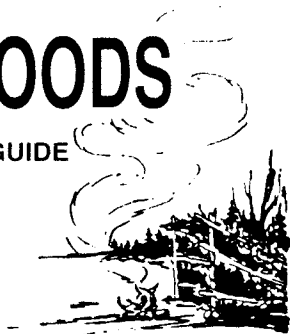


# YOU ALONE in the MAINE WOODS

THE LOST HUNTER'S GUIDE



Maine  
Department of  
Inland Fisheries and Wildlife

## You Alone in the Maine Woods

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 \_\_\_\_\_

\_\_\_\_\_ E-MAIL \_\_\_\_\_

PHONE \_\_\_\_\_

Medical problems, if any (include drug reactions):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ BLOOD TYPE \_\_\_\_\_

In case of accident or serious illness, please  
notify:

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_ PHONE \_\_\_\_\_

**YOU ALONE in the MAINE WOODS:  
A practical guide to woods comfort,  
safety, and survival**

**1<sup>st</sup> EDITION 1972  
2<sup>nd</sup> EDITION 1973  
3<sup>rd</sup> EDITION 1974  
4<sup>th</sup> EDITION 1975  
5<sup>th</sup> EDITION 1976  
6<sup>th</sup> EDITION 1979  
7<sup>th</sup> EDITION 1983  
8<sup>th</sup> EDITION 1998  
9<sup>th</sup> EDITION 2001  
10<sup>th</sup> EDITION 2003**

by

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Search & Rescue Coordinator  
And Col. John F. Marsh  
Maine Warden Service



State of Maine  
Department of Inland Fisheries and Wildlife

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## *A MESSAGE TO OUTDOOR ENTHUSIASTS*

If you are one of our outdoor recreational enthusiasts, this booklet will prepare you for a trek in the woods as well as make you aware of procedures to follow should you become lost or injured.

This manual may not contain all there is to know about survival, nor is it a guarantee against getting lost. It is an effort to provide you with the necessary information to manage in the wild. This book can be considered an aid to survival until help arrives should you lose your way.

The Warden Service of the Department of Inland Fisheries and Wildlife is responsible for locating people lost in the Maine woods. Using the latest technology along with highly skilled ground search parties, aircraft, and watercraft, the Warden Service will find you. You can, however, help end the search sooner and remain more comfortable while lost if you follow procedures outlined herein.

This manual serves a twofold purpose:

1. To be prepared for survival in the Maine woods.
2. To provide steps to aid in rescue.

By reading this manual, you will help safety awareness in our Maine woods.

Production of the manual was made possible in part by funds derived from the federal excise tax on handguns and made available to hunter safety training by the Federal Aid in Wildlife Restoration Act (Pittman-Robertson Project W-79-S). Recreational Safety Officer Gareth Anderson and Warden Colonel John Marsh compiled the information and wrote the original manual with the generous assistance of many Maine Wardens, guides, and old time hunters. The illustrations are by Warden John Ford and the Fish and Wildlife Department's Information and Education Division handled production of the manual. The Division of Watercraft Registration and Safety furnished safe boating tips.

**Maine Department of  
Inland Fisheries and Wildlife  
[www.mefishwildlife.com](http://www.mefishwildlife.com)**

## BE PREPARED; HAVE A SURVIVAL KIT

Before you go into the Maine woods, make sure you're equipped with a simple survival kit, one that can easily be assembled from camp or home supplies. Take care of your kit; use it only in an emergency and keep it on your person at all times. Listed below are many items that are contained in a good survival kit. Those that are marked with an asterisk (\*) are required items, and you should never enter the woods without them. The remaining items are optional.

- \* Spare knife or small belt axe  
(do not bring to class)
- \* Waterproof matches
- \* Spare compass
- \* Whistle
- \* Personal medicine or spare eyeglasses
- \* Emergency-type survival food

Hard candy	Hooks, line, flies
Instant soup	Flashlight
Coffee or tea bags	Metal signal reflector
Salt packs	3 ft. x 3 ft. square of
Canned or dried meats	aluminum foil
Candles	Wax-soaked cardboard
Sugar (cubes or packs)	firestarters
Instant cocoa	Safety pins
Dry cream	Plate
Dried fruit	Light wire
Chewing gum	Nylon rope
Space blanket	Flint or metal match
Iodine	Plastic bags
Aspirin	Plastic garbage bag
Band-Aids	Spare glasses (if necessary)
Cup or foil plate	Bar of soap
Sunscreen	Bug repellent
Needle and thread	

These items, even in moderate amounts, will help prevent hunger and create a sense of well being if you become lost. The amount of each is up to you. There are other things that may be added, but try to keep the package small and light at all times, so it will remain easy to carry.



RESCUE BLANKET



SPARE

COMPASS



BAND AIDS



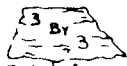
IODINE



ASPIRIN



NEEDLE & HOOKS



Folded Aluminum



WATERPROOF MATCHES



FIRE STARTERS

SAFETY PINS



25' ROPE

## .. FOOD ..



HARD CANDY



GUM  
SUGAR



## LET SOMEONE KNOW

Along with your survival kit, you have another obligation to fulfill before entering the Maine woods. **Make sure you tell someone where you are going, including a written itinerary, and when you plan to return.** 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 the nearest State Police barracks, and they will notify the Warden Service.

## DRESS WARM, STAY WARM

Maine guides and woodsmen of old were well aware of the principles of keeping the body warm. New outdoorsmen were amazed that their guides could stay so comfortable while seemingly so lightly clad. These early Maine woodsmen were active individuals, whether at play or work, and they soon found that bulky garments were a handicap.

They knew that wool, even when wet, retains warmth far longer than flannel, cotton, or man-made fabrics. Full-length, woolen underwear helped many a log driver survive an early spring plunge into the Machias River.

Early woodsmen's trousers were woolen also, cut full for warmth and ease of movement and for comfort when kneeling in a canoe. Their trousers were thick and heavy



woven, and nobody worried much in those days about creases and wrinkles. Deep, canvas pockets held extra food, a knife, string, matches, and other survival gear.

Standard footwear consisted of heavily greased leather boots or rubber packs worn over hand-knit socks, usually two pair in extra-roomy footwear. Socks were dried every night and rinsed frequently to keep them fresh and to fluff the knap for greater insulation. Sheepskin, or felt batting was frequently used for innersoles.

Their shirts were usually heavy flannel nearest to the body (over long underwear) with two woolen shirts over the flannel one. They had long known the importance of allowing the body to ventilate, so they kept the neck open and wore a bandanna tied loosely about the throat. This also served to keep out tree needles, or to tie down their felt hats when "it blew hard."

Speaking of hats, today's hunter must, by law, wear one of a solid hunter orange color while hunting with a firearm during deer season. In addition, they must wear either a vest, jacket, or shirt with a minimum of 50% hunter orange covering the torso.

The old guides hat worn many years ago and still today was usually felt, peaked at the top, and wide brimmed enough for shade and moisture to run off. Even these today are available in the hunters' blaze orange. As the weather grew colder, the old time guides would switch to a fur hat much like the old "trooper" styled hats that could be tied down around the head. Such a hat of fur today can also be purchased in blaze orange and would be a necessary choice during hunting season.

