

Canoe Country Wilderness Canoeing

by Lee Hegstrand

PREFACE

This monograph is presented as a compendium of information taken from the author's many years of canoeing experience, from guide books and the internet. It is intended to serve several audiences: inexperienced youth groups or older individuals who have little or no experience canoeing the "Canoe Country," a term I use in this monograph that includes the Boundary Waters Canoe Area Wilderness, or BWCAW, and Quetico Provincial Park in Ontario, located just north of the BWCAW. A compendium format is not a high literature style and I apologize for this, however this the trade-off for avoiding the fluff added to make other guide literature more entertaining. This is a busy world and for some types of literature the more information conveyed in the least space is best.

Read what follows carefully to learn from the mistakes of others and to insure a more successful trip. You are about to embark on an adventure of such significance that this booklet alone cannot adequately enlighten. Please read one or more of the books suggested in the "Readings Suggestions" section, to better understand what the Canoe Country represents. Enjoy yourself and drink in the beauty of the Canoe Country!

Introduction

A canoe trip into the wilderness can be an enjoyable experience (weather permitting!) if careful planning precedes the trip and proper procedures are observed during the trip. Remember that the wilderness can be unforgiving to the thoughtless. There are four important themes to observe in any canoe trip: a) ecology - observe low impact use; b) safety - a serious injury in the wilderness where medical help is perhaps days away can be devastating, so NEVER take chances in the wilderness; c) clothing and equipment - bring only the essentials that are also simple, practical and durable; and d) personal conduct - exhibit: 1) cheerfulness in adversity, 2) a spirit of cooperation and teamwork, 3) initiative, 4) a work ethic and, 5) a good moral character.

A wilderness canoe trip can sometimes be arduous and uncomfortable: there must be some commitment on your part and not just casual interest, i.e., I am going because my best friend is or because he or she begged me to. During those times when life will be a little tough, do not complain! Much of the misery experienced while portaging in hot, humid, buggy days or trekking all day in wind and rain is mental. A positive, cheerful attitude is essential. All prospective canoeists must be able to swim, should be healthy (make dental and doctor appointments well before trip departure) and preferably be in excellent physical condition. If you are allergic to insect bites or stings, bring medication and let the trip leaders know of your potential risk.

Route Planning

Good route planning is one complement of a successful canoe voyage. Robert Beymer's books (listed below) are useful for trip planning and you should also consult an outfitter. The elements to consider are:

- 1.) Scenery: waterfalls, pictographs, lakes with high cliffs, and vegetation (some areas have been burnt-over or wind-blown in the recent past). Good scenery can help make a trip memorable.
- 2.) Fishing prospects: Some lakes contain trout and others produce only shallow-water fisheries. Despite high use of the Canoe Country and the low productivity of its waters, fishing success is still good because many canoeists do not fish and those that do keep only what they can eat at one meal. If you fish for recreation only, it is recommended that you use hooks without barbs. A word of warning: never depend on catching fish to provide for your meals - weather and luck may foil those plans.
- 3.) Solitude: The easier routes will be more popular. Popular routes will have more congestion on the portages and there will be more competition for campsites and, besides, are you not seeking the wilderness? Some trailheads are much more popular to start from than others are and all are quieter on weekdays. Suggestion: travel in the Canoe Country right after Labor Day, the fishing is better, there are far fewer people, the weather often permits swimming, the bugs are relatively absent and there is a hint of fall colors. Try to pick the least popular trailheads (indicated by entry permit numbers) whenever you travel.
- 4.) Route difficulty: Consider the number of portages, their condition and length and match those routes with your ambition and ability. Routes with long, steep or swampy portages will be less popular and, of course, more difficult to do. Therefore, consult a topographic map to evaluate how hilly the portages are and, sometimes more important, how swampy they are. Routes with many small lakes will have more portages and will take much longer to travel, so allow more time for these routes. Conversely, you will travel faster on routes with large lakes. As a rule about one-fourth of the distance traveled on an average trip will

be on land. Note that routes with large lakes could cause you to become wind-bound. The solutions to this problem: a) try to finish paddling large lakes near their ends so if the next day is stormy you may make a quick exit, or b) early morning paddles are usually less windy than midday travels so paddle large lakes early in the day, or c) paddle large lakes during moonlit nights being mindful that navigation is difficult in this low light.

