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A young boy wearing a cap and holding binoculars, looking upwards in a forest. The image has a green tint. The text "OUTDOOR SKILLS" is overlaid in orange.

OUTDOOR SKILLS

CHAPTER

8

NATURE



God made nature and said it was good. He ought to know! Humans made cities, and while they are fine in their own way, they simply can't match the level of artistry and skill you see in a simple forest glade or on a windswept prairie. There are many great lessons about yourself and the world that can only be learned as you get back in touch with the order and pattern of nature.


As a Trailman, you will make some of your best memories in God's great outdoors. Nature is your birthright, but it is equally the birthright of your children and your children's children. Every tree, every flower you see, and every unspoiled view you enjoy is there because the person who came before you did not ruin it. Decide right now not to spoil it for the person who comes along after you. Many people suggest that the only things that you "take with you" are pictures and memories and the only things you leave behind are footprints that are unavoidable.

NATURE IS EVERYWHERE

Nature is everywhere. Even the plastic, metal, and silicon that make up your home computer are made up of elements as old as the earth, sea, and sky. The electricity that powers that computer is akin to the lightning that frightened woolly mammoths and saber tooth cats.

You step closer to nature as it was meant to be when you look at your face in the mirror. Blood runs through you like a restless river, carrying nutrients and oxygen to all points. Your breath comes and goes in an rhythmic tide. Your nervous system, digestion, senses, and muscles work together, each helping the others to make possible the marvelous being you are.

It is when you look out the



window that you take another step toward seeing the big picture. The grass and trees look to the sky for water and sunlight. The birds eat seeds from the holly, and bees forage for nectar from the flowers. The remarkable cooperation that goes on among systems in one body is duplicated in the way living things cooperate in the environment of your own back yard.

Even so, that yard relies on people to look the way it does. If you stopped cutting the grass, trimming the shrubs, and planting

Oikos (home) + **logy** (study) = **Ecology**

flowers, it would only take a few years before new trees grew and the yard became a wooded acre. Nature has a built-in order and pattern that has a place for every animal and plant and an animal and plant in every place. Unlike your yard, the woodland glade or open prairie keeps itself looking the way it is supposed to without your mower or hedge clippers doing a thing!

The relationship between different plants and animals, the soil where they stand, and the sky that covers them is both remarkable and beautiful.


ECOSYSTEMS

A group of plants and animals and the environment in which they live is called an ecosystem. Just as all members of your patrol have different jobs on a campout, every living thing found in a wild area has certain things it takes from the environment and certain things it gives back.

Sunlight helps plants make their own nourishment from the air and ground. Certain animals eat plants and use their stored sunlight and minerals to survive. Other animals

eat the plant eaters. The wolf and grizzly bear survive off what is left of the sunlight. When they die, their minerals go back into the ground where more plants can use them. Sunlight keeps the process going smoothly as long as all the plants, plant eaters, and meat eaters are allowed to do their job.

The story of how animals and plants depend on each other, the weather, sunlight, and water is called **ecology**. Ecology comes from the Greek language. “Oikos” means home and “logy” means study. Ecology is the story of how the family



members get along in nature's houses such as deserts, mountains, prairies, forests, and seashores.

PLANTS

Plants are the world's oldest users of solar power. They make sugars out of air and water, providing for their own needs and the needs of animals that eat them. They take in carbon dioxide, the waste gas we breathe out, and produce oxygen, the life-sustaining gas we breathe in. They are not only doing this on dry land, but also as microscopic algae thriving in the oceans that cover 71 percent of the Earth's surface.

Not only do plants provide food, they also provide timber, paper, and important medicines. Plants that died long ago provided fossil

fuels like oil, coal, and natural gas that release the power of ancient sunlight to power our industry, light our homes, and keep us moving from place to place in speed and comfort.

Plants take in carbon dioxide, the waste gas we breathe out, and produce oxygen, the life-sustaining gas we breathe in.

You should learn to recognize the plants commonly seen in your area. During the growing season, trees can be recognized by their leaves, but even plants that lose their leaves in winter can be identified by their bark, their height, and their overall shape. There are several excellent



books that can help you. Your Troop Leaders may also be of assistance.

WILDLIFE

In the great play of life, plants may be scenery, but animals are the actors that add drama to the wilderness. They play three basic parts: herbivores (plant eaters), carnivores (hunters), and scavengers (those who eat dead animals they find).

You are most likely to see birds, because their ability to fly away from you at a moment's notice gives them confidence around people.

Some animals are rather hard to see because they live underground or in the water or because they hide from you. As your powers of observation increase and you learn to walk quietly and hide carefully, you will have greater success at spotting animals than people who are loud and boisterous.

You can detect many animals that are difficult to see if you know how to look for their signs. Detecting such animals is like detecting the wind: you don't actually see the wind, but you can feel the cool breeze and witness the trees moving. When animals travel through an area they cause a disturbance, too. Tracks left in the mud beside a creek, bird nests, skeletons,


feathers, and even bits of fur left on a barbed wire fence all tell a story to those who will listen.

You should invest in a field guide to animals in your area and see how many creatures you can find.



Getting Along With Wildlife

You are a visitor—animals are residents. Treat their home with respect and behave like a good guest. This includes taking precautions not to disturb animals. You shouldn't closely approach them, handle their nests, or touch and pick them up. Even timid creatures, like mice, will bite if disturbed. Docile appearing animals may have diseases like rabies that affect



their natural behavior. But more importantly, you cause the animals stress by intruding in their homes or poking and prodding them. Getting wildlife used to feeding or being handled by humans teaches them undesirable behaviors that can put them—and humans—in danger.