Handwear was mostly limited to knitted mittens

WOOL UNDERWEAR



GREASED LEATHER BOOTS



WOOL SOCKS

"THE CLOTHING WORN BY AN OLD MAINE GUIDE"

WOOL PANTS WITH DEEP POCKETS



A BANDANA AROUND THE THROAT KEEPS OUT RAIN etc. also a WOODSMAN CAP FOR ADDED COMFORT



EQUIPMENT THEY CARRIED



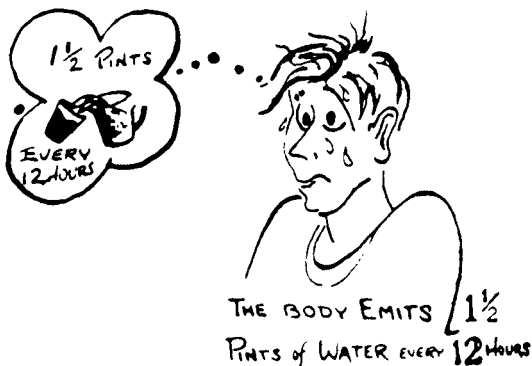
with a thumb and forefinger to allow both dexterity and ease of shooting. They were quite frequently reinforced with elastic or a rubber band around the wrist. Also, these guides always took extra precaution to make sure their mittens were somehow attached to them, so they wouldn't be left somewhere or lost overboard.

While today's hunter wears a lightweight down or Dacron coat during the winter, early guides wore a greatcoat of lined canvas, extra-heavy wool cloth, or sheepskin. Of course, this was not used to work in but rather to afford protection when traveling and moving about. It was removed and hung to air-dry when engaged in hard labor like splitting wood.

Though times have changed and modes of dress have changed, the principles that the early Maine woodsmen applied in keeping warm should be taken into account.

By now, we have established the value of nature's own great insulator – air – and her own natural clothing – wool. It is a well-accepted fact that the amount of insulation is more important than the kind, and when dressing for the outdoors, even with today's lightweight clothing, attention should be paid to this dead air principle.

Today's lightweight garments have a remarkable ability to withstand penetrating winds. In addition, the better garments such as the climate control fleece ones can handle perspiration buildup equal to or better than wool. 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.



An alternative to today's outdoor clothing is to wear the time-proven wool and to carry with you a light-weight poncho, which will give maximum protection from wind and rain while permitting the body to ventilate thoroughly. A hunter orange vest over your coat will add more protection. 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 outdoorsman on it as a stretcher between two poles, or use it as a signal cloth. A poncho can even serve as an emergency flotation device if you capsize – simply fold it to trap air, and dog paddle along with it. Ponchos are light and amazingly strong.

## BOOTS

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

The all-rubber boot is waterproof, of course, but leaves a lot to be desired in ankle support and does not allow ventilation. The all-leather, waterproofed boot is warm and sealed by silicone to the extent that all ventilation is excluded. Heavy moisture buildup can be expected in both of these boots, and they must be well dried after every use. Felt insoles will help solve moisture problems, as they draw the moisture into them and away from the feet and socks.

Since the rubber-bottomed, leather-topped boot allows some ventilation through the leather, gives you ankle support, is warm, adjustable, withstands punctures, and is waterproof, we can say that it has more desirable survival qualities than others. This boot can be bought with an insulated bottom for extra warmth or with a heavy felt liner that should be removed each night and dried.

It is a good practice to carry an extra pair of socks when traveling for a day, as they will go a long way toward helping tired feet and warming cold ones. A dry pair of socks will feel like a million dollars if your others get wet. Old timers again found that wool socks were unbeatable in keeping feet warm while walking through the Maine woods.

## MAP AND COMPASS

Now that you are properly 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 as simple to understand as 5<sup>th</sup> grade math.


### Topographic Maps

A "topo" map is simply a drawing of an area as seen from the air. The various symbols and lines tell an experienced reader just as much as a story would. These maps may be purchased at any well-stocked sporting goods store or bookstore or from the U.S. Geological Survey Map Office, Washington, D.C.

### TOPOGRAPHIC SYMBOLS

#### ROADS:

HARD SURFACE 

LIGHT DUTY 

DIRT 


TRAIL 


RAILROAD 

#### BUILDINGS

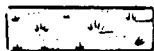
SCHOOL 

CHURCH 

CEMETERIES 

POWER LINE 

#### SWAMP MARSH



#### WOOD MARSH



TELEPHONE LINE 

OPEN PIT, MINE ETC. 


LANDMARK 

SHAFT, TUNNEL 


#### STREAMS:


PERENNIAL 

INTERMITTENT 

DISAPPEARING 

WATER, WELL or SPRING 

SMALL RAPIDS 

SMALL FALLS 

A topo map furnishes five important pieces of information concerning your area of interest. We have already given one, distances. The others are descriptions, details, directions, and designations.

We are interested in magnetic north, and you can usually assume as you look at the map that north is at the top and south is at the bottom. With this in mind, you can easily tell how major landmarks lie in relation to your base of operations.

Details of importance are: Man-made features (black), water (blue), vegetation (green), and elevations (brown). Study your topo map for a while, and notice the brown contour lines. They will be far apart in some places and near together in others. Pick a steep hill you know, and notice how tightly its contour lines are on your map. This will show that as you walk from one to another you are going up 20 feet in height, so if the lines are close together, you are in for a hard climb.

## **Declination**

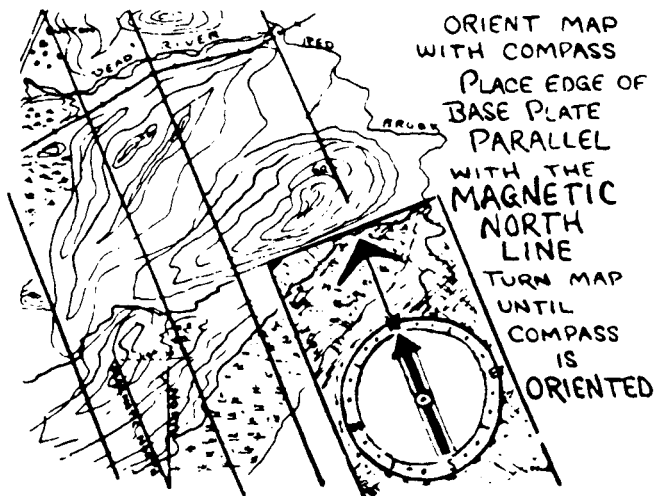
Declination, simply put, is the difference between magnetic north and true north. This difference is not significant enough to cause problems while pursuing the usual outdoor activities. The few miles, if that, which you might cover during normal outdoor activities wouldn't make more than a hundred feet difference when you come out of the woods.

As soon as you can after purchasing your map, continue the north-south magnetic line (at the bottom of the map) all the way up through the map. Draw other lines

parallel to it one inch apart and up through the map. These will be your magnetic North-South lines.

Now when you use map and compass together, they will read exactly alike and you need not worry about declination. An additional feature of your NS lines is that they are one mile apart on a one inch to one mile map. You can easily estimate distances at a glance.

To orient your map and compass, 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.





If you have a plan of hunt, so to speak, you may find all the bearings at one time and mark them on the map. Later, as you hunt, simply set your compass to the desired bearings as you come to them. This saves time and eliminates errors, as you are keeping an accurate log of your trip.

Also, in planning your hunt on the map, you should establish the boundaries of the area you will be hunting. Perhaps a road of some sort on the south, a river on the west, an old railroad bed on the north, and a hauling road on the east. This way you won't hunt farther from your camp or car than you had intended – a basic point to remember if you want to avoid spending a night in the woods.

Often, hunters in a party will plan the day's hunt on a map at camp in the morning. They decide where each will hunt that day, and plan to meet at a certain place to have lunch. This insures that everyone is accounted for. A time and place for meeting at the end of the day would also assure that nobody is lost.

Before entering the woods – whether at an old logging road, a town or county road, or from camp itself – you should check your compass and bearings. This assures, for one thing, that you have not left the compass in another pair of pants or on the camp table. It also serves to establish the direction in which the road is running and, most important, determines the general direction or course which you must follow to return to the road from anywhere in the general area where you are to hunt. If you follow a deer track for a couple of hours, it will be impossible to follow an exact bearing. If you know that a southeasterly course will put you back on the road near where you left it, you have all the knowledge needed.