5.) Time allowed for the trip: Do not attempt being too ambitious with the number of miles you can cover given the time allotted for your trip. In general (depending on the canoeists' strengths and the prevailing wind direction [trips going west to east often are faster]) you can travel roughly three miles per hour on the water and from less than one to as much as three miles per hour on land, depending on: a) whether you take the portages in one trip at a trot or two trips leisurely and b) the length, steepness and water on the portages. You will travel slower on long portages because of the greater need for rests. Thus calculate water miles and land miles on a prospective route to decide if sufficient time is available for that route selection. In general you may roughly calculate a rate of two miles per hour including portages and lunch stop on routes with large lakes with few portages or a little over a mile an hour for routes with many portages. Check with the US Forest Service or an outfitter before leaving for the trailhead to learn of any potential problems you may encounter on your route. Plan for a layover day on any trip to allow for a welcomed rest or for catch-up time for any wind-bound or other problem-plagued days. It is a good idea that the first days be easier to condition the muscles. Another hint: try to fit the longest portages of the trip towards the end of the journey when the food pack is lighter and muscles are better conditioned.

6.) Cost: Of course the cost of a canoe trip into the Canoe Country depends on many variables such as how deluxe you outfit, the length of your trip, whether you go to Canada or paddle in the Boundary Waters, where it is cheaper, or whether you outfit yourself or go through an outfitter. For beginners it is highly recommended that they seek the services of an outfitter. For a list of Canoe Country outfitters go to www.canoe-country.com. As a rough calculator, a five-day trip through an outfitter will be about \$325 per adult at the cheapest rate. Note that outfitters will offer discounts up to 50% for non-profit groups. It is recommended that trip leaders get non-refundable deposits from participants to help lock-in your group list.

Packing

One caveat: while canoes and many packs can hold a large quantity of "stuff", this should not be a reason to pack heavy knowing full well that you must carry it all! While canoeists have an advantage over backpackers in that portages are relatively short, you should still strive to reduce pack weight as much as possible. A good shoulder pack is a No. 3 size Duluth-type (canvas) pack. This style is roomy and well suited for canoe trips. A larger No. 4 Cruiser pack is acceptable for lighter personal packs. Note that this larger pack is too big for smaller youth to carry. Another option would be a waterproof dry pack made for water travel. These packs are very roomy and yet are relatively inexpensive. Internal frame packs are OK but they are expensive.

Do not use external frame packs, as their frames will catch canoe thwarts or gunwales when loading or unloading and they do not fit well in canoes. A day or belt pack for cameras, small personal items, drinking water and that day's lunch is handy. Line all non-waterproof packs with two trash bags that are appropriately sized. Personal packs consist of foam pads, sleeping bags, clothes and personal items all are packed into 11-gallon trash bags or waterproof stuff sacks if using canvas bags.

Rain suits are always packed last in the personal packs and are not packed inside the plastic bag but on top. Pack tight to use dead spaces. Tent, tarp, stove, cooking equipment, etc.

go into the equipment pack with the heaviest items toward the top to ensure that the pack's center of gravity stays near your own. The large water containers you use for cooking are packed last on top of the equipment pack so that they are accessible to fill with water before landing for that day's camp. Pack soft items next to the back of the pack to cushion your back. Adjust the pack's shoulder straps snugly. A party of two should have no more than one personal pack, one equipment pack, a food pack plus (possibly) a day pack. Keep packs and loose items to a minimum to make portaging easier and to reduce the chances you will leave something behind. Pack a few extra 11 and 30 gallon plastic bags to replace those that are damaged on a trip. These extra plastic bags can also be used for trash removal.

Clothing and Personal Items

Clothing

Clothing should be functional, not gaudy or loud (blue seems to attract black flies and mosquitoes) and minimal. Your clothing must stand up to harsh winds, cold rain, voracious insects, and abrasive rocks - and still be comfortable in the sunshine. For a week trip no more than three changes of underwear are necessary - these items can be worn more than one day in a row (this is the wilderness, not civilization you will be in!) and perhaps washed once. Never wash clothes in lakes, you can use your extra plastic trash bags as a wilderness washing machine.*

