

Wilderness Survival Basics

LEARN TO BE PREPARED FOR:

AN UN-PLANNED OVERNIGHT (OR MORE) IN NATURE.

Class Outline

- Session #1 (Classroom) – Wilderness Survival Foundation & Priorities / Priority #1 and #2 / Kit Example
- Session #2 (Classroom) – Thermoregulation: Shelter & Fire Overview / Personal Shelters
- Session #3 (Outdoor) – Thermoregulation: Tarp Shelter Set-Up's (summer & winter) / Knots Used
- Session #4 (Outdoor) – Thermoregulation: Fire Making Methods / Signaling for Rescue
- Session #5 (Classroom) – Signaling for Rescue / Water / Dangers (insects, animals, lightning)
- Session #6 (Classroom) – Layering System / Compass & Nav Basics / Natural Navigation / Food
- Session #7 (Outdoor) – Basic Compass Use / Figure 4 Deadfall / Plant Cordage
- Session #8 (Classroom) – Survival Kits / Hiking Gear + Anomalous Items / First Aid Kits

Note: For outdoor sessions, feel free to bring a camp chair if you don't want to stand for 50 minutes.

You will be participating and not sitting the entire time.

Goal of this class - To give you a FOUNDATION of Wilderness Survival... So, you will:

- Understand what to do in a survival situation, and in what order.
- Understand each priority in a Wilderness Survival Situation
- Be able to build a **COMPLETE** and organized survival kit with contents you are familiar with, comfortable with and know how to use.
- Understand how KNOWLEDGE, GEAR and SKILLS work together.

Why Learn Wilderness Survival?

Because your "mindset " can be the difference between being a "RESCUE" or being a "RECOVERY" in a survival situation.

Knowing what to do in a wilderness survival situation can help you **minimize** fear and Panic!
Fear and panic are killers, they don't allow you to think clearly.
Walking around while in a panic can lead to serious injury!

•Recognize and admit your situation - Know that a ***POSITIVE ATTITUDE,***
along with your survival knowledge, skills and gear will get you through this situation.

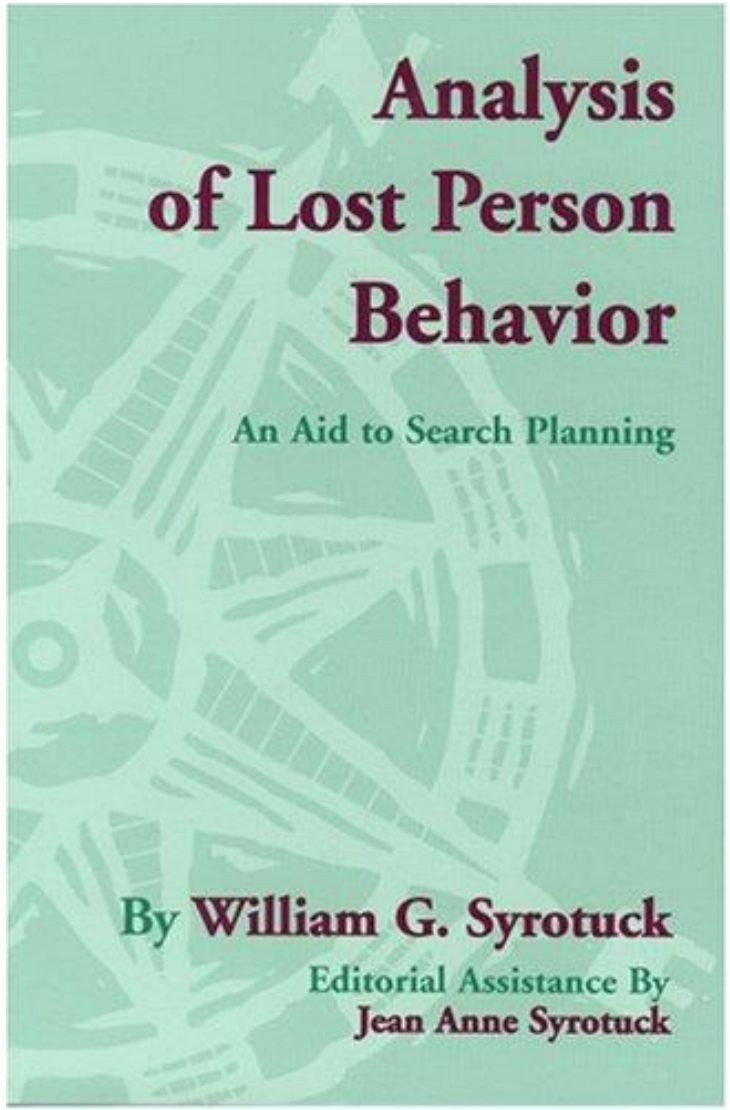
•Keeping yourself busy and your mind occupied greatly reduces fear.





Avoid unnecessary risks!

Every time Search & Rescue go out on a rescue or recovery, they put their lives at risk!



