**Survival**

**–1983** Thanksgiving storm. **88 people died**. (2/hour)

–85 % from Carbon Monoxide

–Allow vehicle to become covered with snow. Snow doesn’t get below 26-28

Degrees F.

–95 % of Wilderness Deaths in Northern Climates are caused by Hypothermia!

**–In the past 10 years the outdoor death rate has more than doubled.**

**Survival Is:**  10 % Skill

10 % Equipment

80 % Positive Mental Attitude

**Survival Is:** Personal

Seasonal

Geographical

**Getting Lost:**

–**87 %** of All people who become lost or stranded will panic to some degree!

–**50 %** of these people will run until they drop from exhaustation.

–Every time you pass a fork in the trail go past, stop and look back

–Let someone know where you are going and when you’ll be back.

–**If you become Lost:**

**S.T.O.P.** (Stop, Think, Observe, Plan)

1) Stop, sit down Look around

2) Blow whistle

Before Dark:

1) Find a big tree with low branches

2) Hug the down wind side

3) Stay Put!

**–3 requirements for surviving the night :**

1) shelter

2) Fire

3) Signal

**– 6 Priorities of Life:**

**1) Shelter:**

Adequate to protect from wind/rain/snow/ etc..

**2) Fire:**

For Light, Signal, Companionship, Protection, Warmth.

**3) Be Where You Are: S.T.O.P.**

Think, plan, organize, Observe,

The # 1 enemy to survival is Pain. ( Injury, thirst, hunger, cold etc..)

**4) Water:**

You can last 3-4 days without water ( depending on conditions)

You should drink 3 quarts of water each day.

Boil, filter, or treat water.

Drink warm water----> Pine needle tea-------> sage brush tea

**5) Signal:**

Ground to Ground:-----> whistle

Ground to Air------> fire, glass signal mirror

**6) Food:**

Not really necessary. You can survive 4-5 weeks without food.

**Types of wild foods:**

Green Plants: Take a lot of Energy, not very digestible,

Must make positive ID !

Berries: White and Yellow Berries: 95 % are Poisonous

Red Berries: 50 % are Poisonous

Blue and Black Berries: 85 % are edible

15 % Among the most poisonous

Mushrooms: Avoid unless you can make 100 % positive ID

Small Game: Difficult and time consuming to snare

Fish: Difficult to catch or spear without the proper equipment.

Pines: Most pines are edible

Insects: Ants, grasshoppers, grubs, worms, etc..

Can be boiled in a glass of water and swallowed like a pill.

**Emergency Kits**

***Activity:*** Create your own personal carry pack

**Personal Carry Pack:**

–Fire Starter ( 3 types ) –Trail food

–Whistle –Bandana

–Mirror –Map/Compass

–Space blanket, poncho, garbage bag etc. –Water purification

–Knife –First Aid Kit

–Rope –Water bottle

–Personal medicines –Flash light

***Activity:* Create your own vehicle emergency kit.**

**Vehicle Emergency Kit:**

–Coffee can, T.P., Rubbing alcohol –Tire Chains

–Sleeping bag, space blanket, etc.. –Tow strap

–Fire starter –Winter boots, gloves, hat

–Rubber Tubing/Gas can –Sand, Kitty Litter

–Water/ water purification –Pieces of carpet

--Rope (can also use as tire chains) –Shovel

–Flares –Cell Phone / C.B.

–First Aid Kit –Flash light

–Jumper cables –Extra Lubricants (Oil, ATF, antifreeze etc.)

–Tarp –Tire repair kit / Inflate-a-flat

–Newspaper –Food

Topics: –siphoning

–hubcap, sand, gas

–spare tire/ flare

–mirrors to signal

–lighter

–spark plugs / firestarter

**Fire Starting** \*demos\*

–Matches in waterproof case –Pine pitch

–Lighter –Wax filled paper cup / can

–Magnesium kits –Magnifying glass

–Candle –Hand fire drills

–Steel wool / 9 V battery –Bicycle inner tube pieces (~2"x2")

–Vaseline / cotton –Lighter fluid/dryer lint/ film canister

**Three stages of fuel:**

Tinder: Any material that will light from a spark. Man made or natural, it works best when dry, and fluffy

Kindling: Thin wood or wood shavings that will light from a small flame.

–inner bark –book

–pine needles –birds nest

–paper –dry grass / leaves

–**Do Not** use money

(Doesn’t burn well)

Fuel: Wood, thumb size or larger used to maintain a fire.

Collect enough tinder, kindling, and fuel to build three fires. This allows you to go back to a smaller stage of your fire begins to dwindle.

In addition to fuel, collect a **platform** ( dry piece(s) of wood to build your fire on) and

a **brace** (wrist sized piece of wood that is placed on the platform next to where you intend to lay your tinder. Allows air to circulate)

**Shelter**

–Tarps –Tube tent

–Space blankets –Snow cave

–Lean-to –A-frame shelter (pine branches, bark)

–Tree cave –Pine bough beds

–Burried fire pit/ tarp –Cave

–Plastic sheeting –Rock out croppings

**Site selection:**

–Large enough and level enough for both you and your equipment.

–Close to construction materials.

–Close to signaling and recovery site

–Close to food and water source.

**Safety considerations: General:**

**–**Animal trails

–Avoid avalanche slopes –Southern exposure (in cold weather)

–Drainages –Shelter opening should face East.

–Unstable rock formations –Basic principles of Tarp/natural shelters.

–Below dead trees

**Signaling**

–Whistle –Marine flare guns

–Flares –Mirror

–Fire tower (aspen bark, pine boughs etc) –Fire arms

–Cell phone / C.B. radio –Smoke / fire

–Flash light –Logs, Rocks, etc laid out on ground

**Signal location:**

1) Close to camp and shelter.

2) Located in largest clearing available

3) If practical the site should have 360 degree visibility

4) If no clearing is available, place signal next to a stream.

5) Avoid shadows or over hangs that might obscure the signal.

Video: *The Great Outdoorsman:* Winter survival (18 min)

**Water and water purification**

Obtaining Water:

–Surface water (purification required) –Solar still

–Plastic bag around tree branch –Rain / Dew collection

–Subsurface (Beach well, dry riverbeds) –Vegetation ( Cacti, fruit, etc...)

Water Filtration

–Seepage basin –Bandana (crude)

–Three tiered tri pod (cloth covered with sand, gravel, grass, charcoal

Water purification:

–Boiling (10 min. minimum) –Iodine/ Iodine tablets

–Filter ( bottle, straw, pump, etc.) –Chlorine ( 2 drops to one Quart, sit for 30 min)

Liquids to avoid:

–Salt water

–Urine

–Alcohol

**Desert Survival**

**Winter Survival**