Mid-season (July & August) wear can be weighted in favor of lightweight clothing i.e., a pair of dark colored, fast-dry type shorts and light-colored T-shirts. Early or late season trips should emphasize warmer items. Mid-season travel always should include a pair of khaki type cotton/polyester blend or nylon long pants. Do not bring blue jeans or other all cotton pants because they dry slowly. Sometimes Canoe Country July days will be no higher than the 60's, rainy and windy, with lows in the 40's so pack a dense weave, light-weight, long sleeved shirt ("chamois skin" type), a medium-weight (polar fleece) jac-shirt, long johns (optional) and a lightweight (nylon) windbreaker for warmth. Perhaps the most important reason to have a lightweight long sleeved shirt is for bug protection. It is best if your pants or shorts have deep pockets or pockets with Velcro or snap closures to avoid losing items. Wear shorts only in very warm weather; the extra skin exposure invites insect attack, sun burn and vegetation damage on portages. Convertible pants with zip-out legs to make shorts are nice. Do not bring pajamas!! It is recommended for youth groups especially that most clothing be duplicated, one set termed a "wet cloth" and the other a "dry cloth." Always keep one set dry.

Rainwear

Breathable rainwear is the best choice but unfortunately its high cost makes non-breathable rainwear a more common choice. If you choose non-breathable rainwear, it should have adequate ventilation to help rid body moisture from inside the garment. Rain pants should have cuff-zippered legs to make them easier to put on and take off. Quality rainwear is important. Do not use plastic rainwear. Avoid using ponchos because they restrict walking.

* Fill double-bagged plastic 30 gallon trash bags with an appropriate amount of clothes and water, add a small amount of biodegradable soap and shake the bag to mix. Let stand about a half-hour, then agitate. Wring clothes into the bag and decant at least 150 feet in the woods. Return the clothes for a similar rinsing process.

Footwear

It is difficult to avoid getting wet feet while on the trail, portages are often wet and swampy and embarking and disembarking from the canoe usually requires canoeists to step in the water, water that is often deeper than the top of the boot you are wearing. For any footwear ankle support is extremely important since portages are often slippery, rocky or have roots to trip on. An injured ankle can be a serious affair when you are depended on to be an important "porter" of boats and packs. High top (to provide ankle support) basketball shoes (Hint: cut slits at the bottom for water drainage) is an inexpensive alternative footwear for a canoe trip. Or simply wear hiking boots and endure a wet "slosh" while on the trail. The Chota Boot Company makes a boot for canoe travel called "Quetico Trekkers" which the author recommends. These boots have drain holes and a removable inner sole than can be dried rather quickly. Avoid Teva-type sandals since they provide neither ankle support nor insect protection. Some advocate wearing the Army's Jungle boot, purchased at US Calvary stores (accessed on the internet). These boots were designed for wet ground conditions.

Other Items

In addition to trail shoes, you should also pack a pair of comfortable, lightweight footwear such as low-cut sneakers to wear while in camp to give your trail shoes time to dry out and allow your feet to have the comfort of dry footwear part of the trip. Wear heavy trail socks with a polypropylene blend (they dry faster) to cushion your feet on portages and provide protection against "ankle biters" (stable flies). Wear a hat for sun, bug and tick protection. Cotton bandannas are handy; they provide bug and sun protection around the neck, are great for wiping sweat, they can become a cold compress when dipped in the lake and can be even used as a napkin! Swimsuits should be a fast-dry material. Do not pack a bath or beach towel - a hand towel, or even better, a chamois towel is sufficient. Sunglasses are important, especially if they are polarized to reduce water glare.

Finally, for personal items (see equipment list) pack a small (dentist sample size) tube of toothpaste or go without toothpaste, brushing alone is satisfactory for a week trip. Use biodegradable soaps and 30% DEET content bug repellent in non-aerosol containers. Some of the non-DEET repellents marketed recently are rather satisfactory but require more frequent application. Men should not bring razors; grow a beard! Wear only a waterproof watch, otherwise go without a watch (sun time is fine in the wilderness!). Leave valuables at home (they are unneeded in the woods) and money secured at the trailhead or with your outfitter. Minors should carry proof of citizenship if you will be crossing into Canada. Life vests are required and should be comfortable to encourage use. Avoid bulky, horse-collar type vests. A bottle of Rainex is handy for a whole group to treat eyeglasses in case of rain. Those who wear corrective glasses should always wear eyeglass straps while at least on the trail if not during the entire trip.