WEATHER

Weather happens because the layer of atmosphere around our planet is constantly changing. The air may move gently in breezes, quickly in gusts, or even violently in tornadoes or hurricanes. It may hold moisture above you in the form of clouds, or that moisture may come down as rain, sleet, or snow. Most remarkable, these weather patterns get their power from sunlight, just as plants do directly and animals do indirectly.

WEATHER

is the way that clouds, wind, precipitation, and temperature affect you at a given moment.

CLIMATE

is an overall pattern of weather in an area such as desert, temperate, or rain forest.


You may hear two words that sound like they mean the same thing, but they are quite different. Weather is the way that clouds, wind, precipitation, and temperature affect you at a given moment. Climate is an overall pattern of weather in an area such as desert, temperate, or rain forest. A rainstorm in Topeka, Kansas, is weather, but icy winds at the South Pole are a consistent part of the Antarctic climate.

There are certain things climate can tell you when you are dressing for an outdoor activity, but you especially need to be aware of the weather as time for a campout approaches. Some of your hiking essentials, such as rain gear, remind you that even the best weather reports can very quickly change.

GOOD STEWARDSHIP

Left to itself, nature usually maintains a smooth balance that gives opportunities for many different plants and animals to live together.

Unfortunately, sometimes the activities of man disrupt the delicate balance over large areas. In some places, the natural order is very hard to see, and it is highly



unlikely there will ever be cougars or bison in New York's Central Park again. That makes treating areas where nature still has a significant presence all the more important.

There are some laws which protect habitat from wildfire and guard animals from wanton slaughter. In National Parks, it is illegal to remove any natural object—even a small pebble—from your campsite.

A Trailman does not have to be threatened by fines or imprisonment to treat nature with respect. When you love something, and when you live the Trailman Motto to “Walk Worthy,” this all makes perfect sense and you will protect nature. When we recite the Trailman's Oath, part of it says that we will “do our best to...be a good steward of creation.”

LOW IMPACT CAMPING

There are more people on Earth than there were a century ago, but we still have to operate in the same amount of room. That makes caring wisely for the wild areas we have left all the more important.

There are a few simple things Trailmen can do to walk more softly in the wilderness while still hav-

ing a great time. If you remember from the last chapter, deserts, mountains, prairies, and forests are homes. Just as you would take off muddy boots before entering your house, taking similar precautions in nature's houses will become a habit that demonstrates respect for God's creation.

Prepare in Advance

Know what you will need to bring, what you should leave at home, what you should do, and what you should avoid doing. The best way to do this is to ask the land manager for suggestions.

No Trailblazing

It may require walking a few extra steps, but stay on the prepared paths and camp whenever possible in prepared campgrounds. These places were reserved for human wear and tear so that the surrounding areas could remain pristine for future visitors. Remember, when you blaze a new trail, other people will be tempted to use it after you.

Not all wild areas are as durable as the grass in your yard. Some delicate places will hold the scars of your passing for a long time.

Leave it Intact

If it belongs there, it stays there. If it doesn't belong there, pack it



out. In National Parks and Monuments, removing natural objects is a violation of the Antiquities Act.

Even if it's not illegal, it is unethical to collect "souvenirs" of your visit that deprive future visitors the same experiences you enjoyed. Don't dam creeks, dig trenches, or leave trash. Don't leave "pioneering" projects, such as camp gadgets, behind.

Take nothing but pictures, leave nothing but footprints, and make nothing but memories.

Be Careful With Fire

Campfires have their place in the outdoors, and that place is a carefully prepared area set aside by the land manager. Consider

using a camping stove if your aim is to heat water or cook food.

If you are camping in a prepared place with a fire ring, use the existing spot rather than building a fire in a new place.

If you do use fire, make sure the area around it is clear of twigs, branches, and anything that can catch fire; and always watch a fire carefully to prevent flames from spreading to the surroundings. It only takes a moment to start, but it may take years for nature to heal from it.

Remember never to run or horseplay around an open fire. A tragedy could occur if a Trailman were to trip or fall into a fire or onto hot coals.

Wise Sanitation

Water you use at home is treated before being released. Obviously, you can't return water to its source as clean as you got it, but you can take precautions to minimize your impact on the land.

For short stays, remove solids from dishwater and put them in the trash. Then take dishwater or rinse water at least 200 feet (75 steps) from open water and fling it out rather than pouring it in one spot. For longer stays, dig a sump hole. It should be about a foot across and two feet deep. Remove solids from dishwater before emptying it. Fill in the sump hole before you leave, and return the land to a natural appearance. Water used to wash your body should be treated with

the same precautions as dishwater.

It is less adventurous but a lot more pleasant to use restroom facilities at campgrounds. If you must dig a cathole for human waste, it should be located at least 200 feet (about 75 steps) from open water, trails or campsites. Dig a hole about 7 inches deep. After using it, fill it in with the soil you dug. Leave the area as close to its original appearance as possible, but leave a stick in the ground to warn people against using the same spot. Sanitize your hands.

For longer stays with several people, dig a latrine. A latrine is a shallow trench about four feet long and seven inches deep. After each use, sprinkle a layer of dirt to abate odors and keep away flies. Return the area to a natural appearance before moving on.

Getting Along With Other Visitors

One of the greatest parts about camping is getting away from it all. Select your campsite in a way to protect your own privacy and the privacy of others. Do not make excessive noise or use brightly colored tents. Leave loud electronics behind. Make sure you do not enter another campsite without asking permission.

