



YOU ALONE IN THE MAINE WOODS

THE OUTDOOR ENTHUSIAST'S GUIDE



This is your personal survival manual. Read it thoroughly before your trip into the Maine woods, and then carry it with you when you go.

Name: _____

Address: _____

City/Town: _____

State: _____ Zip Code: _____

email: _____ phone: _____

Medical problems, if any (include drug reactions):

Blood Type: _____

In case of accident or serious illness, please notify:

Name: _____

email: _____ phone: _____

YOU ALONE IN THE MAINE WOODS

A practical guide to woods comfort, safety, and survival

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by

Safety Officer Gareth Anderson, Search & Rescue Coordinator

and

Col. John F. Marsh, Maine Warden Service

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by

Michael F. Richard, Hunter Safety Director
Scarborough Fish and Game Association

Brad Rounds, Maine Master Guide

Bryan Courtois, Education Director
Maine Association for Search and Rescue (MASAR)

and

Michael Sawyer, Recreational Safety Unit Supervisor,
Maine Department of Inland Fisheries and Wildlife



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The Maine woods and waters offer endless opportunities for enjoyment — whether afoot (hunting, hiking, or snowshoeing) afloat (sailing, paddling, or powerboating), or riding on an ATV, snowmobile, or horseback.

But whenever you venture out to the woods or waters, there will be risks involved. You can't completely avoid them, but you can anticipate them, prepare for them, and reduce the danger you put yourself and your fellow travelers in should an incident occur.

Sometimes it'll just be an oops that you learn from without suffering anything more than embarrassment. Other times, your decisions and actions (or inaction) can escalate to a serious or life-threatening event.

Your planning, training, outfitting (clothing and equipment), and situational awareness will make all the difference. Nature in general, while unforgiving, is not out to get you. And animals, if respected, don't pose a danger.

You don't need to plan, train, and equip for every worst-case scenario – just the things most likely to occur. You probably don't carry extra brake parts in your car, but you likely do carry a spare tire and the tools to change it. This is the same concept. Two-week survival situations happen, but they are extremely rare. The vast majority of folks get themselves back to safety or are found within 24 hours; so it's just those one or two unplanned days out there that you should always be ready for.

BE PREPARED: HAVE A SURVIVAL KIT

When venturing into the Maine woods, you should always carry a basic survival kit. Take good care of it, always keep it on your person, and only use it in an emergency.

Its contents may vary somewhat depending upon your activity, but you should be able to create a simple version from supplies you already have at home or camp. Listed below are the items you should always include, as well as some others that will make you more comfortable if you ever get lost in the woods.

Items to *always* keep on your person (and never enter the woods without):

- A knife
- A map
- A compass
- A waterproof container with a lighter, sparker, or waterproof matches (store the striker in the same container, but be sure it cannot rub against the match heads) and fire starters such as cotton balls soaked in petroleum jelly
- A plastic whistle

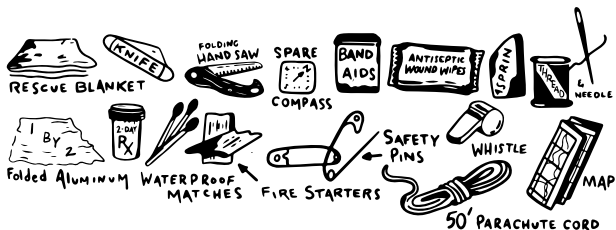


Additionally, your kit should *always* include:

- A spare knife
- A small folding hand saw or wire-type saw, such as a flexible section of chainsaw with nylon loop handles on each end
- A spare compass
- Personal medicine for two days, including your choice of over-the-counter pain medication
- Emergency-type survival food — think durable, long-shelf-life, no-preparation items like commercially-made energy bars, hard candy, chewing gum, hot drink mixes, etc.

Optional items to pack depending upon your activity:

- A copy of this booklet
- A space/mylar blanket or “sleeping bag”
- A tick removal tool: tweezers, a tick spoon, or a tick key
- An antiseptic wound wipe
- A small container of hand sanitizer (you can also use it to clean wounds or start a fire)
- Band-Aids
- Three to four 4-inch individually wrapped gauze squares
- Military-style trauma dressing or a wrapped maxi pad
- Commercially made tourniquet if you are trained to use one
- A cup or foil plate (to save space, use a large metal non-insulated mug. That way, it can double as a pot to heat water in and a container for your “always” non-food items).
- Needle and thread
- A hunter orange vest (whether you are hunting or not)



..FOOD..



Optional items to pack depending upon your activity:

- A headlamp or flashlight with extra batteries
- An old CD or DVD to serve as a signal mirror
- A 1x2 feet sheet of aluminum foil (wraps around a pencil)
- Waterproof fire starters (such as wax-soaked cardboard)
- Safety pins
- Several feet of duct tape (wraps nicely around a shortened pencil)
- Five or six feet of light wire or dental floss
- A 50-foot parachute cord
- Flint or metal match or disposable lighter
- Two plastic contractor bags (orange if you can find them)
- Spare glasses (if necessary)
- A method to purify water (a small amount of household bleach, disinfecting tablets or liquids, or a purification straw)

In addition to survival items, make sure you also have:

- Bug repellent (something with DEET content or Picaridin — both are proven effective for ticks)
- Sunscreen
- Two hunter orange bandannas
- A change of socks (wool, nylon-wool blend or an alternative that has no cotton)

These items, even in moderate amounts, will help prevent hunger and create a sense of wellbeing if you become lost. The amount of each is up to you, but most people who get lost either find their way out or are found within 24 hours. You may add other things, but try to keep the package small and light so that it will always be easy to carry.

LET SOMEONE KNOW

Along with your survival kit, you have another job before entering the Maine woods: let someone know where you're going. Plain and simple, if no one knows you went and where you went, no one is going to be looking for you!

Leave the following information with a responsible adult who will call 911 for help if you are overdue:

- What you are doing
- Where you are headed
- Who is with you
- A description of your vehicle and where it is located
- Description of your boat, snowmobile, ATV as appropriate
- Your latest return time

Once you get back safely, let the responsible person know that you are back. Otherwise, wardens and others are going to be looking for you without reason. If you change plans, make sure someone knows.

Also, don't hide your car. Leave it where it can be easily found and used as a starting point for rescuers, should a search be necessary.

The Warden Service is responsible for finding you in case you become lost in the woods. The State Police are in radio contact with wardens, so those concerned should call 911 and they will notify the Warden Service.

DRESS SMART TO MAINTAIN NORMAL BODY TEMPERATURE

Maine guides and outdoor enthusiasts of old were aware of the principles of keeping the body warm. People were amazed that their guides could stay so comfortable while seemingly so lightly clad. These early guides were active individuals, whether at play or work, and they soon found that bulky garments were a handicap. The lesson: it's about all about dressing in layers!

Today, there are many durable fabric options for various activities that can be worn in layers and will:

- Trap air for insulation
- Maintain warmth even when wet
- Wick moisture away from your skin — an essential feature in any weather
- Keep wind and rain out

Several thin layers are always warmer than one or two thick ones, and give you the flexibility to treat your clothing system like a volume control. The idea is to stay warm, but not sweat. If you are moving and generating heat, you can adjust by removing layers.

The order of your layers is important: closest to your skin you should wear a thin “wicking” layer of polypropylene or a similar synthetic that will move moisture away from your body. Avoid cotton. Your next layer should be an insulating material that will trap warm air. This can be wool, fleece, or something similar. On top of that, you'll want to have a breathable, waterproof shell layer such as Gore-Tex[®], which allows smaller vapor molecules to escape without letting larger water droplets enter.

The Base Layer

Staying comfortable and dry begins with having a base layer that can wick moisture away from your skin. This moisture can amount to one and a half pints of water every 12 hours. Trapped moisture can be a serious problem in a survival situation, as it becomes difficult to dry out before retiring for the night. Moisture also draws heat from the body, increasing the risk of hypothermia. As a general rule, wear synthetic underwear (or long underwear), NOT cotton. Don't forget that this includes socks. Besides NOT being cotton, socks should not be too tight in your footwear. Insulation requires airspace and wiggle room; otherwise, your feet will be cold even in moderately chilly weather.