Sleeping Equipment

Avoid discount-store type sleeping bags. They are not very warm, are heavy and bulky. A down-filled bag (pound for pound nothing is more compressible or warmer) rated not less than 40 degrees (for summer travel) is best. Down loses its insulating qualities if wet or damp, so it must be kept dry. For youth groups, especially, the latest synthetic-filled bags (Qualiofil or Polarguard) are better alternatives. These insulating fills will dry adequately if they become soaked and will provide acceptable insulation even if damp. One could even consider substituting a blanket bag for mid-season travel. It is recommended that you use a compression stuff sack to pack your sleeping bag and clothes. Do not take air mattresses; they are not durable. The best choice for a sleeping pad (rugged trippers may do without a pad) is a 3/4 length self-inflate type pad ("Therma-Rest" brand) or, as a lesser choice, since it is not waterproof, a similar sized foam pad. Your extra clothes put into a stuff sack will make an adequate pillow or you could use a highly compressible camp (not house) pillow.

Tents

Price is an indicator of the quality of a tent. A good quality tent exhibits the following features: Light-weight, durable, stable in high winds, easy to set up, has no-see-um proof mesh netting on doors and windows, a bathtub type waterproof floor (seam sealed) and shock corded, aluminum (not fiberglass) external poles in no more than two foot long segments (longer ones will not fit in a pack easily), supporting a freestanding-type design. Freestanding tents are a great convenience in the shallow soils of the Canoe Country because they do not have to be completely staked down on calm days. Tents with three or more roof support wands will be more stable in the wind. Ideally the tent size should be rated one person more than the party size to allow for both gear and non-claustrophobic living space on wind-bound days. Always place a ground protector under a tent that is cut somewhat smaller than the floor of the tent or, as some recommend, a large sheet of plastic placed partially up the walls on the inside of the tent. If you are borrowing a tent, be sure to set the tent up and test for leaks and the existence of all essential parts if the owner is uncertain of the tent's condition.

Additional Considerations

Follow the recommendations herein or use the official trip pack list for clothing, personal gear and equipment. Any major substitutions should be cleared with the trip leaders! Personal pack organization would be greatly aided if various sized stuff sacks were used. Try to eliminate any loose items in your pack. All participants must realize that you are responsible if you lose or damage items not owned by you, including rentals. It is a good idea to leave a complete change of clothes back at the trailhead so that you may enjoy the luxury of clean clothes after your hot shower from one of the many outfitters that provide shower facilities for a fee. It is also a good idea to trim your fingernails before trip departure to minimize the chance of tearing your nails. When renting a canoe obtain the lightest craft you can afford.

Food

Food Packing

It is best to let an outfitter plan and pack your food unless you have backpacking experience. Buying and packing food is a very time consuming job and choosing the correct amount of food to bring is a precise task. Dehydrated trail meals are very convenient and over the years their makers have refined the many meal selections to meet the acceptance of the user public. They are somewhat expensive though (about \$3/person for dinners) and most canoeists rely on the many grocery store items which are now available to provide a good menu mix and dehydrate their own foods.

Strive for one-pot type of cooking for convenience. Some canoeists opt for gourmet trail cooking, this fine for a leisurely trip but since this option exists for most of the year, convenience is more important than taste for the week or two you will be on your canoe trip. Package separate food items for a meal in plastic bags (remove store shelf boxes) and finally pack all food items for a meal in one large bag (double bagging helps prevent spills and reduces food odors). Write down all cooking instructions (or cut out the shelf box instructions) for each meal and include those instructions inside the large meal bag. Clearly label all food bags. Suggestion: pack the three meals in three separate drawstring bags and label to reduce rummaging time. Pack out all plastic food bags as it is illegal to burn plastic in the Canoe Country. No food cans or bottles are allowed except those containers which are meant to be reused, this is another U.S. Forest Service regulation.

If you are using canvas packs, line the food pack with two 30-gallon trash bags to help keep the contents dry. Some canoeists like to stiffen their canvas food bag with a wicker basket or a well-lacquered heavy cardboard box to help keep the food protected and organized. Always plan for several quick meals, for convenience, in rainy weather. Pack food for one extra day, just in case. Consider 3000 to 4000 calories per person per day when planning menus.

High-energy rib-sticker foods such as those high in carbohydrates (pastas and rice) and fats are good choices. Note that food planning is important, if too much food is allotted for each meal you could find yourselves packing out heavy amounts of wet, moldy, left-over food by the end of the trip since you should not deposit unused food at the campsite or in the water. If you are fishing for some of your meals remember to pack cooking oil and other fish preparation ingredients.