You must be sure that you take that all-important bit of knowledge into the woods with you and have it recorded in your mind or on paper; in strange country, it is better to have it on paper and not to trust your memory. In addition, be equally sure to have the topographic map of your area carefully folded in your pocket or survival kit.

The older and more experienced hunter or woodsman in your party should assume responsibility of being certain that the less experienced hunters have their compasses, maps, and return bearings and know the lay of the land before leaving camp or the car.

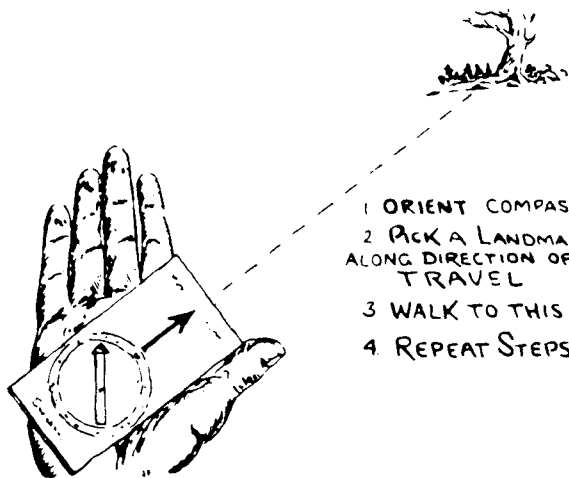
### **Finding Directions with a Conventional Compass**

Assuming that you wish to walk to a certain spot – a hill, lake, or other landmark – you can do so even if you can't keep it in sight. There are two ways: first, by taking information from a map, and second, by using your compass. When using the field sight method, face the object and hold the compass in front of you. Turn the housing so the needle is directly over the N for North. Sight across the compass to the object. The direction will be expressed in degrees, and you must memorize it or write it down.

You can now walk to your destination even though you go from hill to gully and lose sight of it. Pick objects to walk to that are directly in your compass line, and walk to one after the other until you are there. Remember, even if you have traveled this piece of woods before, check every landmark and noteworthy feature against your map.

After you have hunted the area, you can return to the road you left from by simply adding or subtracting 180°

from your previous bearing. Let's say that the bearing you were traveling was 100° east. Add 180° to this, making your return bearing 280° west, or the direct opposite of the bearing you went into the woods on.



- 1 ORIENT COMPASS
- 2 PICK A LANDMARK  
ALONG DIRECTION OF  
TRAVEL
- 3 WALK TO THIS POINT
- 4 REPEAT STEPS 1,2,3

## **Pinpointing an Object**

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

West Shirley Bog has produced that prize of prizes for you, a 300 pound bear. You can hardly move him to dress him, and you'll certainly never drag him out alone. First, you blaze a fairly large circle about him and maybe tie pieces of your bandanna 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 of you. So you take a north bearing of 0°- noting landmarks along the way. 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 walk back on a south bearing of 180°. The landmarks are familiar, but say you can't find your bear. Mark the spot where you have stopped, walk in widening circles, and there he is!

## **Using a Watch as a Compass**

To find north with your watch, point the hour hand directly at the sun. The point halfway between the hour hand and twelve o'clock will be south, and therefore, the exact opposite point on your watch will be north. This is at best a survival technique and shouldn't be relied on as a replacement for a good compass.

## By Way of Review

In order to travel about freely in the woods and fields of Maine, you need to follow three basic rules: place your compass on the map, set the compass by the map, and set yourself by the compass.

Again, we want to emphasize that you can read these words until the black bear turns white, and they'll do you little good unless you practice them. Start in your yard, field, or nearby city park until you know the art completely. Only then should you head for the big woods.

We might stress a waterproof cover for your map or a treatment of some kind that will protect it. Once you find the ability to travel with map and compass, it is so honestly simple you'll use that ability at every opportunity.

One final rule with compass work: **Believe your compass under all circumstances** (unless it is obviously broken) – it is your most important piece of survival equipment.

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 and weigh a little more than a half a pound utilize several satellites circling the globe to indicate your position on earth within a hundred yards of your actual location.

These units can also guide you back to locations such as camps, roads, and ponds. In addition they can theoretically mark your trail as you venture through the woods.

Briefly put, they let you know where you are, how

fast you're going, the direction to steer to return to your location, and how much longer you have to go. They are, however, comparatively expensive and require batteries.

## OVERNIGHT PREPARATIONS

There is little else we can do to prepare you to hunt in the Maine woods so let's turn to the other side of the coin. You are now hunting alone in the Ten Thousand Acre Tract southwest of Rockwood. You shot at a big buck about noon and have been tracking him ever since. Its clouded over now and getting along towards sunset. You stop to get your bearings, and slowly that feeling creeps over you as you realize that in the excitement of the hunt you have traveled quite a distance, and worse, you aren't really certain which way 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, you had best prepare to spend the night, as no one can safely wander lost through the Maine woods after dark. At this point, the best words of advice are "To thine own self be true." If you are lost, admit it, and decide right now to keep your head, as your only enemy is panic.

Do not suppose that dense, trackless forests don't sometimes baffle or confuse even experienced woodsmen. Was it not Daniel Boone who said he'd never been lost, "only bewildered"? He meant, of course, he was always

prepared to spend a night out and find the way in the morning. And so it should be with you.

Look on the situation as a challenge. Make plans and establish goals. Take a few minutes to think them over and write them down. What should be done first? What can wait until later?

Your first decision should be the selection of your encampment. In this choice, you should keep in mind natural shelter. The side of an open hardwood ridge affords little natural shelter from either wind or rain. A better bet would be an area similar to the area a deer chooses for his winter yard. Try to find a place with a canopy of green growth on the edge of more open hardwoods. Such a site will afford natural shelter as well as an abundance of dead firewood. If it is near a clearing or a shoreline, so much the better, as this would make it easier for you to signal a rescue plane. Also, the availability of drinking water should be considered in picking your campsite, but don't set up near a roaring brook or a waterfall – you wouldn't be able to hear signal shots or your rescuers' shouts. Also don't set up camp under a tree loaded with snow; it might come down on you or your fire.

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

Since you decided to spend the night rather than wander about aimlessly, you had better start gathering plenty of wood and build a fire. 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 in the woods, possibly quite nearby. As soon as your fire is lively, you'll feel as man has 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.

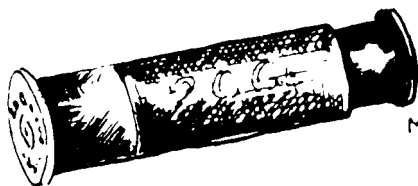
Where man finds work, he finds contentment, and gathering firewood is a positive action that will relieve you of the burden of imagined danger. As you work by the methods and steps we'll outline for you, think ahead to the next step. Try to concentrate on what you are doing, not on your plight. There 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 the Native Americans lived, and history shows they led remarkably rewarding lives.

The most important item of fire starting is a thorough knowledge of fire starters and kindlers. Wooden, scratch-anywhere, kitchen matches should be the only ones carried. Leave the paper ones at home, as they just build false security. Your matches should be made waterproof by dipping them in melted paraffin wax. Two dippings of the wax used in home canning will give good protection; the whole match must be covered. These matches should never



be used except in extreme emergency. You should, however, try a few at home after waxing them to make sure they work.

A strong plastic pill bottle makes a good watertight receptacle to carry your matches in, but it is hard to beat commercially produced metal containers.

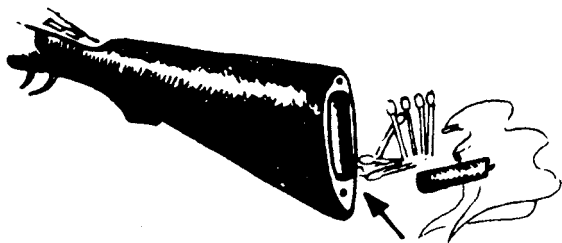


TWO SPENT  
SHOTGUN SHELLS  
OF VARYING GAUGE  
PROVIDE A SIMPLE  
MATCH CARRYING  
CASE.....