The Insulating Layer

When choosing your insulating material, there are a few things to consider. Fleece vs. wool: Both wool and fleece retain most of their insulating properties even when wet. Fleece dries faster than wool, does not absorb as much water, and is lighter and more packable. And some of today's better garments such as climate-control fleece can handle perspiration buildup equal to or better than wool. The drawback of fleece is that if it comes in contact with a flame or other heat source, it will melt and can cause a serious skin injury. Wool, on the other hand, might singe, but will not melt. Combining wool insulation with a waterproof poncho is a time-tested basic clothing setup. Down: Be careful with down-filled garments – they are incredibly warm and lightweight, but lose almost all insulating ability when wet and are virtually impossible to dry in the field to regain loft. Even wearing a waterproof shell over the down layer won't do much to help if you fall into a stream.

"IT'S ALL ABOUT DRESSING IN LAYERS!"



BASE LAYER
TOP



BASE LAYER
BOTTOM



FLEECE



FLEECE
OR WOOL



SHELL



SYNTHETIC
MITTENS



GLOVE
LINERS



BOOTS

The Shell Layer

Today's lightweight garments have a remarkable ability to withstand penetrating winds. Another great feature to look for is venting (under-arm zippers, etc.), which can save you the step of taking a layer off. Or, for a minimalist alternative to today's outdoor clothing, you can wear the time-proven wool and carry a rain poncho. The poncho can be used as part of your shelter in an emergency, your bedroll at night, a roof when it is raining, or something to carry water in. You can huddle under it during a severe storm, carry a fellow person on it as a stretcher between two poles, or use it as a signal cloth. A light, strong poncho can even serve as an emergency flotation device if you capsize — simply fold it to trap air, and dog paddle along with it. A final consideration with your top layer is visibility. If your shell is not brightly colored, consider carrying a hunter orange vest with you whether you are hiking, snowshoeing, trail skiing, etc. These are lightweight and take hardly any room; yet putting one on will make you highly visible when in need of help.

Handwear

Like your clothing in general, your handwear should suit the activity. One great tactic is to wear wool, silk, or poly glove liners under your heavier gloves or mittens. They provide a lot of dexterity when you take your main handwear off, while still offering some protection.

BOOTS

Boots fall into three main categories: all-rubber, all-leather or leather/fabric combinations, and rubber-bottomed, leather-topped. Whichever you choose, make sure they fit properly with the socks you would normally wear.

All-rubber

The all-rubber boot is waterproof, of course, but it has no ventilation and leaves a lot to be desired in terms of ankle support.

All-leather or combination leather-fabric

These boots provide good ankle support and often have high-traction soles. If this type of boot seems most appropriate to you, strongly consider a pair with waterproof, breathable liners and removable insoles. Otherwise, you will need to seal them with an agent like silicone. This will warm and waterproof the boots, but it will also seal up all ventilation, causing moisture buildup, which can be a serious issue in boots. Adding felt inserts can help draw moisture away from your feet and socks, but you'll still need to dry them after every use.

Rubber-bottomed, leather-topped

Since the rubber-bottomed, leather-topped boot allows some ventilation through the leather, gives you ankle support, is warm, adjustable, waterproof, and withstands punctures, we can say that it has more desirable survival qualities than others. You can buy these boots with insulated bottoms for extra warmth or with insulating insoles that you should remove and dry each night.

WEATHER

Always check weather forecasts before going out in the woods or on the waters. Although not as dramatic as being immersed in water, both wind and wetness (fog, rain, snow) increase body heat loss more than enough to be worried about. Sometimes, the best option is to not go out at all.

When you do go out, be weather-alert: pay attention to, and be prepared for:

- Sudden changes in temperature and wind direction or speed on your skin
- Cloud changes (more of them, getting more packed together, darker, and/or lower)

Warm or clear weather can change abruptly, leading to suddenly higher winds, dramatic temperature drops, or intense rain, snow, or hail. For the unprepared, this can be a recipe for hypothermia!

Lightning storms

Especially in the open, above the treeline, and on the water, these are very high-risk situations. If you find yourself in one:

- In a boat, stay low in the craft and head for shore, preferably not a rocky shoreline with wind-driven waves. Once ashore, seek the protection in a building, a vehicle with the windows rolled up, or under trees of uniform height, NOT one or two trees in an open area.
- In an exposed area on land, get to the protection of trees of uniform height, NOT single trees in an open area. If that is not possible, such as if you are above tree-line, stay away from caves or overhanging rock; and if with others, spread out at least 50 feet apart. Crouch down on your pack or an insulated pad if you have one with you, and keep trekking poles, paddles, and firearms horizontal to the ground.

MAP AND COMPASS

Now that you are prepared with a survival kit and are properly dressed to enter the Maine woods, let's talk about the most important of all your survival tools: the map and compass. First, forget any ideas you may have that map and compass work is difficult; actually, it is pretty simple. You can become much more confident with it by taking a map and compass class and practicing at home.

A note on paper vs. electronic maps

Paper maps may seem old-fashioned, but small screen sizes on GPS units and mobile phones require a lot of panning and zooming to see features adequately and then to put them into perspective. Lots of folks use e-maps at home and print what they want, putting it into a plastic zip-lock bag for protection. Remember: paper maps need no batteries.

Topographic (Topo) Maps

A topo map is an aerial drawing of an area that uses various symbols, lines, and colors to tell an experienced reader many important things.

Before setting out you should make sure that you have an accurate, up to date map of the area you are going into. USGS maps can be downloaded and then printed from [usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps](https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps). You should not rely only on an electronic map and should carry a printed copy at least as a backup. There are commercially available maps such as the Maine Atlas and Gazetteer as well as activity specific maps produced by the state that cover ATV and snowmobile trails. Sources for hiking maps

include those produced by the Appalachian Mountain Club and the Maine Appalachian Trail Club.

Topo maps use the following color scheme to highlight various features:

Green: Forested Areas

Blue: Water (Lakes, Ponds, Rivers Streams, etc.)

White: Open Areas

Black: Man-Made Features (Roads, Bridges, Structures, Trails)

Brown: Lines showing land contours (elevation above sea-level all along each line)

Some maps may also show revisions made using aerial photographs in **Purple**.

TOPOGRAPHIC SYMBOLS

ROADS:

PAVED



UNPAVED



CLOSED



TRAIL



PARKING



MARSH



MILITARY FIELD



STREAMS:

NARROW



WIDE



DAM



CAMPGROUND



FIRST AID



PICNIC AREA



RANGER STATION



SHELTER



BIKEWAY



TUNNEL



DRAINAGE DITCH



EDGE OF WOODED AREA



The Map Legend, usually found at the bottom of the map, contains other important information including:

Scale: The distance across the map in kilometers, miles and feet. A scale of 1:24,000 means that one inch on the map represents an actual distance of 24,000 inches or 2,000 feet.

Contour Interval: the difference in feet of elevation between each contour line

Location: Latitude and longitude covered, plus the name of map and surrounding maps

Magnetic Declination – this is the difference between True or Geographic north, and Magnetic north in the map area

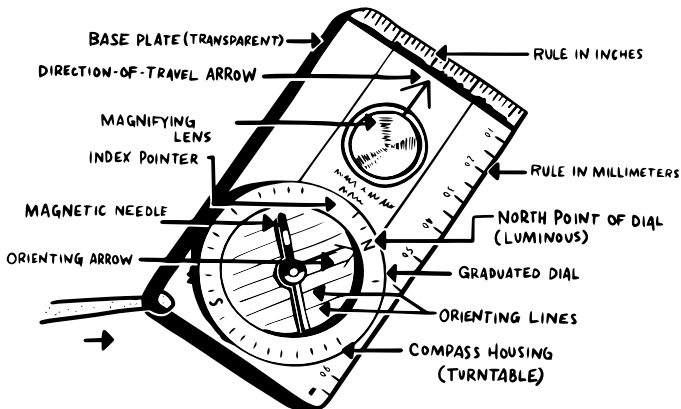
Date drawn: The date the map was drawn or compiled

Date Drawn is important. Topo maps are not updated often; and as a result, there may be new features added after the date drawn that aren't shown on the map (homes, businesses, roads, etc.), as well as things shown on the map that are no longer there (trails, structures, etc.). It's a good idea to use a second, more current map source such as the DeLorme Maine Atlas or a similar tool to supplement your topo map.