Food Preparation Ideas

Plan to take a generous amount of trail mixes (i.e., gorp) and candies along for snacking and to tide you through the unforeseen. Textured vegetable protein mixed with a beef soup base makes an inexpensive meat substitute. Pancake syrup: 2 to 1 mixes of brown sugar and hot water with mapeline added.

Margarine will keep a week if the weather isn't too hot. Apply soap to the outside of pots if cooking over a fire to make cleaning easier or put pots in their own pack bag without bothering to clean their outsides. For a white gas stove, bring one quart of fuel per person per week when cooking exclusively with a stove. For other cooking and recipe ideas consult Patricia J. Bell's book, *Roughing it Elegantly* or the National Outdoor Leadership School's, "NOLS Cookery," publication. Lunches may consist of cheeses and hard sausages (wrapped inside pita/flat bread or between crackers), beef jerky, dried fruits or trail mixes, candy bars (no chocolate in warm weather) or brownies plus powdered fruit drinks.

Getting There

Paddling Techniques

Bow paddlers can be a great help in guiding the craft by using a sweep stroke, draw stroke, bow rudder and cross bow rudder, or a back stroke. Be sure the stern person agrees with your stroke selection, implicitly or explicitly, before commencing. Teamwork is important! Strokes should be in unison to keep the boat from rocking. Use a full, smooth, not jerky, stroke. When traveling a lake in high winds (to be avoided if possible) the bow person should always continue stroking to maintain forward momentum to prevent the canoe from turning sideways to the waves and swamping. In a head wind "feather"* your paddle to reduce wind resistance. The bow paddler usually decides when to switch sides when tiring. Keep in mind that frequent switching adds water inside the boat, wastes energy and slightly retards the progress of the craft. Always bring a spare paddle if one breaks.

*The paddle blade is rotated and brought back parallel to the water at the end of the stroke and then re-rotated to begin a new stroke. This will greatly reduce wind-drag on the paddle, reduce the paddlers efforts and reduce any retardation on the canoe's progress.

Paddling Precautions and Tips

If there is a threat of lightning avoid the middle of lakes, move directly to the shoreline, within 30 feet, the so-called "shadow of protection" area afforded by shore trees, and land as soon as a suitable landing site is found. Avoid standing near large trees that might attract lightning. On very large lakes hug the shoreline relatively more than with smaller

lakes so you may more quickly seek safety in the event of a sudden storm. Do not attempt to run a rapids if there is a portage indicated on the map (there is a reason for that portage). Be careful when approaching waterfalls, land well before a waterfall since the river current accelerates rapidly as you approach the lip of falls. Always land well below a falls to avoid any recirculating hydraulics that could pull you into the waterfall. Remember to relax and roll with the canoe's motion, especially on a windy lake. A stiff posture will make the canoe more tippy or lively.

On very windy lakes, it is best that the stern paddler paddle on the leeward side of the boat when heading into winds or the windward side when following the wind to reduce the need to rudder or make correction strokes. It is a little safer to paddle upwind than downwind. At times the wind may overtake the canoe and additional help in steering the craft from the bow person is necessary. It is prudent in high wind to have the bow and stern paddlers move toward the center of the craft and kneel to help the rise and fall of the bow and stern and to lower the occupants' center of gravity. One trick on windy days is to "hop" between peninsulas and islands to take advantage of their sheltered shores even if this route is not the shortest. In these conditions it is frequently the fastest or only way to make forward progress.

Canoe Rescue

If the canoe capsizes, stay with it (it floats!) and capture any floating items. Either stay in the swamped canoe and paddle it to shore or swim along side the craft and push it in. When you are able to touch bottom turn the canoe over and lift it out of the water. Exception: in icy water when help is not imminent, leave the canoe and swim to shore, if the shore is nearby (death can occur in 15 minutes in 32 degree water). If the craft turtles too far from shore to make the occupants self rescue impractical then transfer the packs and paddles into a rescue canoe(s) and perform a canoe-to-canoe lift. The submerged canoe is turned "belly side up" and perpendicular to the rescue canoe, bow first. While a second rescue canoe (if there is one) hand attaches gunwale-to-gunwale (the gunwale is the top edge of the canoe) with the first rescue canoe for more stability, one former occupant, already in the water, pushes down on the submerged craft's stern as one strong person in the rescue craft lifts its bow and drags the waterlogged craft over the top of the two (preferably) locked together rescue canoes. After the water has drained from the rescued craft flip it and return it to the water. Again lock gunwale-to-gunwale with it and the rescue canoe. Assist the dunked paddlers reoccupation. Because such mishaps can occur at any time always wear your life jacket while on the water and strap the packs in. Note that turtled canoes are extremely rare if you keep your weight low and in the center of the canoe and avoid high winds.