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 also provides illumination. Some people carry a small amount of lighter fluid, but again, this tends to build false security, and you are much better off with some good, dry, flammable tinder and waterproof matches.

An excellent combination for emergency situations would be two dozen waterproofed matches and a candle carried in your gunstock. A dry rag can be stuffed down on the items for use as tinder and to keep the items stationary. This will not weaken the stock, and you will always have with you the materials to start a fire in any emergency.

The use of gunpowder and other fire starting tricks has no place in the manual of practical survival techniques. For your purposes, preparedness should carry more emphasis than gimmicks. The carrying of flint and steel or a metal match as a backup measure is recommended, because these



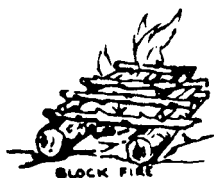
**MATCHES, CANDLE AND A RAG PLACED IN THE  
GUNSTOCK COULD SAVE YOU.....**

will work if you can find dry tinder. Before including these spark-makers in your survival kit, you should experiment with them so you are thoroughly familiar with the principles involved in their use. A well-fueled reliable lighter is a good backup fire starter.

Nature herself provides many excellent fire starters. Almost any dead twigs will serve as kindling, as will dead tree moss, leaves, and grass. If dry, nearly all dead wood will burn. 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 and greener wood. Make sure to prepare your fire spot properly so as not to start a forest fire.



A good supply of kindling should be kept handy in case the fire goes down during the night. Make all your movements count – even your supply of wood can be used



BLOCK FIRE



PYRAMID FIRE



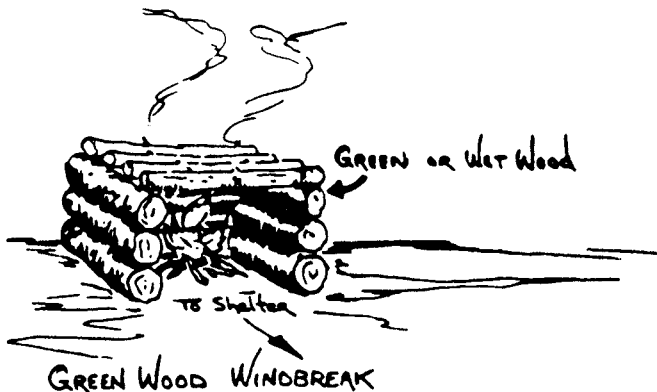
REFLECTS  
& HOLDS HEAT

as a windbreaker by careful arrangement; it will conserve fuel and reflect heat.

How much wood is needed to sustain a fire overnight? A good rule of thumb is to gather what you think is needed and then double the size of your pile. It will take a lot of wood to get through the night. A good test is to measure your fire's consumption for one hour and then multiply this by the number of hours you will be in darkness. In gathering fuel a small belt axe is worth its weight in gold, and the carrying of such an axe probably is more important than carrying a heavy revolver on your belt.

Do not eliminate any possibility for fuel. Larger logs may be thrust into your fire and burned through, making two, and so on. Wet wood can be stacked near or over your fire on a frame of sticks. Use some imagination, and work quickly.

As a windbreak, only stones surpass green wood or wet wood. Fashion your windbreak into a V shape, or square, with one side open toward your shelter. This has a fuel-saving feature as it eliminates excess drafts, and it stops sparks from flying around and dries more fuel for later use.



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.

## FIRE STARTING IN THE RAIN

Here is where the hunter who carries cardboard squares that have been soaked in wax will be well off, as these almost guarantee a ready fire. These squares will burn for as long as two minutes and eliminate the need to attempt starting a fire with wet natural tinder.

Other common household articles can be soaked in melted wax and carried in your survival kit for use as tinder. Cotton rope, newspaper strips, paper towels, and paper dinner napkins all have been found to make good tinder when dipped in wax. These take up very little room and can

be slipped into a plastic pouch with your matches.

The impossible situation may seem to be starting a fire during a downpour. You should look under bankings, rocks, brush piles, and downed trees for kindling. Protect it from weather with a shirt, by bagging it, or keeping it under your poncho until you are ready to use it. Birch bark may be nearby; gather lots of it and dry, dead limbs under dense evergreens.

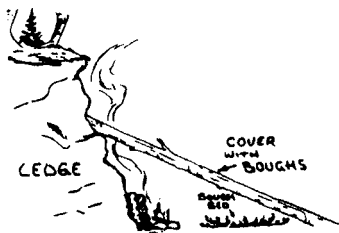
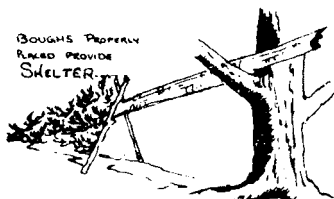
One of the great items for kindling is the shaving stick or "fuzz" stick. This is a dry stick that has been whittled but the shavings held on by stopping the cut just short of the end of the stroke. These are rapid fire starters - nature's own - and a little practice will make you expert at fire starting. Dead, dry, softwood limbs are especially good for this purpose.

## SHELTERS

You should have a shelter during foul weather or if it is threatening. A lean-to can be made by placing poles



against a ledge or bluff. Evergreen boughs may be used for a roof by placing them with the tip ends up; they will shed water when arranged in this manner. Also, a generous supply of evergreen boughs should be placed on the ground beneath you. Refer to the shelters illustrated, and choose the one that is best suited for your situation.



## SPENDING THE NIGHT

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

If your clothes are wet, you must find a way to dry them. Remember, your body heat is being drained off rapidly into your wet clothing, and you must conserve as much as is possible. If you have dressed in wool, you are a lot better off in this respect, but you should still dry your clothes.

Start by taking off your outermost clothes, wring and pound all the water from them. Heat them thoroughly, being careful not to burn them. Dry all clothing in stages, trying to keep warm clothing on your body until everything's finally comfortably dry. You must maintain body temperature to prevent exposure.

Don't pay too much attention to any shooting you hear just at dark, but be listening intently for shots after dark. The usual emergency signal is three well spaced shots. Listen for a car horn or chainsaw. Have your compass ready, and if you hear a signal, try to take a bearing on it by the light of your fire. If there are three shots, you should answer with two yourself, by pointing your gun directly towards the sky and firing.

Shots heard just after dark are probably fired by your friends; if they are properly equipped, they can get you out without help. Shots later in the evening will probably be an organized search led by wardens who are well-trained in



retrieving lost hunters from the Maine woods.

These wardens will fire three spaced shots and await a two-shot reply from you to take a bearing on. If you are short on ammo, you can answer with one shot, but keep the gun pointed up. Remember, if you can hear them, probably they can hear you. All you should do now is wait, keep your fire going, and listen.

After the search party has traveled some distance, they probably will shoot again, so you should be ready to answer. Remember that they are better equipped than you to travel, so stay put, and keep answering their signals until they are within shouting distance. 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. Keep an empty cartridge case handy for a whistle, as the sound will carry further than a shout.

What happens if help doesn't arrive the first night? Don't try to stay awake all night listening for signal shots, because 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 at this point 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 and heat them through. Using a stick, 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 in the ledge. After a couple of hours,

remove the fire and make your bed in the warmed area.



**A WARM BED CAN BE MADE FROM ROCKS & BOUGHS**

In your survival kit should be a large square of aluminum foil. This can be used 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), which lasts long enough to allow sleep. Remember to keep your head well covered; it might help to pull your earflaps down and wrap your bandanna around your head first. You may button up your neck now because little sweating will occur. With dried, warmed clothing, a brush bed, heated stones, or logs about you, and your heat reflector working, you should sleep fairly well.