A lost person, capable of going three miles in any direction, creates a search pattern covering up to 28 square miles (πr^2).

To cover an area this size thoroughly would take 264 searchers, searching for twelve days!

Question?

In a survival situation, what is the lightest thing you can carry with you that will give you the greatest odds of survival?

KNOWLEDGE

What circumstance(s) could get you into a survival situation?

Nationally - The top reasons SAR is called out (not in any order)

1) Trips
2) Falls
3) Sprained Ankle
4) Lost Hiker
5) Fatigue/ Physical Condition
6) Weather (Heat)
7) Gastro Intestinal Issues….
8) Drowning



93% of people are rescued within 24 hours!
And a total of 95% are rescued within 3 days.

Note: Search and Rescue recommend staying put, if safe to do so.
It can take them much longer to find you if are continually moving your location.

•Local - **WASHINGTON COUNTY**
Search and Rescue Information:

• 150 to 170 Calls per year:

• 50 are Heat Related, with 2 to 4 Heat Deaths Per Year.

• 20% are people stuck on hillsides that can’t get down or back up.





A few wilderness survival recoveries / rescues

>32yr old experienced hiker dies from exposure (hypothermia) in New Hampshire.

>Grandfather and grandson die in Arizona during a hike.

>62yr old hiker lost for 9-days in the Sierra National Forest.

>78yr old hiker lost for 3 days in Baxter State Park.

>Body of a missing hiker found after 3 weeks in Yosemite.

>Multiple incidents of hikers and their pets dying on Arizona trails are primarily caused by extreme heat, dehydration, and hyperthermia!

>Each year in Yosemite, SAR responds to 250 incidents / rescues!



•<u>The biggest killers in the wilderness:</u>

- Drowning
- Catastrophic Falls
- Exposure (inability to regulate your body temperature)
  - Hypothermia or Hyperthermia-

Average deaths in the wilderness per year:
Hypothermia - 699 / Bee - Wasp sting - 48 / Snake bite - 5 / Bear attack - 2

Hiking can be more dangerous than backpacking, because when backpacking….

•*You are carrying items to help thermoregulate as well as water filtration and food.*

•*Hikers sometimes go without these items and can get into trouble.*



•Primitive Skills Vs. Modern Methods for Wilderness Survival

•Primitive Skills:

•Requires knowledge and practice that will allow you to live off the land.
•Can become a hobby or even a lifestyle for some people.
•Requires a great degree of knowledge and practice of the skills, some being:
- Fire by Friction.
- Construction of primitive shelters.
- Tracking & trapping methods, and hunting with primitive weapons.
- Uses of natural resources (plants and such) for food, medicine and utility.
- Making Stone Tools

•**Note**: Just because you know primitive skills does not mean you should depend on them.

•Modern methods and gear, greatly improve your chances of survival.

- **Modern Wilderness Survival - <u>OUR PRIMARY FOCUS!</u>**

- Basic knowledge and minimal practice needed, using modern gear that can be purchased at most outdoor stores to address your priorities in a survival situation.

- This is for the average hiker / backpacker / birder / naturalist, that wants to learn to survive if lost or injured on a wilderness outing.

- The knowledge you gain could save your life in a wilderness survival situation!



My approach to teaching Wilderness Survival:

~~Survival Gear Lists~~
Vs
Concepts
(in this case “the Priorities of Survival”)
will lead to proper gear selection for you based on your level of skill and knowledge

If you give a man a fire.....





Trip Preparation

• Be Prepared (Scout Motto)
- **Tell someone where you are going and when you plan to return.**
(when can that system fail?)

- Clothing Selection (first line of defense against the elements):
• Know how to use the "layering" system.
• Cotton doesn't kill....Stupidity kills!
- Gear Selection (***all gear should be tested out prior to your trip***)
• ***If you can, buy 2, one to practice with and one for your kit.***
- Know the area (familiarize yourself with the map of the area)
• Route Plan (know the terrain and any possible hazards)
• Forecasted weather for your trip
• Resources - Water / Plants / Animals

The Actual Trip

• Pay Attention to:
- Weather Changes / Terrain / Hazards / Landmarks / Plants / Animals
- Look back on occasion to see what the trail will look like on the return trip

If you think you are LOST

S•T•O•P

- **S**it Down - Don't keep walking (because you can't walk in a straight line) Physically stop, sit down and let yourself calm down. Walking around in a panic can lead to injuries. Remember about panic and fears being killers. Eat a snack, breathe deeply, try to relax (because you know what to do).

- **T**hink - Are there any immediate dangers? Life threatening injuries? Once calm, you may be able to remember your route and how to get back. Visualize your journey and landmarks you have passed.

- **O**bserve - Your surroundings and relate them to your map. You may notice a feature you recognize and use that feature to help you navigate back.

- **P**lan - What are your options? What do you have with you, what natural resources are available to you? Should you use navigation techniques to continue onward, or backtrack to a known location, or should you make yourself comfortable and wait for rescue?