Navigation

Canoe voyaging is a lesson in proper navigation and part of the satisfaction of the trip is meeting this challenge successfully without wasting time and energy searching for your destination. So, to avoid terrible frustration, it is very important to know where you are always on the water or in the woods. Use your map, common sense, compass and observe! If you get lost on land or water, stop! Do not panic, instead relax and think. Chances are that you will determine your error. Remember to always carry a compass. Protect your maps against damage. It is wise not to leave the navigation entirely up to the stern person, he or she never has all the answers! It is a good idea to pack duplicate maps in case you lose or damage any. Magnetic declination is too small in the Canoe Country to be important, so true north and magnetic north are essentially the same. As a last resort, for those who find navigation a hopeless task, global positioning devices can help. Maps can be obtained by visiting web site www.mckenziemaps.com. Portages very often begin at a low point on the horizon, often following a creek or river. Look for a worn spot on the shore and note canoe scrapes on underwater rocks. On rivers, portages often begin just before the

inside bend of the stream. On large lakes with many bays and islands be extra careful, follow your map and use compass bearings. It best to "aim off" portages, i.e., get close to land before the portage and then follow the shoreline to its beginning. This is the best method when the portage is not definitely obvious at some distance out in the lake. Be careful: there are many false portages in the Canoe Country; be certain where you are! Also some portages have false splits in them - look for tree blazes and follow the well-worn path.

Portaging

Portage Techniques

One mile equals 320 rods and a city block is about 26 rods (a rod = 16.5 feet, or about the length of a canoe). Here are four methods of portaging (look at the contour lines on the map and consider the portage length to judge which method you prefer):

1.) Single pack, double carry: Carry only one pack the entire distance. Advantages: simple method; avoids frequent lifting of dropped packs. Disadvantages: this method does not allow for load rests as with methods 3 and 4, below, and can be risky as the food pack is left alone for a while as bears can and do ambush these easy sources of food. Assuming that you are carrying three packs per party, the canoe portager carries the remaining third, and to be fair, the lightest pack after the canoe has been portaged. Note: the canoe portager should never wait at the end of a portage to have the packs brought down but instead head back up the trail to help retrieve any packs left along the trail. If all pitch in the work is done quicker. If you are using a Duluth pack, use the tump line (the wide strap attached to the top of the pack) at least part of the portage to relieve the burden on your shoulders. The tump line is placed just above the center of your forehead, centered on your hairline.

2.) Double pack, single carry: The person carrying the canoe also carries the lightest pack. His partner then double packs by stacking the second pack on top of the first pack. Carrying the canoe and packs in one trip is best if the portagers are able since the time and energy savings are substantial. The portage is taken once rather than three times. A single carry also reduces the problem of portage congestion since this method shortens the time spent on the trail. Try to start a portage by double packing at least.

3.) Portage-and-a-half: Carry the heaviest pack about halfway, retrieve the lightest pack and carry to the first pack, pick up the first (heaviest) pack and carry through. Walk to the beginning of the portage again and retrieve the remaining pack. The canoe portager then carries the lightest pack that is lying about portage midpoint, again assuming there are three packs to carry. Advantages: get rest breaks and therefore safer and portagers' idle time is minimized. Disadvantage: sometimes hard to estimate when halfway through the portage and slower than the double pack method.

4.) Leapfrog: Carry the heaviest pack for about five minutes and then go back and retrieve a second pack and carry it five minutes past the first pack and then return to pick up the first pack and repeat. The canoe portager helps with packs left along the trail after the canoe is carried through. Disadvantages: slower than a double pack and energy/time is wasted in frequent lifting of packs. Advantages: good method for long portages when the frequent rests are welcome and there is no need to estimate half the portage distance. This is an acceptable method at the beginning of the trip when the food pack is the heaviest and this pack is also left unattended for a shorter time than with methods one and three above. Remember about the hungry bears?

