leaves the twig smooth when they fall off, it is a Douglas Fir

AAA. If the needles are scale like and closely pressed to the stem it is a . . . . . .Western Red Cedar

Trees with leaves

B. If the leaves are opposite on the twig, simple, and looks like a hand, it is a . . . . . Maple
   a. If the leaves are large (8-12 inches or longer) with 5 lobes it is a . . . . . .Big leaf Maple
   b. If the leaves are smaller (2-6 inches) with 7-9 lobes, it is a . . . . . Vine Maple

BB. If the leaves are alternate in the twig, simple
   a. and with lobes, it is an . . . . . .Oak
   b. and without lobes, it is a . . . . . Willow
   c. and the edges are doubly saw-toothed and looks wrinkled, it is a . . . . . .Red Alder
   d. and the edges are singly saw-toothed, and rather triangular in round stems, it is a . . . . . .Cottonwood

There is one tree specie that is a deciduous tree (with leaves), but does not lose them every year (evergreen). You can identify this tree by its dark, shiny green leaves above and whitish beneath. If you see a tree that has leaves year-round

it is a. . . . . Madrone

There is one tree specie that is a conifer tree (with needles), but loses its leaves every year (deciduous). You can identify this tree by seeing if its needles are in clusters or tufts in the twig. If this is what the needles look like

it is a . . . . . .Larch

Certain trees have cones where seeds can be found. All conifer trees (evergreens) have cones. These can be grouped as pine trees, spruce trees, hemlock trees, fir trees, and cedar trees.

Cones from Pine Trees

1. If the cone is 5 to 15 inches long, its shape is a cylinder, and it is often pitchy,
   it is a . . . . . .Western White Pine

2. If the cone is ¾ to 2 inches long, its shape is round, and it has prickles at the tips,
   it is a . . . . . Lodgepole Pine

Cones from Spruce or Douglas Fir Trees

3. If the cone is 2 ½ to 4 inches long, its shape is a cylinder and it looks papery and ragged at the tips,
   it is a . . . . . Sitka Spruce

4. If the cone is 3-4 inches long, its shape is a cylinder and it has a 3-forked bract that looks like a mouse hiding (tail and hind legs),
   it is a . . . . . Douglas Fir

Cones From Hemlock and Cedar Trees

5. If the cone is ½ to ¾ inches long, its shape is oval in close clusters, and its color is light brown
   it is a . . . . . Western Hemlock

6. If the cone is about ½ inch long, its shape is oblong in loose clusters and its color is dark brown
   it is a . . . . . Western Red Cedar

CAUTION

Most plants are pretty but, some plants can cause problems.
Devil's Club and Stinging Nettles are prickly.
Contact with them can be quite painful.

Poison Oak and Poison Ivy look similar. They can grow as vines or bushes. Contact with skin may cause a rash or allergic reaction. Fumes from burning can cause breathing difficulty.
See page 53 in GORP for pictures and descriptions.

Never use branches from a Cascara Tree for stick cooking. Its bark is used for making laxatives. Cascaras look very similar to Alders. Consult a field guide for positive identification.