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.

## **TIPS TO KEEP WARM BY**

1. Thickness combined with dead air is warmth. Even dry grass can be used, by stuffing it into clothing or around your sleeping area, you can make effective insulation as the Native Americans did. Wrapped around knees, ankles, elbows, feet, and chest, it will help tremendously to maintain

- body heat. At least a quarter inch should be used.
2. A covered head helps your extremities have a better chance to keep warm. Twenty five to seventy percent of body heat loss is through an uncovered head. Always wear an insulating type hat that can cover your ears.
  3. Open your shirt front, uncover your head, take off your jacket, unbutton wrist cuffs, and ventilate before resting and sleeping. Don't enter sleeping quarters when you are sweaty.
  4. Before retiring, eat something, sweet if possible. Flex muscles, work them against each other, strain them (but don't sweat), and when you lie down, warmth will have started.

## SIGNALS

When daylight comes, you have two goals:

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

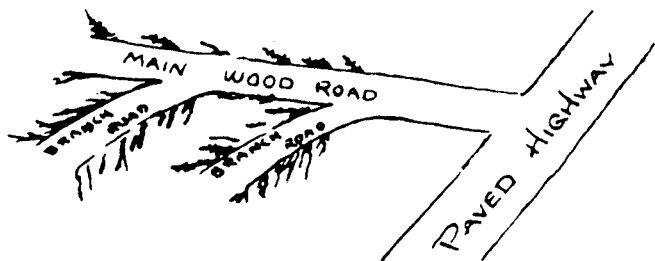
There are a lot worse places to be than the Maine woods. You have survived the first night, and now you should put forth a strong effort to be as busy as possible. An idle mind can only work against you! An alert busy mind is of paramount importance now. Don't sit fretting about how cold you are. Do something about it! Now's a good time to keep repeating, "God helps those who help themselves." Get some wood and build a fire up good and hot. Warm yourself through and through. 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 you absolutely must move on, follow this plan: Leave a message – by note, stamped in snow, or carved in a tree. Set up some sticks or stones pointed in your direction of travel.

These two woods-travel tips may help you find your way out: First, virtually all of the Maine woods have been cut-over at some time or another, and almost anywhere you go you may find a skid or twitch road (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 a woods road – one way leads to civilization and the other usually goes deeper and 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; trees pushed over on the roadside will lean in that direction. 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.



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, or a road, or maybe even a town.

**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.**

Maine has many experienced bush pilots as well as game warden pilots who will be looking for you from the air, so get to work on having the best signal fire possible. You won't need an especially big fire as long as it is burning hot and you have boughs ready to put on for smoke, when you hear a plane. 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.

There are several important things to remember. 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 must be worn during hunting season can be seen for miles from a plane. At least one article of blaze



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

orange clothing is a good thing to have on you regardless of the season. The cover of this booklet can also serve as a signal. A mirror can be a very capable signal, but you must practice with it in order to use it effectively.

Also, you can stamp out a message in snow. Pick a flat place in an opening, if possible. The shadows show well from the air. Better still, try to find stones, trees, brush, etc., and lay them in contrast against the snow. Once you start your signals, do not leave the area. Someone will be coming.

## GROUND To AIR CODE

1. REQUIRE DOCTOR	
2. UNABLE TO PROCEED	
3. INDICATE WAY TO GO	
4. PROCEEDING THIS WAY	

5. SAFE TO LAND	
6. ALL WELL	
7. NO	
8. YES	



If a plane of the Maine Warden Service spots you, and conditions permit, the pilot will cut his engine and fly over low and attempt to give you directions. If there is a road, river, or pole line nearby, he will fly over low in a direct route toward it. He will then circle and repeat this several times so that you can seek your own way out. If you don't understand the plane's signal, *stay put*.

## 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? You may be faced with a longer stay in the woods until you are found.

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 hunters have been lost in the Maine woods without food, fire, or shelter for over a week and were in good condition when they finally were found.

On the other hand, there have been cases where lost hunters 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.

## EDIBLE WILD FOODS

We will start this section by quoting one of Maine's foremost survival experts who says:

“I have serious reservations about edible plants. First, why? A person can survive for a week with no food and only water, without any real problems. Second, 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. Why gamble with it?”

Please note, food isn't your important need – water is. The human body generally requires about two quarts of water per day in cold weather. Your body will lose two or three quarts of water per day regardless of water intake. If intake does not equal output, dehydration occurs. In the Maine woods, finding water should be no problem, so drink freely. If possible, boil it first, just to be on the safe side.

Coming back to food: accept the fact that it is the last thing you should concern yourself with. You could go without food for several weeks. Take stock of your food supply, and ration it so you can eat regularly. Two meals a day is best for your system, supplemented with plenty of water.

You may have a chance to kill some bird or animal that comes near your campsite, but here again, you have to be honest with yourself. If half-cooked, strange meat would make you ill at home, it will cause you that much more discomfort in a survival situation. Mother Nature has food available to supplement those things in your survival kit, but it must be approached with discretion.

There are a couple of simple rules governing edible plants:

1. Leave all mushrooms alone. They are mostly water and aren't worth the risk.
2. A good test on fruit types is to cut them horizontally. If they have star-shaped seed compartments, such as an apple, they are edible. But if they have a single seed, much like a peach, you had better not risk eating them.

The various nuts are all edible, but some can cause serious stomach discomfort if Eaten in any quantity.

Most of Maine's cold-water fish spawn in the fall in the shallow, gravel areas of brooks and streams. They can be pretty easy prey for a lost hunter.

All of the birds and animals in the Maine woods are edible even though some are not too palatable.

If you get either fish or game, you must be sure to cook it thoroughly. If you have carried a small can in your survival kit – such as a Vienna sausage can or a tin band-aid box – you have a boiling pot. If you haven't, one can be fashioned from your aluminum foil.

Cut any meat in small pieces and boil it thoroughly. Remember, the broth will have as much nutrition value as the meat itself. If you can't boil it, cut meat in small squares and cook it on a stick.

Again, we want to state that food is the least of your worries. With plenty of water, your system will sustain itself for long periods with no food or with what you have in your survival kit. Keep your mind off your stomach, and put your effort into your shelter and signals.

## **FIRST AID**

Our comments on first aid will be limited mainly to self-treatment of those injuries that are 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 this is not possible, 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.

## Cuts and Wounds

The bleeding from almost all cuts can be stopped by direct pressure with a hand or a finger. A pad should be placed over the wound and direct pressure applied. When the bleeding stops, fasten the pad in place with tape or strips of cloth; maintain pressure but not enough to stop circulation. Elevate the body part involved, (get it higher than the heart compared to the ground), if you don't suspect a fracture. Keep direct pressure on the wound while elevating.

If direct pressure does not stop the bleeding on an arm or leg, apply finger pressure on arteries where they are next to bones. The two such pressure points that are most effective are on the inside of the arm between shoulder and elbow, and the groin about where your hip and leg join on the front. Pressure on these points will usually stop any bleeding on arms and hands or legs and feet.

Tourniquets should only be applied by persons appropriately trained. Tourniquets can easily do more harm than good. If heavy bleeding persists, a tourniquet if used properly, and **only as an absolutely last resort**, may save a life when the bleeding is uncontrollable and the victim is a long distance from medical help. When used, even in these extreme circumstances, **there is a high probability that this procedure will result in the loss of a limb.**

## **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 you would a fracture, just to be safe.

A broken bone should be splinted only if the person will be moved. Cut tree branches to make natural splints, use some cloth padding between skin and branch for comfort. Tie the splint 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 will permit you to walk short distances without too much difficulty. Do not wrap so firmly that you cause swelling or impair circulation. Do the wrapping over the shoe or boot. It can be very difficult, if not impossible, to tell the difference between a sprain and a fracture near a joint. Don't underestimate!

