

SPPR 1832

OUTDOOR EDUCATION

By

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Survival Skills



Introduction

- Survival skills may help individuals in dangerous situation / dangerous place
- Useful skills include lighting a fire, finding shelter, making water safe to drink, finding and identifying food, treating injuries, and climbing, swimming, and using specific or makeshift tools.
- Each type of environment challenges a person with a different range of dangers.
- An environment may be dry, wet, hot, cold, high altitude, low altitude, desert, rural, urban, or an island.
- Nevertheless, there are four basic necessities of life which apply in all of these cases; shelter, water, fire, and food (also oxygen for very high altitudes).

Survival Priorities

- In most survival situations, four priorities must be addressed before any other needs are met:
 - Finding or making shelter is the most important survival priority because it allows a person to stay protected from the elements, and thus hopefully warm and dry.
 - Humans can live for only about three days without water.
 - Fire helps to purify water, provide warmth, scare away dangerous animals, and signal to other people.
 - A human can survive for weeks without food, but hunger impairs judgment and clarity of mind, and makes one weak and susceptible to disease.
- These priorities may shift depending on the environment, though shelter is almost always the most important consideration. For example, in a desert environment, water is typically more immediately important than fire, with the priorities (perhaps) reversed in a cold-weather survival situation.

Shelter

- A shelter will protect one from potentially disastrous weather, help prevent [hypothermia](#), and allow restful sleep.
- A shelter should provide a somewhat comfortable place to sleep. To this end, it should account for the following:
 - Immovable rocks, animal nests, and other obstacles and hazards should be avoided.
 - Dry watercourses may be flat, sandy, and comfortable to sleep on, but they will flood in a storm.
 - Sunlight will provide warmth (which is not always welcome), and help one to wake up in the morning. However, sunny, open areas are vulnerable to wind.
 - Heat transfer: an excessively large or well-ventilated shelter will not retain warmth well.

Shelter

- Natural shelters such as caves and overhanging cliffs.
- Enlarge the natural pit under a fallen tree and line it with bark or tree boughs.
- Near a rocky coastal area, build a rock shelter in the shape of a U, covering the roof with driftwood and a tarp or even seaweed for protection.
- A lean-to made with poles or fallen trees and a covering of plastic, boughs, thick grasses or bark is effective to shelter you from wind, rain and snow.
- A wigwam may be constructed using three long poles. Tie the tops of the poles together and upright them in an appropriate spot. Cover the sides with a tarp, boughs, raingear or other suitable materials. Build a fire in the center of the wigwam, making a draft channel in the wall and a small hole in the top to allow smoke to escape.

