



Foundational Principles

The Rule of 3s (Priorities)

3 Minutes without Air: Immediate danger. Ensure clear airways.
3 Hours without Shelter (in extreme conditions): Protection from elements is critical for survival against hypothermia or heatstroke.
3 Days without Water: Dehydration quickly impairs judgment and physical ability. Water procurement is paramount.
3 Weeks without Food: While less immediate, food provides energy and morale for long-term survival. Prioritize other needs first.
Tip: Always address the most immediate threat first. This hierarchy guides your actions.

Mindset & Planning

Positive Mental Attitude (PMA):	Crucial for problem-solving and perseverance. Panicking is your worst enemy.
Pre-planning & Knowledge:	Know your environment, potential hazards, and local emergency contacts before you go.
Tell Someone:	Always inform someone of your itinerary, including your expected return time and route.
Practice Skills:	Don't wait for an emergency. Practice fire-starting, knot-tying, and navigation regularly.
Stay Calm:	When an incident occurs, stop, think, observe, and plan (S.T.O.P.).

Everyday Carry (EDC) Essentials

Knife/Multi-tool:	Indispensable for countless tasks, from cutting cord to preparing food.
Lighter/Waterproof Matches/Ferro Rod:	Reliable fire-starting tools are a must.
Paracord (50-100ft):	Versatile for shelter building, trapping, repairs, and more.
Whistle:	For signaling for help; much more effective than shouting.
Small First-Aid Kit:	Bandages, antiseptic wipes, pain relievers, gauze, medical tape.
Water Bottle/Filtration Device:	Staying hydrated is key. A filter can be a lifesaver.
Headlamp/Flashlight + Spare Batteries:	Essential for navigating or working in the dark.
Compass & Map:	Even if you have GPS, know how to use traditional navigation tools.
Duct Tape (small roll):	For quick fixes on gear, clothing, or even minor wounds.

Shelter & Firecraft

Shelter Building Basics

Site Selection: Look for natural windbreaks, level ground, and avoid flash flood zones or deadfall. Consider proximity to water but not too close.
Protection: Your shelter needs to protect you from wind, rain, snow, and sun. Think about insulation from the ground (vapor barrier).
Types of Shelters: <ul style="list-style-type: none"> Lean-to: Quick and simple, provides basic protection from one direction. Debris Hut: Excellent insulation, built with a strong frame covered in thick layers of leaves, grass, and debris. Traps body heat effectively. Snow Cave/Quinzee: For snowy environments, provides excellent insulation but requires significant effort and knowledge to build safely.
Insulation: Use natural materials like dry leaves, pine needles, or grass inside your shelter and between you and the ground. The thicker, the better.
Size: Build your shelter only as large as you need. A smaller space is easier to heat and maintain.
Waterproofing: If using natural materials, layer them like shingles to shed water effectively.
Secure: Ensure your shelter can withstand strong winds or any other environmental challenges.

Fire Starting Methods

Lighter/Waterproof Matches:	Most reliable and easiest. Keep them dry and accessible. Store in a waterproof container.
Ferrocerium Rod (Ferro Rod):	Produces high-temperature sparks. Works when wet. Scrape hard and fast for best results. Good for all weather.
Magnifying Lens/Concave Mirror:	Requires sunlight. Focus the sun's rays to a tiny point on dark, dry tinder. Works best on a clear, sunny day.
Bow Drill/Hand Drill:	Primitive methods. Requires skill, practice, and the right materials (dry wood). Generates friction to create an ember.
9-Volt Battery & Steel Wool:	Touch the terminals of the battery to fine steel wool (0000 grade). Creates an instant flame. Very effective but consumes battery life.
Tip: Tinder, Kindling, Fuel:	Always prepare plenty of each before striking a spark. Tinder (fluffy, catches spark), Kindling (pencil-sized sticks), Fuel (larger logs).
Fire Starters (DIY):	Cotton balls soaked in petroleum jelly, dryer lint, finely scraped birch bark, char cloth.

Fire Lay Types & Uses

Tepee Lay:

- **How:** Sticks leaned together in a cone shape over tinder. Initial ignition.
- **Use:** Quick to light, good for starting, provides heat and light quickly. Add fuel as it burns down.

Log Cabin Lay:

- **How:** Logs stacked criss-cross like a cabin, with tinder/kindling in the center.
- **Use:** Slower to start, but burns longer and more consistently. Good for sustained heat and cooking.