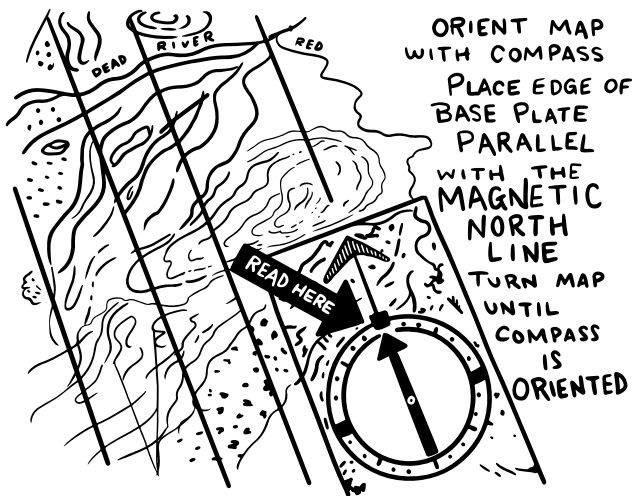
Contour Lines: These brown lines show the shape and height of the land features (hills, mountains, valleys, etc.). As shown in the drawing on the right, the contour lines on gentle slopes are further apart while those on steeper slopes are closer together. A contour interval of 20 feet means that the hill shown in the example is between 80 and 100 feet in height and the gentle slope is on the western side.

Parts of an Orienteering Compass



Magnetic North vs True North: By convention, true (or geographical) north is usually at the top of the map. Since you will be relying on traveling by magnetic bearing, you will need a way to take accurate magnetic bearings from your topo map.

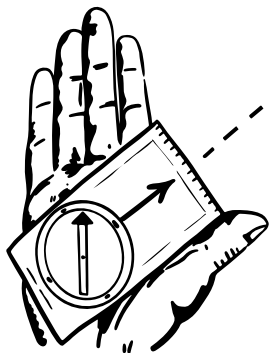
The easiest way to do this is to draw magnetic north/south lines on your map using its declination information (for example, 18 degrees, 30 minutes West declination on the Greenville, ME topo map). Draw your first line carefully, and then draw additional parallel lines at equal distances across the map. Note that the lines in the diagram slant 18.5 degrees to the left of vertical (West of true North) and are about $\frac{1}{2}$ mile apart, making it easy to estimate distances across the map. They also make it easy to take magnetic compass bearings.



To take a bearing or azimuth from point A to point B: place the edge of your compass along the line running from point A to Point B. Point the Direction of Travel arrow in the direction you will be walking. Then rotate the dial until the orienteering lines drawn on the bottom of the compass dial are parallel with the north-south lines you have drawn on your map. Be sure that the orienting arrow in the middle of the dial points toward the north end of the magnetic north-south lines. **Note: we do not use the needle when taking the bearing in this way.** The bearing is indicated at the point where the dial touches the back (nock) end of the Direction of Travel arrow (50 degrees).

Once you have determined your compass bearing, you will want to **follow your bearing**. First, face the direction of your compass bearing by holding the compass in the palm of your hand with the Direction of Travel arrow pointing away from your chest like a gunsight. Hold the compass flat (to allow the needle to move freely) and slowly rotate your body until the north end of your compass needle comes to rest over the north (pointed) end of the orienteering arrow. You are now facing 50 degrees (or whatever bearing your compass was set for). Sight down the Direction of Travel arrow and find a distinct object (landmark) near to you and in your line of travel that you can walk to without losing sight of it. Walk to the object, and then repeat the process using another landmark further down your line of travel. Repeat this procedure until you reach your destination or are ready to change direction.

To take a bearing on an object: Place your compass flat in the palm of your hand and point the Direction of Travel arrow at the object. Keeping the compass flat and the Direction of Travel arrow pointed at the object, slowly turn the dial of your compass until the north end of the orienting arrow is directly beneath the north end of the compass needle. The bearing to the object will be found on the dial where it touches the back (nock) end of the Direction of Travel arrow. In this example, the bearing to the “mountain” is 310 degrees. You can now travel following the bearing to the object using the method above, even if you lose sight of the object as you travel.



1 ORIENT COMPASS
2 PICK A LANDMARK
ALONG DIRECTION OF
TRAVEL

- CHURCH
- POUND
- MOUNTAIN

3 WALK TO THIS POINT
4 REPEAT STEPS 1,2,3

To reverse your direction, simply add or subtract 180 degrees (half of a circle) from your original bearing: $50 + 180 = 130$ degrees. $310 - 180 = 120$ degrees. This is known as finding your back-bearing or back-azimuth.

To Orient your map using your compass, set the map, folded if necessary, on a flat, level surface, set the compass on the map, and turn the map until the magnetic North-South lines are aligned with the North-South arrow of your compass. The map is now oriented. Objects around you will be in the same directions as they appear on the map.

Keep in mind that your compass needle is magnetic and will be affected by items containing iron or steel, such as knives, firearms, vehicles, etc. if they are too close to your compass.

Electricity also generates a magnetic field, and can affect the needle, so be aware that electric current, cell phones, power-lines, etc. may also interfere with your compass needle if they are close enough.

Pinpointing an Object

You already know that it is easier to aim for a fairly large object than for a house, camp, etc. It is possible, however, to relocate a specific site using the following method:

By way of example, let's say you were hunting and have shot a moose that you can't haul out without help.

First, blaze a large circle about him and maybe tie pieces of your bandanna or flagging tape around the area. From your knowledge of the lay of the land (because you've studied your area map), you know a good hauling road is nearby, directly north. So, you take a north bearing of 0 degrees and note the landmarks along the way. Use the landmark-to-landmark method described above to travel your bearing.

When you hit the road, mark the spot carefully and head back to camp for help. You can save a great deal of work in a situation like this by writing details of the trail in your notebook and even counting steps for distance. When you go back, you will have the return bearing all set for you.

Once you have help, all you have to do is travel back following a south bearing of 180 and all the familiar landmarks. If you still can't find the moose, mark the spot where you have stopped with something like an orange bandanna and walk a circle around it as far away as you can without losing sight of it. You'll likely catch sight of one of the other markers you left around the animal, and there he will be!

By Way of Review

To travel about confidently and safely in the woods and fields of Maine, you need to follow three basic rules: 1.) Place your compass on the map, 2.) Set the compass by the map, and 3.) Set yourself by the compass.

Map and compass skills are not rocket science. Master the few techniques shown above and practice them. Start in your yard, field, or nearby city park until you become confident in your ability. Only then should you head for the big woods.

Protect your map from the elements by placing it in a water-proof container (such as a Zip-Lock Bag). Carry a backup compass (or two). Once you develop confidence in your ability to travel with a map and compass, you'll find it so simple and enjoyable that you'll want to use it at every opportunity.

One final rule with compass work: Believe your compass. If you begin to doubt it, look around for things that may be interfering with your needle (nearby iron objects, electricity, etc.). Take out your backup compass(es) and compare. Take the best two out of the three. Unless your compass is obviously broken, it is one of your most important pieces of survival equipment (your brain is number one).

Hand-held GPS

The introduction of hand-held GPS (Global Positioning System) units has opened up the computer world to wilderness travel. These compact units are about 2x6 inches, weigh a little more than a half a pound, and utilize several satellites circling the globe to indicate your position on earth within a hundred yards of your actual location.

A GPS, when used properly, can be a valuable navigation tool, but you should never rely solely on it. Instead, maintain strong map and compass skills and use the map and compass as your primary navigation tool. If you are going to use a GPS, make sure it is configured properly and that you are trained in its proper use.

