Wilderness Survival

Class Length:
1 hour 15 minutes

Class Size:
15 – 25 participants

Class Location:
- Barnett Shelter

Materials:
- Survival Kit

Objectives:
- Students will be able to have a better understanding of what to do in a survival situation
- Students will have the basic idea of building a survival shelter
- Students will have the knowledge of obtaining fresh water

Class Set-Up:
- Inspect survival kit for all materials, and be sure to be dressed preparedly.

Safety Precautions:
- Be careful to watch the students as they're building their shelters.
- Sticks are not to be thrown!
- Do not let them get underneath their survival hut unless you have checked it.
- No lifting sticks longer than themselves or thicker then an arm around.

Introduction: (5 minutes)
"Who has been in a survival situation before?"
"What do we need to survive?"
Rule of 4's. (4 min without air, 4 hours without shelter, 4 days without water, 4 weeks without food)
"What is the most important thing to do in a survival situation?"
REMAIN CALM, **STOP***, Stop, Think, Observe, and Plan*
Preparation, the things you have done before going anywhere will ensure your survival chances
"What can you do before your trip to help yourself survive?"
Make sure someone knows where you're going before you leave, and when you're going to be back. "Why is this important?"
Have a Survival Kit
"What kind of bag should your survival kit be in?"
Small. Something that can be clipped to you or something else.
"Where should you keep your kit?"
Either clipped to you or somewhere you can easily grab it-not at the bottom of the pack!

Activity 1 - Bring out the Pack: (10 – 15 minutes)

Contents-

- The pack itself
- Metal cup-melting snow, boiling water or soup
- 3 ways to purify water-boiling (must be at a rolling boil for at least 3min), Water purification tablets (like polar pure, or iodine tablets), Water purifier, SODIS
- Mirror-signaling, break it and use it to cut
- Matches-fire starting-should be stored in a waterproof container
- Candle-When flame is started its needed to capture fire for use, emotional comfort
- Twine or rope-Can be burned or used to make shelters
- Water Purification Tablets-if there is any doubt on the purity of water
- Fishing line and hooks-fishing or shelter building
- Pocket knife-skinning or cleaning food, many other uses
- Compass-with a map you can find a residential area, or any direction
- Whistle-to sound alarm
- Small flashlight-for direction at night, signaling, batteries with steel wool
- Plastic sheeting-can use to make solar still with plastic tubing, raincoat, warmth
- Plastic tubing
- Picture wire-snaring animals, making shelter
- First aid kit
- Batteries-2 D-cell, use with steel wool to make a fire (Demo!)
- Remember-This is just a few ideas with what you could do, ask them for suggestions.

Activity – Shelter Building: (30 - 40 minutes)

"What might you be able to find in nature to use as a shelter?"
caves, hollow logs, rock overhangs, snow cavern, low branches on an evergreen
"What could you use from around here to construct a shelter?"
sticks, leaves, bark, snow, trees, branches

Show a basic 1-2 person debris shelter. Point out that any larger and it will not be an efficient space to trap warm air. The layer of debris on top of the shelter should be at least 2 feet thick to make the shelter waterproof. In more severe, cold, windy weather, the layer should be 4-6 feet thick, with debris used to close the opening as well.

Break students into groups of 4-5 and emphasize that they discuss the location and style of shelter they want to build before beginning the work. Explain that all debris used for shelter building should be "DEAD, DOWN, AND BROWN". This being dead, on the ground (down), and brown. Students should be cautioned about moving large trees or logs and should be careful to not throw sticks about them as they are building. Students must choose a location where you can see them, ask your adult leaders to

help you walk around keeping everybody on task and asking questions to help them think out what they are doing.

Leave time to take a quick tour of all shelters allowing students a chance to explain their shelter and it's features. Before moving on to the next activity be sure to have students tear down all the shelters they built and spread the debris back out WITHOUT throwing anything.

Activity – Getting Water: (15 - 20 minutes)

Bagging Branches (1 minute)
A large plastic bag is placed over a living limb of a medium-tree or large shrub. The bag opening is sealed at the branch, and the limb is then tied down to allow collected water to flow to the corner of the bag. The amount of water yielded by this method will depend on the species of trees and shrubs available. During one test of this method, a transpiration bag produced approximately a gallon per day for 3 days with a plastic bag on the same limb, and with no major deterioration of the branch.

SODIS (3 minutes)
Solar water disinfection - the SODIS method - is a simple procedure to disinfect drinking water. Contaminated water is filled in a transparent PET-bottle or glass bottle and exposed to the sun for 6 hours. During this time, the UV-radiation of the sun kills diarrhea generating pathogens. The SODIS-method helps to prevent diarrhea and thereby is saving lives of people.

Solar Still (10 minutes)
1. Build your solar still in the lowest, dampest area you can find - at the base of a hill, in a dry stream bed or at the base of a dried-up gorge. This is where ground water accumulates and is the best place for gathering it.
2. Carry a sheet of strong plastic 6 feet by 6 feet, a cup or a container, and 6 feet of plastic tubing with you in your pack. In extreme survival situations you may be forced to make due with whatever you have. Understanding the principles of the solar still will enable you to adapt to your situation.
3. Dig a large hole in the ground, 2 feet deep and 3 feet in diameter. The idea is to dig down to damp soil.
4. Place your container, centered, in the bottom of the hole.
5. Place one end of your plastic tubing in the container.
6. Cover the hole with the plastic sheet. Use the dirt from the hole to weight the plastic surrounding the hole, so that no air can escape. Make sure the free end of the plastic tubing is accessible.
7. Use a small rock to weight the center of the plastic down over the cup, creating a cone over your cup with the point pointing into your cup.
8. Understand that as the sun heats up the soil, moisture evaporates and condenses on the plastic. This condensed moisture drips to the lowest portion of the plastic and then drips off into your cup.

9. Drink from your cup by sucking on the tubing. That way you don't have to disassemble your still to get a drink.
10. Realize that only pure water evaporates, so that in the evaporation process, most of the impurities are left in the soil.

Conclusion: (5 minutes)
Review the basics of survival kit.
"What is the most useful new skill you learned?"
Remind them to tell someone where they are going anytime they are hiking or camping.

Class Tear-Down:

- Make sure the students grab everything out of the woods-leave no trace!
- Replace the steel wool and anything else you might have used
- Return the pack away.