What are the priorities in a Wilderness Survival Situation?

What are “The rule of 3’s”

The Rule of 3’s state: You can live.....

3-Seconds without “Hope” (PMA – A Positive Mental Attitude)

3-Minutes without “Air” (Bodily Function - Blood Loss - Airway Compromise – Heart Issues)

3-Hours without “Shelter” (Thermoregulation – Keep your body core temperature at 98.6º)

3-Days without “Water” (Less in a Desert Survival Situation)

3-Weeks without “Food” (a very low priority)

My Additions to the Rule of 3's and where they fit into the priorities:

3-Seconds without "Hope" (PMA – A Positive Mental Attitude)

3-Minutes without "Air" (Bodily Function - Blood Loss - Airway compromise)

3-Hours without "Shelter" (Thermoregulation – Warmth / Shade – 98.6º Core Temp)

>Signaling & Communication (get signals ready so you can signal to rescue personnel)

>Sleep (sleep deprivation can greatly affect decision making abilities), an often overlooked priority

3-Days without "Water" (Less in a Desert Survival Situation)

>Navigation (If no one is searching for you, it may be time to try to navigate out of your situation)

3-Weeks without "Food" (a very low priority)

Your Survival Kit should be built based on the priorities listed above

- Build your survival kit on the priorities listed above.

- Using the “Priorities of Survival”(rule of 3’s + 3) will assure a complete kit with components you are familiar with as opposed to working off a gear list created by someone else.

- Adding in the items listed in ”10 essentials” will complete your kit.
  Note: most of the “10 essentials” are already covered by “The Rule of 3’s”

More on “the 10 essentials” later.....



Our environments change, however, our needs don't!

The priorities are the same in all environments, although the <u>approach</u> to addressing the priorities may be different, shelter for example……

Jungle (raised bed) / Arctic (snow cave)





Priority #1
3 Seconds without “Hope”
PMA - Positive Mental Attitude

• The correct mindset can be the difference between being a “rescue” vs. becoming a “recovery”.

Having a positive mental attitude is why some people, with absolutely no survival training, have lasted for several days in a survival situation and have been successfully rescued .On the other hand, while we have no definite way to know, some that have perished, had the skill and knowledge to live, but did not. This could have been due to their mindset. Possibly, they did not have the positive attitude and hope needed to get them through the situation.....they just gave up!

A survey of over 120 Naked and Afraid applicants found that 100% put “PMA” as their number one priority in a survival situation!

• Carry what you need to give you the hope, the “PMA” to get through your situation.
- Confidence, determination and the will to get through the situation.
    - Family photo
    - Bible verses
    - Survival information cards

Priority #2
3 Minutes without “Air”
Bodily Functions - First Aid & Safety



In Wilderness First Aid, we use the MARCH Algorithm to assess life threats:

M - Massive Hemorrhage (control life threatening bleeding)

A - Airway (make sure the victim has a patent airway - no blockages or swelling)

R - Respiratory (assist with respirations if needed)

C - Circulation (CPR if the victim is in cardiac arrest)

H - Hike vs. Helicopter and…… Hypothermia / Hyperthermia
(remember to control body temperature for shock victims)

•A Wilderness First Aid / First Responder class is something to consider.

•Why take a Wilderness First Aid Course?

•Because Wilderness First Aid differs from Urban First Aid.

•You can't depend on 911 when you are hours or days from help.

•Things you may need to do in the Wilderness that are not even done by urban first responders:

•These are a few of the things taught in a "Quality" Wilderness First Aid class:

•1) Put Dislocations back into place

•2) Spinal Assessments - Can the victim walk out?

•3) Infections - Need to be addressed if you are days away from help.

•4) And More!



What are the signs and symptoms of conditions you should really be aware of?

(Things like burns are visually seen, the items below, you need to be able to access)

1) Hypothermia
2) Hyperthermia
3) Dehydration
4) Hyponatremia
5) Heart Attack / Cardiac Arrest (they are not the same thing)
6) Shock
7) Anaphylaxis
8) HAPE (if going to altitude)
9) HACE (if going to altitude)
10) Spinal Injuries

Some common myths in wilderness medicine:

•You have to scrape out a bee's stinger –

No, you can pull it out without issue.

•Sweating stops in persons with Heat Stroke-

No, this person can still be sweating. The only way to tell the difference between Heat Exhaustion and Heat Stroke is altered mental status appears in Heat Stroke.

•Cut & Suck a Snake Bite-

Don't do this! The person needs to get to a hospital with antivenom.

•Tourniquets do more harm than good –

Tourniquets can save lives, and in the absolute worst case, lose a limb, save a life.





Homework (optional)

A few knots we will be using during shelter set-up's

- Bowline, or Figure 8 in a bite, or any end of line loop
- Siberian Hitch (Evenk Hitch)
- Trucker's Hitch (modified Trucker's Hitch) or Taught Tarp Hitch
- Adjustable Grip Hitch or Taught Line Hitch
- Slip Knot