It is critical to practice using your GPS in a location you're very familiar with, as you'll need to know how to input accurate waypoints and how to follow your particular unit. We strongly urge you to set your GPS to show magnetic bearings; that way, you can use it with your compass for increased safety.

Benefits

Electronic GPS units are great for guiding you back to locations such as camps, roads, and ponds; and they can theoretically mark your trail as you venture through the woods. They'll let you know where you are, how fast you're going, the direction to steer to return home, and how much longer you have to go.

The GO TO feature allows you to get back to a waypoint you have set at your vehicle, campsite, or wherever you started. This is particularly useful if you have to veer off course to get around a swamp or some other obstacle, as it will keep giving you a corrected course to get to your destination. Important note: this feature knows direction, NOT terrain. So slow down and be very careful using it at night or during reduced visibility, as it will walk you off a cliff that during good visibility you would have seen and routed around.

Drawbacks

GPS units can be expensive, they require batteries, and if you are using a GPS application on your phone, it will rely on a cell phone signal to work. No cell phone signal, no GPS. And quite a bit of the Maine woods has no cell phone service.

THE IMPORTANCE OF WATER IN THE BODY

For your body to function well, you must maintain a good fluid balance. Even a 5% loss affects performance and decision-making. Drinking alcohol is NOT a way to stay hydrated; it will cause a net fluid loss and make maintaining body temperature more difficult. Eating snow or ice is not a good option either, as the net loss of body temperature and related energy needed to reheat your body will likely be more than any benefit you could gain. You need to drink water.

When sourcing water outdoors, remember that clear appearance is not an indication of safe water, nor is the fact it is cold. To make water safe for drinking, you will need to boil it if you can, or use another purification method (you should always have one or more in your survival kit). Just make sure you understand how your water purification method works before you try to use it.

If you can't purify water but you have a source, drinking water that might make you sick once you are back home from your survival adventure is better than dehydrating at the time.

OVERNIGHT PREPARATIONS

Maybe you're tracking an animal that you shot while hunting. Maybe you're forty miles from nowhere riding solo on your ATV, and now you're out of gas. Or maybe you took an off-trail "shortcut" while hiking, and you now realize it is getting along towards sunset.

Either way, you stop to get your bearings, and slowly that feeling creeps over you as you realize that you have traveled quite a distance, and worse, you aren't completely certain how to get out.

Are you truly lost, or are you just turned around?

Sit down and gather your thoughts. Be honest with yourself. Maybe you can hear a train, a highway, or a chainsaw. If it were early enough in the day, you could afford to try to find your way out; but don't kid yourself. If it is within an hour or so of sunset, that time will be best used preparing to spend the night, since not many folks can safely wander lost through the Maine woods after dark. If you are lost, admit it, and decide right now to keep your head, as your only enemy is panic.

Forests sometimes baffle even experienced woodsmen.

Was it not Daniel Boone who said he'd never been lost, "only bewildered"? He meant, of course, that he was always prepared to spend a night out and find the way in the morning. And so it should be with you. Look at the situation as a challenge. Make plans and establish goals. Take a few minutes to think them over and write them down. What should you do first? What can wait until later? Remember the acronym "STOP": Stop, Think, Observe, Plan.

The first thing you should do is decide on a location for your campsite. When choosing your site, keep the following in mind:

Natural shelter: While the side of an open hardwood ridge affords little natural shelter from either wind or rain, an area that a deer might choose for his winter yard – a canopy of green growth on the edge of more open hardwoods – offers natural shelter and plenty of dead firewood.

Visibility (find a space and show your face): If your campsite is near a clearing or a shoreline, it will be easier for you to signal a rescue plane, helicopter, or drone. The basic idea, though, is to stay put and let help find you. Moving around will make that a lot more difficult.

Altitude: Cold air collects in low areas such as valleys, and tops of ridges are prone to be windy; so a site partway up a hill might be your best location.

Hazards overhead: Don't camp under a tree loaded with snow; it might come down on you or your fire. And there's a reason hanging or leaning deadwood is called a "widow maker."

Drinking water: Consider the availability of drinking water when picking your campsite, but don't set up near a roaring brook or a waterfall, as you won't be able to hear whistles, signal shots, or your rescuers' shouts.

There will be more on the actual construction of shelters later; but for now, you have chosen your campsite, and you should put all your energy into the most important factor in any survival situation — your fire.

FIRE IS SURVIVAL

Never forget that you **MUST** be able to control the fire you start. You must be able to totally extinguish your fire with certainty before you leave your unplanned campsite.

Appropriate clothing, mylar blankets or “sleeping bags,” and contractor trash bags (which provide easy immediate shelter but are not recommended once a fire has been started) are effective alternative ways to keep warm if you have doubts about a fire, and are certainly first choices above treeline.

If you can do so safely, start gathering plenty of wood and build a fire. Make this a high priority while there is still light. Put all thoughts of being lost out of your mind. Things are not as bad as they seem. There are woodcutters, game wardens and your fellow hunters, hikers, or riders in the woods, possibly quite nearby. As soon as your fire is lively, you’ll feel as humans have felt for centuries: dominant, secure, and comforted. Native Americans said fire had three powers: warmth, companionship, and the power to ward off the bad spirits.

Keeping busy (for example by gathering firewood) is a positive action that helps fight boredom, worry, and panic. As you work by the methods and steps we’ll outline for you, think ahead to the next step. Try to concentrate on what you are doing, not on your plight. There is no animal in the Maine woods that will harm you, so all your effort should be put into making yourself warm and comfortable against the elements. You can do it. Remember, this is how humans lived for thousands of years, and history shows they lived quite well.

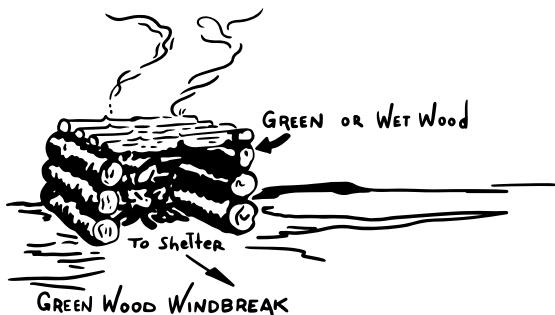
Preparation and Setup

Make sure to prepare your fire spot properly so as not to start a forest fire. You will need to check over your fire, have bare ground around it for several feet, and watch for roots poking up and back into the ground cover in order to avoid a smoldering and nearly impossible to control underground fire.

If carefully arranged, a green or wet wood pile can double as a windbreak (the only thing better for this purpose would be stone). Fashion it into a V shape or a square, with one side open toward your shelter. This will conserve fuel by eliminating excess drafts, reflect heat back toward you, dry the wood supply somewhat for later use, and stop sparks from flying around.

Firewood

You don't want a large fire that could either burn out of control or run short of wood during the night, but you do want enough tinder, kindling, and fuel to get through the night. It will take a lot; and when gathering it, you'll find a wire or chain-type saw or a small folding handsaw to be worth its weight in gold. As a rule of thumb, measure your fire's consumption for one hour and then multiply this by the number of hours you will be in





darkness. Then gather what you think you'll need and double the size of your pile. Do not eliminate any possibility for fuel. Larger logs may be thrust into your fire and burned through, making two, and so on. You'll also want to keep a good supply of small kindling handy in case your fire dies down during the night.

Fire Starters

There are several helpful fire starters out there, many of which are made for wood stoves, but nothing is better than good, dry, flammable tinder and waterproof matches with a "metal match" flint & steel and/or a disposable lighter as a backup.

Matches: Wooden, scratch-anywhere, kitchen matches should be the only one you carry. Leave the paper ones at home, as they just build false security. You can buy waterproof matches, or you can make them yourself by dipping wooden matches in the melted paraffin wax that you would use for home canning (dip twice, covering the entire match). Try a few at home to make sure they work, carry them in a strong, watertight receptacle, and never use them except in an extreme emergency.