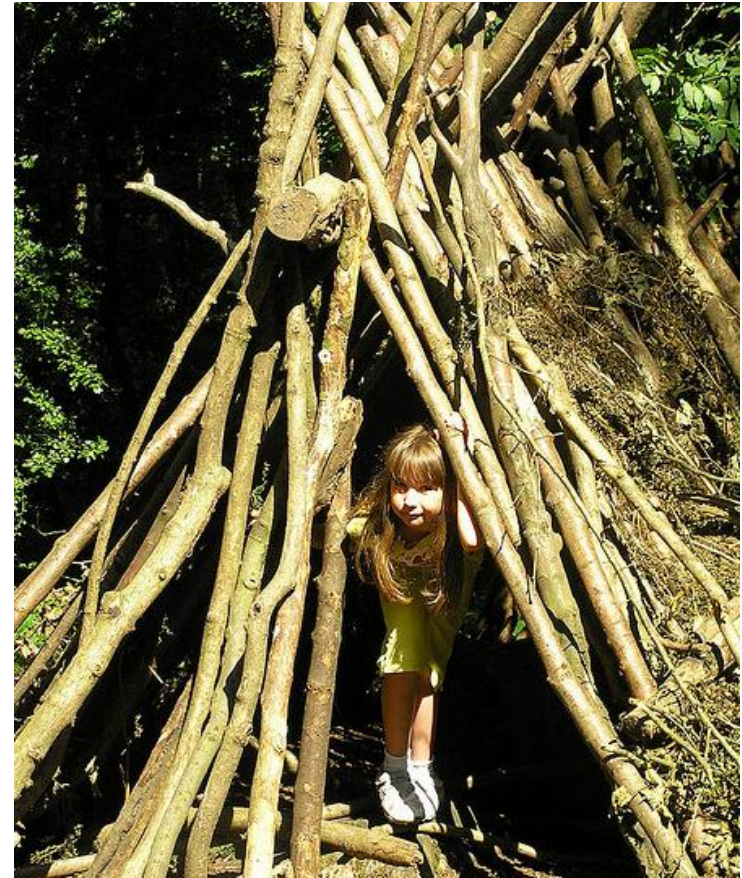
Shelter



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Water

- Humans can live for about three days without water.
- A typical person will lose 2-3 liters of water per day in ordinary conditions, but more in very hot or dry weather.
- A lack of water causes [dehydration](#), resulting in lethargy, headaches, dizziness, confusion, and eventually death. Dark yellow or brown urine indicates dehydration.
- In extremely dry environments, it is necessary to take extra care to prevent water loss by:
 - Breathing through the nose to prevent water vapor escaping through the mouth
 - Not smoking
 - Resting in the shade and avoiding strenuous labor during sunny, hot periods
 - Not eating too much (the human body uses a lot of water to digest food - especially fats and proteins)

Water Sources

- Snow and ice
 - Melt and purify.
- Rain
 - Catch rain in tarps or in water holding material or containers.
- Beach
 - Dig hole deep enough to allow water seep in.
- Tree
 - Cut tree (bamboo, banana tree stump, water form vine)

Water Purifying

- Rainwater collected in clean containers or in plants is usually safe for drinking.
- However, purify water from lakes, ponds, swamps, springs, or streams, especially the water near human settlements or in the tropics.
- When possible, purify all water you got from vegetation or from the ground by using **iodine** or **chlorine**, or by **boiling**:
 - Using water purification tablets. (Follow the directions provided.)
 - Placing 5 drops of 2 percent tincture of iodine in a flask full of clear water. If the flask is full of cloudy or cold water, use 10 drops. (Let the flask of water stand for 30 minutes before drinking.)
 - Boiling water for 1 minute at sea level, adding 1 minute for each additional 300 meters above sea level, or boil for 10 minutes no matter where you are.

Fire

- A fire is as important as a safe water supply, because of its many uses:
 - Boiling water to kill pathogens
 - Cooking food, including wild-caught fish and game
 - Staying warm, particularly when wet
 - Provides a sense of companionship and morale boost
 - Signaling to rescuers (bright at night, smoky by day)

How to start fire?

- Here are the general steps to make, maintain, and end a fire (any fire, any method):
 - Choose and prepare a location for the fire.
 - Gather fuel.
 - Pile some of the fuel in an appropriate manner where the fire is to be situated, ready to be lit.
 - Ignite some material, usually tinder. This is usually the most difficult (and critical) step.
 - If necessary, depending on the fire-starting method, blow the tinder into a small flame.
 - Transfer the flame from the tinder to the actual fire.
 - Build up the fire by adding fuel.
 - Maintain the fire as needed.
 - Put out the fire.

Fire making methods

- Bow drill friction



Source:

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- Fire from cans
- Flashlight reflectors
- Water in plastics
- Magnifiers lens

Food

- Human can survive for several weeks without food.
- However, much like dehydration, hunger can bring about many consequences long before it causes death, such as:
 - Irritability and low morale
 - Weakness
 - Loss of mental clarity, such as confusion, disorientation, or poor judgment
 - Weakened immune system
 - Difficulty maintaining body temperature
- A basic knowledge of [animal trapping](#), [hunting](#), and [fishing](#) will provide meat.
- Equally important is a knowledge of edible [plants](#), [fungi](#), and [lichens](#).

Animals for food

- Insects
 - Provide 65-80% of protein compare to beef (20%)
 - Insects to avoid:
 - insects that sting or bite, hairy or brightly colored insects
 - caterpillars and insects that have a pungent odor.
 - spiders and common disease carriers such as ticks, flies, and mosquitoes.
 - Insects such as beetles and grasshoppers that have a hard outer shell will have parasites. Cook them before eating. Remove any wings and barbed legs also.
- Worms (just wash it, good protein sources)
- Fish
- Birds
- Amphibians
- Mammals

Traps & Snares



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First Aids

- First Aid can help a person survive and function with injuries that would otherwise kill or incapacitate him/her.
- Common and dangerous injuries include:
 - Wounds, which may be infected
 - Bites from venomous animals, such as snakes
 - Bone fractures
 - Sprains, particularly of the ankle
 - Burns
 - The survivor may need to apply the contents of a first aid kit or naturally-occurring medicinal plants, immobilize injured limbs, or even transport incapacitated comrades.

Wilderness First Aid

- Diaphoresis
 - Charcoal powder
 - Fish / animal bones
 - Tea powder
- Burns
 - Running water
 - Soy sauce
 - Soap (hot water)
- Stop bleeding
 - Coffee powder
 - Banana latex