Whatever portaging method above selected, remember what makes portages uncomfortable is not just the weight on your shoulders but also the time the weight is on your shoulders. Those carrying canoes, single packs or even double-stacked packs might consider a "dogtrot", if the trail is smooth, to reduce portage time. On muddy trails (common!) do not swing wide to avoid the mud, such a maneuver just enlarges the trail and increases the muddy area for others. Three more points: portage congestion is an important problem, especially nearer trail heads so, 1) never eat your lunches at the beginning or end of portages, 2) be ready to immediately commence portaging once you land. Gather and pack away all loose items in the canoe before landing. 3.) Pick up trash left along portages, do your part to keep the Canoe Country beautiful.

Landing the Canoe

Be careful landing a canoe! Many tip-overs occur then. Shallow water landings: it is best to land without bumping into the shoreline to avoid damaging the craft and making noise. The bow person hops out into the water to pull the canoe towards the shoreline. Do not drag the bow upland while the stern person is in the boat or the stern will become tipsy. The stern person should steady the boat with his paddle until the bow person has full control of the boat, with that person's legs straddled over the bow and hands gripping the forward gunwales. Dry foot believers: stern person and passenger may have to "walk the gunwale"* to get around packs and equipment in disembarking. The wet foot method, i.e. stepping into shallow water before the canoe has landed, has the advantage of being less noisy, gentler to the canoe, faster and it is easier to heft the packs out of the "higher" canoe as opposed to its relative height on dry land. Keep your center of gravity low and to the middle of the canoe always when embarking or disembarking. Hands on the gunwales. Be deliberate when entering and leaving a canoe to avoid sudden jerks that could tip the craft. When stepping out avoid stepping on larger rocks as they will be very slippery. When all people are out, gently pull the canoe much further up and unload or, better yet, unload while the boat is in the water. Deep water landings: use a sculling or draw stroke and land parallel to the shore. Bow person out first (carefully!) while the stern person and passenger steadies the boat with their paddles and then the bow person holds the canoe while the other(s) exits. Stow life jackets under the seats or attach them to the thwarts. Be careful with paddles, they could be stepped on and broken if laid on the ground. Stash them upright and well out of the way.

*All "fours" on the canoe's gunwales and slide hands and feet along to a suitable footing point.

Loading the Canoe

While the canoe rests in shallow water and oriented parallel to the shore if possible, the packs are then loaded into the boat. With the stern person carefully steadying the canoe, the bow person (and passenger) enters the boat with the first step on the center line of the canoe and both hands on the gunwales and crouching your body to keep your center of gravity low. After seating, the bow person takes his paddle and steadies the canoe before the passenger and finally the stern person enter. Trim the canoe when loading the packs (allow for the weight of the stern and bow persons): a) on calm days trim even with the heaviest pack in the middle, b) on windy days a one-inch trim slant is sufficient: going with the waves, load bow heavy and going against the waves, stern heavy (remember: weight opposite where the wind hits). Packs are laid flat to lower their center of gravity and this is true especially on windy days. Always secure all packs to the thwarts even on calm days unless you have launched on a pond and a portage is nearby. Either rope the packs in or buckle a pack carrying strap around a thwart. Be sure the packs are centered for a good lateral trim.

Pack Handling

Help your partner load his pack by grabbing Duluth packs by their "ears" (the top sides of the lid) and lifting it. Do not pick up Duluth packs by their lid straps. Portage the heaviest pack first when you are the freshest. Be sure packs are set off to the side on all parts of a portage to avoid interference with foot traffic. Always keep packs away from the water so that they will not end up in the water! Designate accountable people for all packs and loose items before portaging to avoid leaving items on the portage. This is a problem for many canoe trippers.

Handling the Canoe on Portages

Treat your canoe well, even if it is a rental. If it springs a leak you may be in serious trouble. Land the craft softly and avoid dragging the canoe over rocks not only to prevent damaging it but also to reduce noise in the wilderness. Other canoeists nearby may not appreciate the noise and you may prematurely announce your presence to nearby wildlife depriving you of possible viewing pleasure.

"What wilderness should be doing is speaking to our souls and teaching us about being quiet..." --Bill Mason

The one or two person side lift is the most elegant method to get a canoe on one's shoulders. Another way to lift the canoe is the "end roll" where a person not carrying the canoe grabs the canoe at the front thwart and rolls the craft up using the stern plate as a pivot. The canoe portager then steps under the carrying yoke and lifts away. This method is less desirable as the stern plate becomes worn over time. If the canoe portager is also carrying a pack this is an acceptable lift method. At the end of the portage lower the canoe carefully to avoid noise and damaging it. Do not leave a canoe unattended near or in the water to prevent its loss from a gust of wind carrying it out into the lake, or the stream current stealing the craft.