Candle: a common candle is a useful addition to your fire-starting kit, as it will ignite easily, will burn for a long time, can be used many times, and provides illumination.

Flint & steel: Before including these spark-makers in your survival kit, you should experiment with them so you are thoroughly familiar with the principals involved in their use. A sparker is a good back up to flint and steel as it can be used one handed in case of a hand or wrist injury.

Natural tinder: Nature herself provides many excellent fire starters. Almost any dead twigs or wood not lying directly on the ground will burn, as will dead tree moss or dry leaves and grass. And birch bark will ignite even when wet. Always start with small pieces and work up to larger materials. As the fire becomes larger and hotter, you can start to put on damper, greener wood. **Note: when gathering fuel, a wire or chain-type saw or a small folding handsaw is worth its weight in gold.**

So far, we have assumed mainly dry conditions, but more often, people become lost on rainy days when clouds hide their landmarks and the sun.

STARTING A FIRE IN THE RAIN

It may seem impossible to start a fire during a downpour, but you can do it. Find an area that will have some shelter from the rain, and consider building your shelter first and then building your fire just at the edge of the entrance.

This is where carrying wax-soaked cardboard squares or several of the woodstove fire-starters will help, as these almost guarantee a ready fire. Practice with your selected wet-weather

fire-starter at home to get an idea of how long it will burn. You can also create your own waterproof tinder by soaking household items such as cotton rope, newspaper strips, paper towels, and paper dinner napkins in wax. Another option is to soak cotton balls in petroleum jelly. One cotton ball can be used to light two fires. These take up very little room and can be slipped into a strong waterproof container with your matches as part of your survival kit.

For kindling, look for birch bark and dry, dead limbs under bankings, rocks, brush piles, downed trees, and dense evergreens, and protect it from the rain in a bag or under your poncho until you are ready to use it.

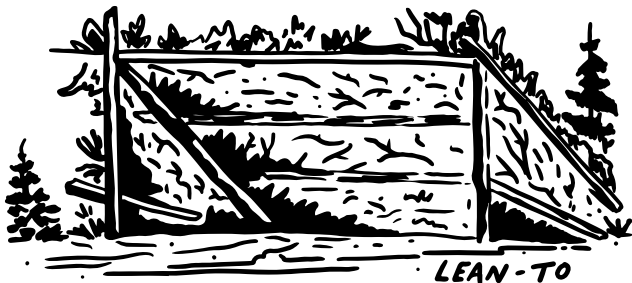
One great kindling item is the shaving stick or “fuzz stick.” To create one, take a dry stick (dead, dry softwood limbs are perfect) and whittle it, but hold the shavings on by stopping the cut just short of the end of the stroke. These are rapid fire starters — nature’s own — and a little practice with them will make you a fire-starting expert. This is also a skill best practiced at home first.



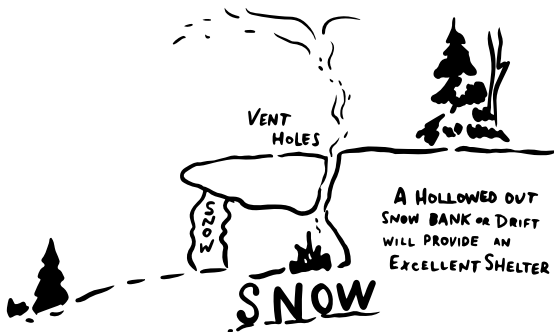
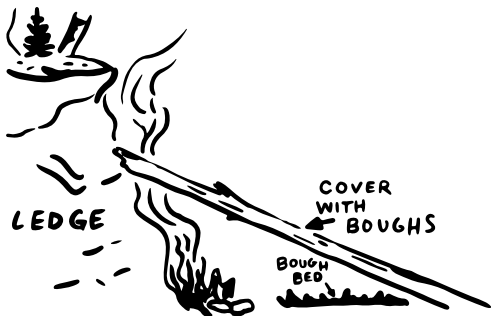
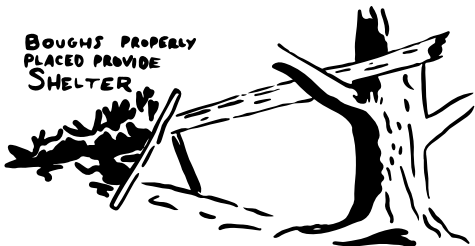
SHELTERS

If weather is foul or threatening, you should have a shelter. You can make a lean-to by placing poles against a ledge or bluff and making a roof of evergreen boughs with their tip ends up so that they shed water. Next, place a generous supply of evergreen boughs on the ground beneath you for insulation and cushion. Refer to the shelters illustrated below and choose the best one for your situation, keeping it as small as practical, given that its primary heat source will be your body heat.

If you build a shelter from natural materials, you have also essentially created a blind that will hide you from those that are out looking for you; so put something brightly colored outside of it to make yourself more visible. If you can, select a site about halfway up a hill. Make sure not to build your shelter in a game trail, and look up to avoid widow-makers.



BOUGHS PROPERLY
PLACED PROVIDE
SHELTER



SPENDING THE NIGHT

You now have fire, warmth, shelter, and plenty of stored wood, so your most important immediate problems are solved. If you told someone where you planned to go and when you planned to return, all you have to do now is wait.

If your clothes are wet, you'll need to dry them, as body heat is drained off rapidly into your wet clothing, and you must conserve as much of it as possible. Start by taking off your outermost clothes. Wring and pound all the water from them and heat them thoroughly, being careful not to burn them and keeping in mind that several modern fabrics melt quickly when exposed to flame. Dry all clothing in stages, and try to keep warm clothing on your body until everything's comfortably dry. You must maintain body temperature to prevent hypothermia.

PLAY AN ACTIVE ROLE IN YOUR RESCUE

If you are lost, you should play an active role in being found, including signaling by whatever means you can. Groups of three, whether it be gun shots, whistle blasts, or fires are understood to be distress signals. For small craft, it is a horn or whistle constantly sounded. Make noise and set out bright colors if you have them. And if you hear a whistle or gunshot, respond, keep responding, and **DO NOT MOVE** until you are found.

Remember, if you can hear them, they can probably hear you. All you should do now is wait, keep your fire going, and keep responding. Whether hunting, hiking, or riding, keep your whistle on your person.

Any movement on your part will just confuse things now. Save your voice, and don't shout until you know help is near. Shouting at the empty woods will only add to your depression and make you hoarse.

If help doesn't arrive the first night, don't try to stay awake all night listening for signal shots. If you haven't heard any by midnight, you probably won't be hearing any before morning, so the best thing for you to do is sleep. Sleep conserves and replenishes your energy and tends to clear your mind. With a little proper preparation, you should be able to sleep quite comfortably.

Start by piling any available stones around the fire. Heat them through, then use a stick to lay the heated rocks out as flat as possible in the area where you plan to sleep. Cover them with a generous amount of green boughs, and your bed will remain warm all night. If loose stones are not available, build your fire against a large rock or ledge or in a small low spot. After a couple of hours, remove the fire and make your bed in the warmed area.

In your survival kit, you should have a large square of aluminum foil. You can use this for many things - for instance, a reflector. By using supporting sticks, you can wrap the foil partway around your fire to direct the heat toward your sleeping area. You can also use your aluminum foil to fashion a drinking cup or a boiling can.

Eating sweets before sleeping gives a boost to your metabolism (chemical change needed for heat generation) that should last long enough to allow sleep. Remember to keep your head well-covered, including your ears. You may button up your neck now, because you won't sweat much. With dried, warmed clothing, a brush bed, heated stones or logs about you, and your heat reflector working, you should sleep fairly well. Lacking the ability to use a fire, your contractor trash bags and mylar blanket or emergency sleeping bag will make a huge difference.

Your senses will be acutely alert, and you may awaken several times throughout the night to strange noises, but remember: there is nothing in the Maine woods that will hurt you. When you awaken, make sure that nearby search parties aren't missing you. Listen for shouts, horns, or shots; freshen the fire; rearrange your clothes; fluff your bed; reheat your stones or trade spares around; warm your socks again; and go back to sleep. If you keep your boots on, unlace them to permit circulation and moisture evaporation.