Star Lay (or Indian Fire):

- **How:** Four or more logs laid out like spokes of a wheel, with the fire at the hub. Push logs inward as they burn.
- **Use:** Efficient use of fuel, easy to maintain for long periods with minimal effort. Good for overnight fires or signal fires.

Dakota Fire Hole:

- **How:** Two holes dug into the ground: one for the fire, another for an air intake. Connect underground.
- **Use:** Creates a powerful, contained fire with minimal smoke visible from above. Excellent for cooking and warmth with concealment.

Signal Fire:

- **How:** Build a large fire with plenty of green, leafy material nearby. Once the fire is hot, add green material to create thick smoke.
- **Use:** To attract attention from a distance, especially during daylight. Three fires in a triangle is a universal distress signal.

Heat Reflector:

- **How:** Build a large log or rock wall behind your fire, facing your shelter. The wall absorbs heat and radiates it back.
- **Use:** Maximizes heat transfer to your shelter, especially useful in cold conditions.

Water & Food Procurement ☐☐

Water Sourcing

Natural Water Sources:	Streams, rivers, lakes, and springs. Prioritize moving water over stagnant. Always purify!
Rainwater Collection:	Use tarps, large leaves, or clothing to collect rainwater. It's often the cleanest source if collected directly.
Dew Collection:	Drag a clean cloth or clothing through dewy grass in the morning and wring it out. Slow but effective.
Solar Still (Condensation Trap):	Dig a hole, place a container, cover with plastic sheeting weighted down in the center. Sun heats moisture in the soil, which condenses on the plastic and drips into the container.
Transpiration Bag:	Tie a clear plastic bag around a leafy branch of a non-poisonous plant. The plant releases water vapor, which condenses inside the bag.
Snow and Ice:	Melt before consuming. Eating snow/ice directly can lower core body temperature (hypothermia risk).
Plant Water:	Some plants like certain cacti, grapevines, or bamboo can contain potable water. Research local flora.

Water Purification

Boiling (Most Effective):	<ul style="list-style-type: none"> Bring water to a rolling boil for at least 1 minute (3 minutes at altitudes above 6,500 ft). Kills most bacteria, viruses, and parasites.
Filtration (Commercial Filters):	<ul style="list-style-type: none"> Portable water filters (e.g., Sawyer Mini, Lifestraw) remove bacteria, protozoa, and some sediment. Always follow manufacturer instructions.
Chemical Tablets (Iodine/Chlorine Dioxide):	<ul style="list-style-type: none"> Easy to carry and use. Kills most microbes but may leave a taste. Follow dosage instructions carefully and allow sufficient contact time.
UV Light (e.g., Steripen):	<ul style="list-style-type: none"> Uses UV-C light to destroy DNA of microbes. Effective but requires batteries and clear water.
DIY Sediment Filter (Pre-filtration):	<ul style="list-style-type: none"> Layer cloth, charcoal (from fire), sand, and gravel in a makeshift funnel. This <i>only</i> removes large particles and improves taste; it does <i>not</i> purify against microbes. Always follow with boiling or chemical treatment.
Solar Disinfection (SODIS):	<ul style="list-style-type: none"> Fill clear plastic PET bottles with water and expose to direct sunlight for 6 hours (sunny) or 2 days (cloudy). UV radiation purifies the water. Slow but effective if no other options.

Foraging & Food (CAUTION! ☐)

Universal Edibility Test (Last Resort!):	A multi-step process for testing unknown plants. Extremely risky and should only be used in dire situations when starvation is imminent. It does <i>not</i> guarantee safety.
General Rules for Foraging:	If you don't know it, don't eat it! Many poisonous plants mimic edible ones. Focus on high-calorie, easily identifiable sources.
Common Edibles (Region Specific):	Dandelion (leaves, roots, flowers), Cattail (roots, shoots, pollen), Plantain (leaves), Berries (only if 100% sure, e.g., blueberries, raspberries). Avoid anything with milky sap, almond scent, or umbrella-shaped flowers.
Insects as Protein:	Many insects are edible and high in protein. Avoid brightly colored ones, hairy ones, and those with a strong odor. Cook them first (roast, boil). Grubs, crickets, ants (some species) are common.
Fishing/Trapping Basics:	Improvised fishing lines (dental floss, inner strands of paracord) with makeshift hooks (bent pins, thorn). Snares for small game (requires knowledge of local regulations and animal paths). Check traps frequently.
Eggs:	Wild bird eggs can be a good source of nutrition if found. Check for freshness by floating them in water (sink = fresh).
Cooking:	Always cook wild game, fish, and insects thoroughly to kill parasites and bacteria.