## **Frostbite**

Your nose, ears, cheeks, fingers, and toes are the most likely parts to freeze in cold weather. Both low temperature and wind are factors in frostbite. An early

symptom may be slightly flushed skin color, later changing to white or grayish-yellow. Pain, feeling of intense cold or loss of sensation are warnings of impending freezing. Firm pressure with warm hand is helpful, but do not rub the affected part with hand or snow. Fingers can be warmed in armpit. Cover affected part with dry insulating woolen materials. Drink coffee, tea, soup or warm water. **Do not drink alcohol.**

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

## Hypothermia

The lowering of the core body temperature is insidious and often difficult to see in oneself because the cold zaps the brain's ability to think clearly. Signals might include shivering, 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 to the body (or both). High energy snacks or warm drinks, particularly cocoa or diluted Jello work very well, fuel the body's furnace. It is also important to remove any wet clothing and put on dry clothing. Hypothermia can have after-effects so it is wise to seek medical care immediately.

## **Shock**

Shock is a very serious condition that can result in death from any bad injury, especially where there is loss of blood. Preventing and treating shock are critical and easy to do. The person should lie down in a comfortable position and be kept warm, but not overheated. While every situation calls for its own decision-making, often it is better to signal for help and stay where you are.

## **Burns**

Burns received in a survival situation will most likely be minor but should not be ignored. Do not try to clean the burn. Do not break blisters. Unless sterile dressing or a clean, freshly ironed handkerchief is available, leave the burn exposed. Do not use iodine or antiseptic on burns. Do not apply grease, butter, or cotton. Much of the modern outdoor clothing will melt to a burn. Do not try to remove clothing stuck to a 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); burns big enough to cover more than one body part (chest and abdomen for example) are serious. In addition to the above recommendations, always treat for shock with serious burns.



## **Heart Attack**

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

Have the person stop activity and rest in a comfortable position. If you fire signal shots do not take the shock of recoil on your shoulder; rest the gun butt on the ground. Build a small fire if woods 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. Don't panic – help will come.

## **WATER SAFETY FOR OUTDOORSMEN**

Most sportsmen use relatively small boats such as skiffs, canoes, and small aluminum or fiberglass motorboats. State laws require the registration of any boat equipped with a motor. In addition, it is mandatory to carry safety equipment such as life-saving devices, lights, whistles, and fire extinguishers depending on the size and type of the watercraft. Check your Maine boating law book for necessary legal and safety details.

In addition to the required safety equipment, extra common sense items such as an anchor with line, compass, extra paddle or oar, a bailer, flashlight and a small kit of

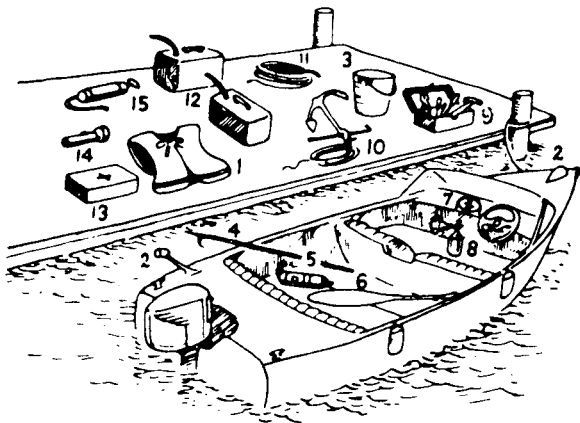
tools to make simple repairs and adjustments to your motor help make your trip safer and more enjoyable.

Always remember to leave word at home or with friends as to your general whereabouts so that in case you are gone longer, get lost, or run into trouble, searchers will have a starting point and can assist you as quickly as possible.

## WATER SAFETY ITEMS

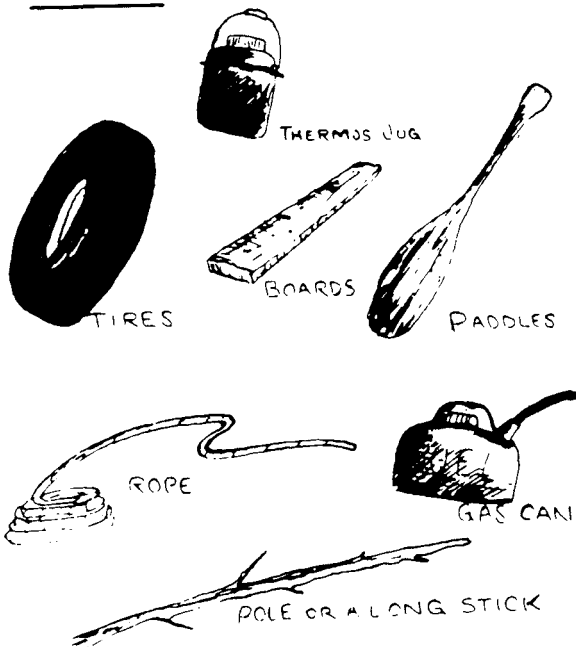
### BOAT SAFETY CHECK LIST

- |   |                            |
|---|----------------------------|
| 1. Approved life-saving device for each person.                       | 7. Compass.                |
| 2. Proper lights (not required if boat is not operated after sunset). | 8. Horn or whistle.        |
| 3. Bailing bucket.  | 9. Tool kit.               |
| 4. Boat hook.   | 10. Anchor.                |
| 5. Fire extinguisher.   | 11. Line.                  |
| 6. Paddle or oars.  | 12. Gasoline cans (spare). |
|   | 13. First-aid kit.         |
|   | 14. Flashlight.            |
|   | 15. Bilge pump.            |



All sportsmen who use the waterways should develop some proficiency in swimming and simple floating techniques. Learning to swim and handle oneself in the water is one of the best safety devices available.

## EXAMPLE OF THROW-OUT FLOATS



ANY of these items could save A **LIFE**...

Many hunters and fishermen are drowned each year by carelessness on or around the water. The most common reasons are usually:

1. Too small a boat for the water to be covered.
2. Overloading the boat with people, gear, etc.
3. Burying lifesaving gear with other items being carried so they are not readily accessible.
4. Impaired operating ability due to use of alcohol.
5. Not keeping a sharp lookout for obstacles or other boats.
6. Fast-changing weather in cold months.

Many of these tragedies could have been averted by some of these simple preventive steps:

1. Check weather reports frequently.
2. Learn weather signs yourself. Don't be fooled by calm water near shore. During an offshore wind waves can kick up ahead of you and cause trouble.
3. Keep your loads light. During cold weather take half your usual load. This greatly increases stability of the boat.
4. Don't stand up if you can help it and never shoot from a boat while standing or when boat is moving.
5. Always wear your lifesaving device.
6. Confine your boating to daylight hours as much as possible.
7. When traveling on large streams or rivers remember to keep to the right side as much as

possible. This will help prevent collisions and spills as you have already established the proper passing position; port-to-port.

8. As far as rapids and swift water are concerned, your topographical map will tell you what's ahead just as on land. Learn the symbols for each type of obstruction. Do not run any swift water or rapids until you have carefully explored the area. Safer still is to take out and portage.
9. Lake travel can be dangerous because high waves can make up in a few moments so keep to the shoreline if possible. If you have to make your way to shore through high waves it's wise to quarter them slightly and slow your speed, and stay low in the boat.
10. When waves are coming against the stern, be sure the boat does not "fall off" a wave. This is called "broaching" and causes the boat to go sideways into the next wave resulting in a spill.
11. When heading into a wave do so with just enough speed to make headway and not cause spray or water to fall into the boat. High speed will pound a boat to pieces and often cause the bow to "stick in" taking heavy amounts of water aboard. In all cases take your time and use your head.