Trappers, even in the last century, lived in the Maine woods just as you are now; they loved it, and you can enjoy it, too.

TIPS TO KEEP WARM BY

If you have two large contractor-style trash bags, you can make yourself a warm sleeping bag. Just cut a slit along the side seam on one bag near the bottom so that you can put it over your head and poke your face through. Then you can step into the second bag, which you can stuff with DRY grass or other plant material for insulation.

You can also stuff dry grass into your clothing or around your sleeping area to make effective insulation as the Native Americans did. Pay special attention to the areas around your knees, ankles, elbows, feet, and chest, and make sure to use at least a quarter inch. It will make an enormous difference. Remember: thickness combined with dead air is warmth.

If you cover your head, your extremities will have a better chance of staying warm. 25 to 70 percent of body heat loss happens through an uncovered head; so always wear or pack an insulative hat that covers your ears.

Before going to bed, eat something sweet if possible. Flex your muscles, work them against each other, and strain them (but don't sweat), and when you lie down, your body will have started to generate warmth. If you are sweating when preparing for bed, don't enter your sleeping quarters yet. Ventilate first, and then you can go in and lay down to sleep.

SIGNALS

During dark hours, assuming you have made a fire with dry materials, your glowing fire will be your signal.

When daylight comes, you have two goals:

1. Have your daytime signals ready.
2. Maintain mental control by staying put.

There are a worse places to be than the Maine woods. You have survived the first night, and now you should make yourself as busy as possible. An idle mind can only work against you! Don't sit fretting about how cold you are. Do something about it! Get some wood and build a fire up good and hot. Warm yourself through and through, and if you have food left, eat a little.

After you are warm and alert, make an honest decision. Do you have any real idea where you are? If you do, and you have a compass and bearings, or if you have snow to backtrack on then it is okay to leave; but remember, you will probably be a lot wiser to stay put. Wouldn't you really be better off making ready for signals and building a warmer shelter than striking off through the woods, using up precious energy and not knowing for sure where you are headed? If so, your next best step is to plan out your signals:

Smoke signals

You can't see the glow of a fire as well during the day, but smoke is visible; so feed damp materials into the fire periodically to generate smoke. Maine has many experienced bush pilots and game warden pilots who will be looking for you from the air, so get to work on having the best signal fire possible. It doesn't need to be especially big as long as it is burning hot. When you hear a plane overhead, lay some green boughs on your fire to create a plume of smoke. Any green boughs will do, but be careful not to smother your fire. Water sprinkled on the edges of a fire will also work well.



BOUGHS PLACED OVER A GOOD
FIRE MAKES AN EXCELLENT **SMOKE**
SIGNAL

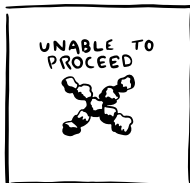
Reflective signals

If you got lost while hunting, you'll always be your own signal. The mandatory blaze orange hat and 50% (or more) vest or jacket that you have to wear during hunting season can be seen from a plane for miles. For this reason, an article of blaze orange clothing is a good thing to have with you regardless of the season or activity. The cover of this booklet can also serve as a signal, as can a mirror, but you must practice with it in order to use it effectively.

Messages in clearings

If you can get to an open location visible from your campsite — even a very small field — you will be easier to spot, both from the air and the ground. If there is snow on the ground, you can stamp out a message. Pick a flat place in the opening, if possible, as this will help the shadows show up better from the air. Better still, try to find stones, trees, brush — the more the material contrasts with the ground cover, the better. The ground signal used most is an “X” with legs that are at least 15 feet long and a body that is at least a foot wide. If a plane from the Maine Warden Service spots you and/or your message, help will be on the way soon.

GROUND TO AIR CODE



If you absolutely must move on, take the following precautions:

Mark your direction

Leave an indication of your direction with an arrow stamped in snow, scraped in the ground, or using stones pointed in your direction of travel. Remember though, the more you move, the more difficult it will be for help to find you; and if you don't reach safety before running out of steam, you may move completely out of the search area!

Be careful crossing streams

Be aware that searchers often consider larger streams as barriers to travel; so if you decide to cross, they may not be looking for you on the other side. If crossing, consider that straighter and wider sections will usually have the shallowest water.

Be cautious about crossing on downed trees, as they may be slippery and can shift underfoot. If wading, it can help a great deal to face into the current, leaning on a trekking pole or the like and keeping two points of contact with the bottom at all times.

In cold weather, ice presents special concerns for safety whether hunting, snowmobiling, snow-shoeing, or cross-country skiing. A very good rule is not to cross ice unless you are prepared to end up in the (very cold) water and have a plan for how to rescue yourself. On average, you will only have seconds to make the right decision.

Head in the right direction

These two woods-travel tips may help you find your way out:

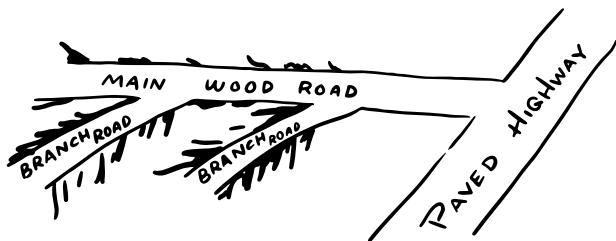
Follow a logging road

Virtually all of the Maine woods have been cut over at some time or another, and almost anywhere you go you're likely to find a skid or twitch road (an unimproved road used by logging operations). If your luck is really good, you may find one that is still in use, or maybe even a main hauling road. The trouble is knowing which way to travel on it: one way leads to civilization and the other usually goes deeper into the woods. You can find your way out by knowing that in making these roads, bulldozers pushed their way IN toward the deep woods; so trees pushed over on the roadside will lean in that direction. So to get out, you merely have to walk opposite the direction of lean, or against the treetops. Also, where skidder trails come into main hauling roads, the turn will be in the direction of civilization. Regardless, if you do find an active logging road, stay on it. This will make you far easier to find.

Follow a brook

You can also follow a brook downstream. The smallest trickle of water deep in the Maine woods eventually ends up in the Atlantic Ocean after passing through ponds and lakes and joining with streams or rivers. You won't have to follow it all the way to the ocean before you encounter a camp, a road, or maybe even a town. Be aware, however, that traveling next to water courses often means traveling through more dense growth and increases your chances of getting wet.

Don't let these woods-travel tips encourage you to try to find your own way out. Remember: except in an unusual circumstance, you are far better off to wait where you are. Help will come.



MENTAL CONTROL

Chances are, you'll spend only one night in the Maine woods. Given a few hours of good flying weather and a smoke signal, search planes can locate you with no difficulty - or maybe a ground search party will find you first.

But what if the planes can't get up; or worse, no one reported you missing because you failed to tell someone where you were going and when you'd be back? In either case, you may be faced with a longer stay in the woods.

Now, an important goal for you is to maintain mental control. In other words, keep your cool. Through the years, there have been repeated instances where individuals have been lost in the Maine woods without food, fire, or shelter for over a week, but were still in good condition when found. But there have also been cases where lost individuals have panicked, lost good judgment and self-control, and perished in less than one day.

How do you keep control? By being just as busy as you can possibly be. Gather a lot of firewood, fix up a comfortable campsite, and have your signals ready. Wash up if you have a chance. It'll probably help if you remember all the people who take vacations and pay money to camp in the Maine woods just as you are doing now. And as we mentioned before, old-time guides, woodsmen, and trappers spent their lives doing it. Relax — you may even enjoy your stay in the Maine woods.