Navigation, Signaling & First Aid

Basic Navigation

STOP Method:	When lost: Stop, Think, Observe, Plan. Avoid panic and rash decisions.
Sun & Shadow Method:	In the Northern Hemisphere, the sun rises in the east and sets in the west. At noon, it's generally in the south. Stick method: Place a stick upright; its shadow moves opposite to the sun. Mark shadow tip, wait 15-20 min, mark again. A line through these points is East-West.
North Star (Polaris):	Locate the Big Dipper and then the Little Dipper. Polaris is the last star in the handle of the Little Dipper and indicates true North.
Compass & Map:	Learn to orient a map with a compass. Understand declination (difference between true north and magnetic north). Practice taking bearings and reading contour lines.
Natural Indicators:	Moss often grows thicker on the shadier (north) side of trees in the Northern Hemisphere (unreliable). Prevailing winds can shape trees. Water flows downhill.
Leave a Trail:	If exploring, leave markers (rock cairns, broken branches) to retrace your steps. Don't rely solely on memory.

Signaling for Rescue

Rule of 3s for Signals:	<ul style="list-style-type: none"> • Three fires in a triangle. • Three loud whistle blasts. • Three flashes with a signal mirror. • Three piles of rocks/logs.
Visual Signals:	<ul style="list-style-type: none"> • Signal Mirror: Flash at aircraft/boats. Practice aiming. • Ground-to-Air Signals: Use contrasting materials (logs, rocks, clothing) to spell out distress messages (e.g., SOS, X for 'require medical assistance') in large letters in an open area. • Strobe Light/Flashlight: Use at night. Flash in groups of three.
Audible Signals:	<ul style="list-style-type: none"> • Whistle: Carry a loud whistle. Three short blasts repeated. More effective and less tiring than shouting. • Shouting: Yell for help, especially if you hear voices or distant sounds. Cup hands to project voice.
Smoke Signals:	<ul style="list-style-type: none"> • Daytime: Build a fire, then add green leaves or wet material to create thick, white smoke. Three puffs are a distress signal. Ensure a clear, open area.
Fire Signals (Night):	<ul style="list-style-type: none"> • Build a large, bright fire. Place it on a high, visible point. A triangle of three fires is ideal.
Personal Locator Beacon (PLB)/Satellite Messenger:	<ul style="list-style-type: none"> • Modern, highly effective. Transmits your GPS coordinates to rescue services. Requires pre-registration and batteries. Best option if you have one.

Wilderness First Aid Basics

Assess the Scene & Patient:	Ensure safety first. Check for responsiveness, breathing, and severe bleeding. Use the ABCDE mnemonic (Airway, Breathing, Circulation, Disability, Exposure).
Bleeding Control:	Apply direct pressure with a clean cloth. Elevate the injured limb. If severe, apply a tourniquet (as a last resort).
Fractures & Sprains:	Immobilize the injured limb. Use splints made from sticks, rolled clothing, or branches, secured with tape or cord. Pad well.
Hypothermia:	Symptoms: Shivering, confusion, clumsiness. Treatment: Get the person into a dry, insulated shelter. Remove wet clothing. Provide warm, sweet drinks (not alcohol). Share body heat (skin-to-skin).
Heatstroke/Heat Exhaustion:	Symptoms: Nausea, dizziness, headache (exhaustion); hot, dry skin, confusion, seizures (stroke). Treatment: Move to shade. Loosen clothing. Cool with water. Drink fluids (water, electrolytes). If stroke suspected, urgent cooling and medical help.
Burns:	Cool with cool (not cold) water. Cover with a sterile, non-stick dressing. Do not break blisters. Prevent infection.
Bites & Stings:	Identify the source if possible. Clean the wound. Remove stingers if present. Apply cold compress. Monitor for allergic reactions (swelling, difficulty breathing - use EpiPen if available).
CPR/Choking:	If trained, perform CPR (Cardiopulmonary Resuscitation). For choking, use Heimlich maneuver. Learn these skills beforehand.
Infection Prevention:	Clean all wounds thoroughly with potable water. Cover with clean dressings. Change dressings regularly. Watch for signs of infection (redness, swelling, pus, fever).