## LOADING YOUR BOAT

There are several things that should be remembered when loading a boat. Distribute the load evenly; keep the load low; don't stand up in a small boat; don't overload. The weather and water conditions should be taken into account, too. If the water is rough, the number of persons carried should be reduced.

The U.S. Coast Guard requires that manufacturers of certain boats display on each boat a "U.S. Coast Guard Capacity Information Label". This requirement applies to all monohull boats less than 20 feet in length manufactured on or after November 1, 1972. Exceptions to this rule are sailboats, canoes, kayaks, and inflatable boats. The "U.S. Coast Guard Capacity Information Label" is intended to provide safety information to the boatman, who may not have expert knowledge of a particular boat's characteristics, in order to reduce the dangers of inadvertent overloading or overpowering. These recommended values are for fair weather and do not relieve the boatman of the responsibility for exercising judgment.

In the absence of a capacity plate, there is a simple rule of thumb to help prevent overloading of boats. To determine the number of persons you can safely carry:

$$\frac{L \times W}{15} = \text{_____} \quad (\text{Number of Persons})$$

L = Overall length of boat

W = Maximum width of boat (both dimensions in feet and tenths of feet.)

The result, or the next smallest whole number if the result is a fraction, gives the number of persons that can be safely put aboard, in good weather conditions.

You should verify the capacity of your boat before loading to insure the boat will in fact safely carry the planned load.

## **COLD WATER SURVIVAL AND HYPOTHERMIA TREATMENT**

Two-year-old Melvin had been missing for nearly twenty minutes when a rescuer in a rowboat finally found him. Melvin was floating, face down, 30 feet offshore in the icy waters of a lake near his home in Ann Arbor, Michigan, his body blue and lifeless. But Melvin's mother could not and would not believe that her son was dead. She instantly began mouth-to-mouth resuscitation and massaged the child's chest.

By the time Melvin arrived at the University of Michigan hospital 12 miles away he was fully conscious; he fussed and fidgeted throughout a series of chest x-rays, brain scans and other tests. The next morning, bright-eyed and bouncing, Melvin went home. He had been saved, Dr. Martin J. Nemiroff decided, not only by his mother's prompt action, but also by the so-called "diving reflex."

- 1.) Limited research has indicated that some drowning victims, notably the young and in cold water, may not be dead and may be revived with no lasting impairments to mind or body.
- 2.) Many drowning cases are dry drownings where victims lose consciousness because of constrict-

tion of breathing passages. There is little water in lungs of such victims, they may therefore be found floating. Even in victims found on the bottom with some water in their lungs, there is still a chance of recovery.

- 3.) Mammals, especially the very young, have an involuntary reaction to immersion called the **Mammalian Diving Reflex**.
- 4.) Water-adapted mammals such as the porpoise, whale, and seal have developed this ability to the point they can remain underwater for extended periods. In diving reflex, blood circulates very slowly between the brain, lungs and heart and when a person is undergoing diving reflex they may give every visual appearance of death. They may have no discernable pulse, (slow, slight 6-8 beats per minute); No breathing, blue skin, no arterial blood to extremities; pupils fully dilated. As of this writing the longest fully recovered victim's time under water is 38 minutes, followed by a 40 minute ambulance ride.

In all drowning cases where the victim is found in a relatively short time, (under 1 hour), it is recommended:

- (a) Take victim to the hospital immediately.
- (b) Do not declare the victim dead at the scene.
- (c) Restore body temperature to normal from the inside out by using aggressive and immediate moist warm air inhalator/CPR resuscitation methods.

(d) In every near drowning also have the victims report to a hospital immediately. Many near drownings have eventually resulted in fatalities due to lung deteriora-



tion, which might have been corrected if properly diagnosed and treated.

## **Cold Water Survival**

Many of our boating fatalities relate to drowning in cold water. We are beginning to realize that: (1) Some of these people do not really drown; (2) Some may not be dead when so pronounced and CPR should be started immediately upon recovering the victim.

Several different investigations, including work done by the U.S. Coast Guard; American National Red Cross; University of Vancouver, British Columbia; and University of Michigan Hospital, not only indicate 1. above, but also that:

- (1) Most people who drown are conscious when they enter the water.
- (2) Most drownings occur 10 feet from safety.
- (3) Actions taken within 10 seconds of water entry usually determine survival or death.

Almost everyone who enters the water has an extremely high potential for survival if they:

- (1) Do not panic.
- (2) Keep their lungs filled with air, therefore maintaining buoyancy.
- (3) This pertains to swimmers and non-swimmers, undressed or fully clothed in the warmest hunting outfits.

Proven Survival Techniques in cold (70°F or less) water:

- (1) Prior to boating, hunting or fishing on cold water put on a Coast Guard approved Personal

Flotation Device, or at least several layers of insulated clothing. (Note: it is impossible for trained swimmers to put PFDs on in the water in 10 seconds, therefore put them on before you need them).

- (2) Upon entry into the water try not to move. Air trapped in clothing coupled with the PFD will provide excellent flotation and thermal insulation.
- (3) Attempt to slowly move toward and grasp flotation devices or floating objects such as a boat, decoys, coolers, oars, paddles, upturned buckets, etc.; or edge of ice.
- (4) Practice H.E.L.P. (Heat Escape Lessening Position). Upper arms held tightly along sides, hands crossed over chest, legs drawn up and ankles crossed.
- (5) Do not struggle. Doing so will cause:
  - Ingestion of cold water. Shock will cause reactive closing of breathing passages resulting in dry drowning.
  - Loss of trapped air in clothing.
  - Loss of heated layer of water around body.
  - Hastened fatigue.
- (6) Do NOT swim long distances. Stay with the boat or other floating object.
- (7) Do NOT use drown proofing system of submerging head and swimming. The greatest body heat loss is from the head and neck. Immersion of the head and neck will speed

- hypothermia and death.
- (8) Do NOT remove clothing.

## **Confronting Weather Extremes Causing Illness**

Illness can occur when a person is exposed to extremes of heat or cold due to the elements. The probability of a person becoming ill can depend on many factors. Type of clothes worn, physical activity, wind, humidity, age, and state of health of a person influence the likelihood of illness.

The three main factors effecting body temperature are outdoor temperature, humidity, and wind.

If a person shows signs of heat- or cold-related illness, their condition can quickly get worse if remedial steps are not immediately taken.

Overexposure to heat can cause heat cramps, heat exhaustion and heat stroke. The least severe are the heat cramps and are generally the first indication of the body having difficulty with the heat. They usually occur in the legs and abdomen. They are a warning of a possible heat related emergency.

Care involves getting the victim out of the heat, loosening their clothing and removing any perspiration-soaked clothing. Cool, wet cloths should be applied to the skin, and cool water to drink. If the victim starts to lose consciousness or vomits, get medical help immediately.

In most cases, the above remedies will be sufficient for the body to recover from heat cramps. Heat exhaustion is a more severe condition and heat stroke is the most serious heat problem.

If you suspect a person is suffering from either heat exhaustion or heat stroke, an ambulance should be called. More aggressive methods should be used to cool the body while waiting for medical help. Ice packs, if available, should be placed on the victim at critical points, which are the neck, armpits, groin, and waist. It is also important to keep the victim lying down.

Frostbite and hypothermia are emergency situations caused by the other extreme of weather and temperature conditions...cold.

Frostbite is the freezing of body parts, usually the fingers, toes, hands, feet and legs when exposed to the cold. Generally, the signals are a lack of feeling in the area affected with the skin appearing waxy, blue, white and cold to the touch.

The area of frostbite should be handled gently, warmed gently by soaking the affected area in water no warmer than 105°F, and **never rubbed**. The frostbitten area should be kept in the warm water until it appears red and feels warm. Bandage the area loosely with a dry sterile dressing and get medical attention as soon as possible.