WILD FOODS

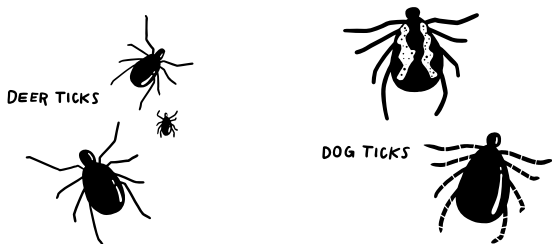
While there are no animals in the Maine woods that will set out to harm you, there are a couple plants that will do you in. And eating strange items, even non-toxic ones, can cause vomiting and diarrhea, both of which could threaten your life in a survival situation. Why gamble with it? You can survive for a week with no food and only water, without any real problems. Remember: food is not your most important need – water is! With plenty of water, your system will sustain itself for long periods, either with no food at all or with what you have in your survival kit. Keep your mind off your stomach and put your effort into your shelter and signals.

TICKS

Ticks can be active any time of the year when there is no snow cover. It's remarkable, but true, that something so small can cause such big trouble for folks.

Dog ticks (also called wood ticks) are common throughout Maine and generally don't transmit disease when they embed in a person, though they can cause a nasty infection.

Deer ticks are best-known as vectors for Lyme Disease, but they can also transmit other concerning diseases such as Anaplasmosis and Babesiosis. Tiny deer tick nymphs are most active in June and July, and either they or the females (which have a reddish back with an all-black head and “shoulders”) can transmit the diseases.



Prevention and vigilance are the best forms of defense against ticks. To prevent tick bites:

Use tick repellent. You can pre-treat clothing and packs with a repellent/insecticide containing permethrin, but do NOT use it on skin. Repellents containing DEET work best on skin surfaces.

Ticks generally attach to clothing lower down on the legs and work their way up. They tend to attach to the skin in hairy areas and along hair lines on the head, in the armpits, and in the groin, although they certainly can and will attach themselves elsewhere. Check yourself and partners at least daily for ticks when you have been in the woods. If you find a tick that is not engorged, simply remove and dispose of it. If you find a tick that is engorged, remove it, place it in a container for your healthcare provider if possible, or take a picture of it with your

mobile device or camera. Do NOT smear it with any substance or try to burn it off. Instead, remove it with a tick spoon, key, or tweezers. If you are using tweezers, grasp the tick as close to the skin's surface as possible. The tweezers should be parallel to your skin, **not** perpendicular. Use steady even pressure and pull upward, do not twist or jerk the tweezers.

When to contact your healthcare provider

Sometimes a tick bite will result in an expanding red “bulls’ eye” rash larger than two inches in diameter. This can occur within a few days or several weeks after exposure. Other symptoms to watch for include fever, headache, general body aches or joint pain, fatigue, chills, and sweating.

FIRST AID

Our comments on first aid will be limited mainly to self-treatment of the injuries most common among hunters or persons lost in the Maine woods. We recommend that you prepare yourself thoroughly for emergencies by taking a first aid course (these are offered in many communities). If that is not possible for you, obtain a good first aid manual and study it thoroughly.

Unless you carry a first aid kit with you into the woods - and this is a good idea - you will have to rely on the items in your survival kit and your ingenuity. Dressings, especially those that help with severe bleeding, are always useful and worth the weight and space.

Cuts and Wounds

You can stop the bleeding from almost any cut or wound by placing a pad over it and applying direct pressure with a hand or a finger. When the bleeding stops, fasten the pad in place

with tape or strips of cloth, maintaining some pressure but not enough to stop circulation. If direct pressure does not stop the bleeding on an arm or leg, apply more dressings and pressure.

It is strongly recommended that, along with dressings, trained persons carry a commercial tourniquet. Tourniquets should only be applied by persons appropriately trained, as they can easily do more harm than good. If heavy bleeding persists and cannot be controlled, and the victim is a long distance from medical help, a properly-used tourniquet — as an absolute last resort — may save a life. Even in these extreme circumstances, there is a high probability that this procedure will result in the loss of a limb.

Shock

Shock is a life-threatening condition that can accompany any serious injury, especially where there is loss of blood. Typically, people in shock become restless and progressively less alert, have pale, cool skin, and have a pulse that feels rapid. Preventing shock is critical; and fortunately, it is easy to do. First, the person should lie down in a comfortable position. Next, help them maintain a normal body temperature, not allowing them to chill or overheat (if the ground is chilled, insulating under the person may be a wise move). While every situation calls for its own decision-making, often it is best to signal for help and stay where you are so that you can, as a top priority, care for the condition (such as severe bleeding) that caused shock to start, and also treat for the shock.

Fractures

The objective in treating fractures is to prevent the broken bone ends and adjacent joints from moving. If you are not sure there actually is a fracture, treat it as though it is a fracture to be safe.

A broken bone should be splinted before you move it. To make a natural splint, cut a tree branch and put some cloth padding between skin and branch for comfort. Tie it in place with a belt, strap, handkerchief, etc., but don't cut off circulation. Check for signs of warmth and color before and after splinting. If you had them before applying the splint but not after, adjust the tightness.

Sprains

One of the most common woods injuries is a sprained ankle. Taping, wrapping, and splinting the ankle firmly over your shoe or boot will allow you to walk short distances without too much difficulty. Do not wrap it so firmly that you cause swelling or impair circulation. It can be very difficult, if not impossible, to tell the difference between a sprain and a fracture near a joint. Don't underestimate! Be very cautious about removing your shoe or boot, since once the footwear has been removed, swelling may make it impossible to put it back on.

Heat Emergencies

Heat emergencies can be caused by lack of hydration, overexertion in hot conditions, and loss of electrolytes, often in combination. A heat problem can show itself in three ways, usually in this order:

- 1. Heat cramps.** These are most often felt in the legs or abdomen, along with weakness, sweating, and sometimes nausea. Body temperature remains roughly normal at this stage. Treat by hydrating with a sports drink containing electrolytes if you have one and can tolerate it without nausea. If you don't have one or can't tolerate it, take water in small swigs. Next, loosen your clothing and/or remove as much as practical. Once recovered, remain watchful for further issues.

2. Heat exhaustion. This shows itself with the signs of shock, including sweating, weakness, pallor, and restlessness, but with a roughly normal body temperature. Treat as above. You may also need to spritz or wipe yourself with cool water. Once recovered, you should be able to cautiously move around; and if found, you should be able to walk out of the woods with assistance.

3. Heat Stroke. The primary signs of heat stroke are high body temperature (usually with lack of sweating) and changes in consciousness/alertness. This is a medical emergency and the body temperature must be lowered quickly, typically by immersion in a stream/pond; but caution must be observed due to changes in consciousness. Alternately, remove clothing and pack the body with wet cloths that you keep cooling down. Be aware that once cooled, your temperature may rise precipitously again. Try not to move around much except to signal for help. You may need evacuation.

Frostbite

Low temperature and wind both contribute to frostbite, with your nose, ears, cheeks, fingers, and toes being the most likely parts to freeze. Early symptoms include slightly flushed skin color that later turns white or grayish-yellow. Feelings of pain, intense cold, or loss of sensation are warnings of impending freezing. It can help to put firm pressure on the area with a warm hand (or if the part is a hand, warm it in an armpit), but do not rub the affected part with your hand or with snow. Cover the affected part with dry insulating materials and try to drink some soup or warm water. Do not drink alcohol, coffee, or tea.

If your toes are frozen and you absolutely must walk out of the woods, do not thaw your toes out until you have reached medical help. The pain and swelling that accompany thawing might prevent you from putting your shoes on again, and may even prevent you from walking. It is very possible that the exercise from walking out could thaw the tissue, so be guarded in your decision.

All frostbite cases require medical follow-up as soon as you are out of the woods. Refreezing of thawed frostbitten tissue before it is professionally treated can have dire results.

Hypothermia

The lowering of the core body temperature is insidious and often difficult to see in oneself because the cold reduces your ability to think clearly. Shivering can be a signal, but sometimes not. Shivering is a good thing, but it takes a lot of energy. You can add heat (huddle around a fire) or add fuel (by eating), or both. High-energy snacks or warm drinks, particularly cocoa or diluted Jello, work very well to fuel the body's furnace. You can also warm water bottles or the like to body temperature and place them around your neck, armpits, and groin. Be sure to remove any wet clothing and replace with dry, making sure to cover your head. Hypothermia can have after-effects, so it is wise to seek medical care immediately. Be aware that, especially in cases of immersion hypothermia, a condition called rebound may occur. Basically, the hypothermic person has warmed enough for shivering and other effects to stop; and then 20 or so minutes later, seemingly out of nowhere, it starts again. If this happens, start rewarming again as above. In all cases of cold water immersion, drowning, or near drowning, call 9-1-1 for rescue assistance or take the victim to a hospital.

Burns

Burns received in a survival situation will most likely be minor, but should not be ignored. Remove the person from the source if you can safely do so, and cool the burn with water for 15 to 20 minutes. Do not try to clean the burn. Do not break blisters. Unless sterile dressing is available, leave the burn exposed. Do not apply iodine, antiseptic, grease, butter, or cotton. Much of the modern outdoor clothing will melt to a burn; if that happens, do not try to remove any clothing stuck to the burn area.

The severity of burns depends on the depth of skin involved (all full-thickness burns where all layers of skin have been burned are serious); the location (all burns on the face, neck, genitals, palms of the hands or soles of feet should be considered serious); and burns big enough to cover more than one body part (chest and abdomen for example) are serious. When treating serious burns, in addition to the above recommendations, always treat for shock.

Heart Attack

Signals of a heart attack can include a persistent chest pain that might go away and come back again and can be very sharp and severe, or can be a burning pain or feeling of pressure, often mistaken for indigestion. Sometimes the pain travels to the arms or the jaw; and sometimes there is surprisingly little pain. The person often has trouble breathing and breaks into a sweat, and there is usually an appearance and feeling of not being well at all.

If you are alone in the woods with these symptoms, stop activity and rest in a comfortable position. Build a small fire if wood is handy and can be gathered with an absolute minimum of exertion. Even if you begin feeling better, do not exert yourself in any way. Plan your moves carefully, and don't panic - help will come. Outdoors persons sometimes carry two 81mg (baby) uncoated aspirin that can be chewed during a cardiac event. If that is part of your plan, speak with your healthcare provider about it in advance. And if possible, call for evacuation!

WATER SAFETY FOR OUTDOOR ENTHUSIASTS

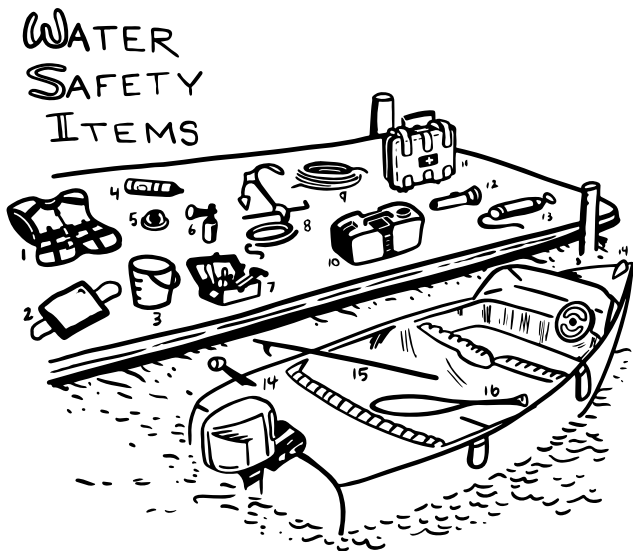
Many outdoor fatalities relate to drowning in cold water. Sometimes it's an activity that we do "on the water" such as paddling or other boating, crossing a stream snow-shoeing, or using a small craft while hunting when we would never consider intentionally getting "in the water," but that's where we end up. In the spring and late fall, Maine inland waters can average 35 to 45 degrees. That's extremely cold water.

For all practical purposes, immersion, and especially submersion, in water less than 70 degrees can have rapid and automatic adverse consequences on the body. Most people who drown are conscious when they enter the water, and are close enough to safety to have a good chance of helping themselves. The actions they take within 10 seconds of entry into the water can determine their survival or death. The first is to realize that there will be an automatic gasp reflex that needs to be controlled. DO NOT PANIC. Controlling your breathing can not only help fight the gasp reflex that most often leads to water being inhaled; but by inhaling well-timed deep breaths and then forcefully exhaling and inhaling again quickly, you

can keep your lungs filled with air and enhance your buoyancy. Keep your clothes on, as they will help with heat retention even though they make moving in the water more difficult.

Boat Safety Checklist

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|--|---------------------------|--------------------|
| 1. Personal flotation device (PFD) for each person | 6. Horn or whistle | 11. First-aid kit |
| 2. Throwable PFD for boats over 16 feet | 7. Tool kit | 12. Flashlight |
| 3. Bailing bucket | 8. Anchor | 13. Bilge pump |
| 4. Fire extinguisher | 9. Line | 14. Proper lights |
| 5. Compass | 10. Gasoline cans (spare) | 15. Boat hook |
| | | 16. Paddle or oars |



TIPS FOR EXPEDITIONS WITH KIDS

If children will be enjoying the Maine woods with you, it's a good idea to use your phone to take a picture of them with the clothing they are wearing and also take a picture of the bottom of their shoe/boot. This information will greatly assist wardens in the event a search is necessary.

Teach children not to wander if they feel lost. If they can see an open area very close to them, teach them to go to it and stay in the open. Make sure they know they should answer any adult when they hear them calling. We do a good job teaching stranger safety to our kids, so this is a really important point!

If you suspect your child may be lost, notify 9-1-1 immediately. Emergency responders don't mind turning around if you can resolve the situation, but the more time that goes by before you call them, the more difficult their task becomes.

Make sure youngsters know that their parents will not be angry with them, and that parents are always happy to have their children safe and sound.

AND SOME FINAL THOUGHTS FOR SPECIAL CIRCUMSTANCES

Hiking

Keep the group together. A good rule of thumb is for each person to keep in contact, either visually or verbally, with the person behind them. If the group starts to get spread out, it is easier for the faster people to slow down than for the slower people to try to speed up. The entire group should stop and gather at all decision points (examples are junctions with other

trails or roads, stream crossings, trail signs, etc.). At each of these points, the group should verify their location on the map and track their progress.

If you need to leave the group, tell a member of the group. Leave a trekking pole, hat, bandanna or other item at the spot where you leave the trail, on the side of the woods that you head into. Do not lose sight of this “trail” marker without first placing a bandanna or other marker within sight of it; and do not get out of sight of the second marker for any reason.

ATV/Snowmobiling

If it is safe to do so, stay with your machine and stay close to the trail. If you must leave, somehow indicate the direction that you are heading.

Boating

Label your boat with your contact information. If your boat is found adrift, the Warden Service can try to contact you to determine if your boat is simply adrift, or if there is the potential for someone to be in the water.

- Keep your loads light, evenly distributed, and low (to reduce your center of gravity). During cold weather, take half your usual load. This greatly increases stability of the boat.
- Know what the maximum legal load (persons and/or gear) is for your boat and never exceed it, even under ideal conditions.
- If the water is rough, reduce the number of persons and load carried
- Wear your life jacket at all times in the craft – the majority of boating fatalities involve use of alcohol and/or failure to wear PFDs (life jackets).

ADDITIONAL USEFUL CONTACT INFORMATION

Recreational Safety Office 207-287-5220

8 Federal Street, Augusta

Landowner Relations Coordinator 207-287-5240

Operation Game Thief 1-800-ALERT US

. 1-800-253-7887

Department Information Center. 207-287-8000

284 State Street, Augusta

Be safe, be smart, be ethical.

Post these numbers in your home, camp, or camper.

Public Safety Dispatch Centers (days/nights/weekends)

Augusta 207-624-7076 or 800-452-4664

Bangor 207-973-3700 or 800-432-7381

Houlton 207-532-5400 or 800-924-2661

Warden Service Regional Headquarters (days)

Gray(207) 287-2345

Sidney.....(207) 287-5300

Bangor(207) 941-4470

Greenville.....(207) 695-3756

Ashland(207) 435-3231

Hunters for the Hungry207-287-7513

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Hunter Orange Saves Lives.