When the entire body cools and is unable to keep warm due to exposure to the cold or as a result of immersion in cold water, hypothermia has set in.

Shivering, numbness, glassy stare, apathy, and – in extreme cases – a loss of consciousness are signs of hypothermia. If the victims are not given immediate care, they can die.

It is important to point out that the air temperature does not have to be below freezing for a person to develop hypothermia. Also, remaining in water even at relatively

moderately cold temperatures of 60-65°F or wet clothing for a long time may develop hypothermia.

In caring for hypothermia, you should start by caring for any life threatening problems. Call the local emergency number if a phone is available. The victim should be moved to a warm place if possible. Remove wet clothing and dry the victim.

If other sources of heat are not available, have one or more persons get inside a sleeping bag or blanket with the victim. Hot sweet drinks may also be administered if the person is conscious. Again, medical help must be made available as soon as possible.

### **Methods for Treatment of Cold Weather Immersion**

#### **HYPOTHERMIA VICTIMS:**

##### **(1) If conscious:**

- Handle gently.
- Insulate from cold environment.
  - Restore core (inner body) temperature, first using either: hot packs along sides and groin, hot sweet drinks; warmed air inhalations; body soak in warm tub (not extremities); bundling in bed or a sleeping bag with one or two warm persons.
  - Beware of aftershock, i.e., rush of cold blood from extremities to heart and warmed core.
  - Take victim to hospital in all cases after cold water immersion, drowning or near drowning.

## **(2) If Unconscious:**

- Handle gently.
- Practice rescue breathing for at least an hour.
- Insulate from environment.
- Take immediately to hospital.
- Provide warmed oxygen inhalation if available.
- If unable to move to hospital attempt rewarming techniques listed above.

## **FIND A SPACE, SHOW YOUR FACE**

A special message to young outdoors people on being lost in the Maine woods. To prevent being lost, never leave your group; always stay with your friends. Stay with your parents and do not follow your dog or cat into the woods. Whenever you go for a walk or go swimming, tell someone where you are going and when you'll be home and do not change your plan.

When you are sure you are lost, find an open space. This might be where someone has cut wood or Christmas trees, a grassy field, a grassy spot near a pond, or just a spot where not many trees are growing. Always make a lot of footprints in your area. There are no animals that will hurt you but if you don't like them near you make some noises to warn them away. Remember they are afraid of you. When people come looking for you answer them when they call. If it is dark, people looking for you make quite a lot of noise. There will be lots of lights and people will be talking while they try to keep the search line straight. Don't be

afraid of them. Answer them when they call to you or go to them and tell them who you are. They are your friends; they just look funny at night. Whenever a helicopter or plane goes over, look up to it and wave to the pilot. Remember, find a space, show your face.

## **PARENTS' LOST CHILD PREVENTION**

Draw a print of your youngster's favorite shoe or boot or both including the sole pattern and keep it where you can find it. Searchers will be looking for footprints if the youngster gets lost. Try to notice what they are wearing each day and exercise control over their playtime travels and activities. Explain hypothermia to them and impress upon them the necessity of staying warm and dry and of dressing warmly in cold weather. Be sure your child knows you will do everything in your power to find them.

If you have knowledge of a successful search and the volunteer effort behind it tell them about it. It will encourage them, should they ever become lost. Tell them about finding simple shelter near an opening and to look up and wave to aircraft or to go to searchers when they come.

Parents and relatives can assist at the search headquarters with information, knowledge of the area, handling news people, helping with food, and by trusting the search team to do a thorough job.

When you suspect your child is lost, alert the local authorities immediately. You or they can then alert your district warden by calling the proper number listed on the back of this pamphlet. This is all you have to do to start the Search and Rescue (SAR) process in Maine.

Always carry some food when going on a trip whether short or long. Know how to use a compass and carry one. Always carry a police whistle; its sound carries better than your voice and is not tiring to the user. Youngsters should be taught that in this respect whistles are not toys and should only be used in an emergency.

Always tell someone where you're going and when you expect to return. If you change your mind tell someone.

We also point out that youngsters should not worry about parents being angry with them. Parents are always happy to have their children safe and sound.

Dress warmly and pay attention to weather and weather forecasts and don't hesitate to call off your trip because of bad weather. If a lightning storm develops and shelter is not nearby, never sit under large trees. Brush piles and thick woods are better.

Always remember to wear something bright that cannot be easily lost or dropped, such as a vest, shirt, or coat. Blaze orange is best. Wave something—a garment, branch, your arms, or hat—when the aircraft comes over you. A small hand mirror can be used to flash at the aircraft.



## NOTES

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## SPORTSMAN'S CODE

A few thousand years ago when a man took his weapon and went out looking for game, it was no one else's business how he did it. This is no longer the case. The hunter is no longer a savage. The privilege of hunting carries with it serious responsibilities a sportsman will not ignore. We urge you to subscribe to this SPORTSMAN'S CODE.

1. **Obey the Game Laws.** They are based on the best information available on game conditions and are designed to assure the continuance of this wonderful sport for years to come – for all of us.
2. **Be Adequately Armed for the Game You Are Hunting.** Hunt only with a mechanically safe firearm of sufficient power for the use intended. Then bear in mind the ability of that gun to inflict injury to others and yourself.
3. **Respect the Rights of Property Owners.** All your hunting will probably be done on someone else's land. Put yourself in the landowner's position: wouldn't you like to be asked if it's all right to hunt on your land? A few destructive hunters can spoil this fine privilege for everyone else. Stay clear of farm buildings, farm animals, and children. Lumbermen and woodcutters have a right to be in the woods, too.

4. **Extend Courtesy to Your Fellow Hunters.** You've probably watched a good hunting dog honor another's point. A good hunter should surely be at least as courteous. Give the other fellow plenty of room to work in.
5. **Aim Only for a Clean Kill.** A deer is a beautiful, sensitive animal as well as a wary, intelligent prize. **Never shoot at a deer unless enough of the animal is clearly exposed so that you can hit a vital spot.** A quick shot at a distant flash of a deer's tail will probably result in either a miss or a wounded deer wandering off to die a slow, wasted, agonizing death. Or you may find you've shot another hunter. Don't have **either** on your conscience.
6. **Never forget – Guns Don't Kill by Themselves. Always Remember – Practice Hunter Safety.**



## **RECREATIONAL SAFETY DIVISION**

### **OFFICE**

8 Federal St., Augusta ..... 287-5220

### **LANDOWNER RELATIONS COORDINATOR**

..... 287-8091

### **OPERATION GAME THIEF**

..... 1-800-ALERT US

..... (1-800-253-7887)

US Cellular & Maine Wireless #GW

Unicel #GW

**BE SAFE, BE SMART, BE ETHICAL**

### **DEPARTMENT INFORMATION CENTER**

287 State Street, Augusta ..... 287-8000

**POST THESE NUMBERS IN YOUR HOME,  
CAMP OR CAMPER**

**STATE POLICE DISPATCHER  
(DAYS/NIGHTS/WEEKENDS)**

Augusta .....	1-800-452-4664
Gray .....	1-800-482-0730
Orono .....	1-800-432-7381
Houlton .....	1-800-924-2261
Skowhegan .....	1-800-452-4664
Thomaston .....	1-800-452-4664

**Warden Service Regional Headquarters (Days)**

Gray .....	207-657-2345
Sidney .....	207-547-5300
Bangor .....	207-941-4440
Greenville .....	207-695-3756
Ashland .....	207-435-3231

**Hunters for the Hungry .....** 1-888-4-DEER-ME



This work is partially financed through Federal Aid in Wildlife restoration Funds under Project W-79-S. We are an equal opportunity employer.

**Hunter Orange Saves Lives**