Portage Safety

Perhaps most injuries occur while portaging. Because of the extra weight you carry, missteps often result in painful and sometimes serious injuries. Very often portages begin in wet conditions with slippery and loose rocks to step on. Portages often have exposed roots or rocks to trip or slip on. So, be careful of your foot placement before stepping! Try to step over rocks and roots. Avoid fatigue while portaging, rest as often as you require. Pack carriers should look for places where both carrier and pack can rest simultaneously to avoid dropping the pack and then having to re-lift it. Simply leaning against a tree with the pack on will provide relief and you will avoid re-lifting the pack. Canoe carriers should look for two closely spaced trees forming a "V" to wedge the bow of the canoe in or (rarely) a horizontal branch for a canoe rest. Again, to conserve energy, do not set the canoe down on the ground unless you must! Canoe portagers should be alert in open areas on windy days, the wind could dangerously pinwheel you and your canoe around!

Other Safety Considerations

Never dive into lakes to avoid head or body injuries from submerged rocks. Observe camp safety with saws, hatchets and knives. These implements cause many injuries in the Canoe Country. It is unnecessary to bring an axe with you on your trip, they are dangerous, heavy, and awkward to pack and wood no larger than your wrist is sufficient for a campfire. Be careful when walking on wet, slippery rocks and be careful of sharp rocks when walking barefoot. Rock walls and cliffs are common in the Canoe Country; as tempting as they may be, do not climb them or you may risk serious injury. During midseason trips check for the presence of ticks on your body. Avoid paddling near the drop zone of a cliff face and never throw rocks from the tops of cliffs. Never run on a portage or in camp. Keep your distance from wildlife, especially wildlife with juveniles. Poison ivy is uncommon but present in the

Canoe Country. When the weather is warm drink four or more quarts of fluids to prevent dehydration, though you are surrounded by water in the Canoe Country dehydration is a very common problem there. Use a SPF factor of more than fifteen sunscreen to help prevent sunburns. Carry and know how to use a first aid kit. According to the USFS the most common "ailments" in the Canoe Country are, in order of frequency: blisters, sunburn, ankle sprains, dehydration, burns, hypothermia, constipation, and eye injuries. Take note, forewarned is forearmed. In case of serious injury or illness signal a USFS aircraft for help using three visual signal arrangements such as three large colorful items clearly laid out. Also use a signal mirror and wave a colorful cloth tied to a paddle or pole. If there is a rescue, the rescued likely will be required to pay the expense of evacuation, which can be considerable. Every year people die in the Canoe Country, many of these deaths could have been prevented if the warnings and instructions contained herein were carefully followed.

Camp Life

Site and Location

In high-use areas look for a campsite at least by mid-afternoon or you may be out of luck! Look for clean sites (dirty ones are more buggy and the smells could attract bears), with an adequate landing and are exposed (i.e., points of land) for more bug protection. Small islands, well away from shore, may be less buggy. Note, however, islands provide no bear protection, bears can swim! Campsites off the main travel routes or in back bays are more likely to be available and will be quieter. Tents should be set up in protected areas to avoid wind exposure but away from large trees to reduce the chance of injury from lightning strikes. It is common for lightning to strike a tree, the bolt travel down the tree trunk and then fan out on its extensive root system. Tents pitched beyond this root system are more safely positioned. Observe site topography to avoid pitching the tent in depressions that could fill with water in a heavy rain. Watch for and avoid tenting under widow makers (loose limbs or leaning trees that might fall in a wind). Cutting of boughs for bedding material and tent perimeter trenching is illegal.

Before landing your canoe at your chosen campsite dig out the water containers and fill them well away from shore for that day's campsite use. Doing this chore now saves the time and effort of re-launching the canoe later to accomplish this same purpose. Never take drinking water near shorelines or stream outlets (in the Canoe Country giardia is often called "beaver fever") as giardia often resides in bottom sediments. It is still common practice not to treat most water in the Canoe Country, however filtering or halide treatment of the water is prudent. Halidated water is unpleasant unless "neutralizing" tablets are added.

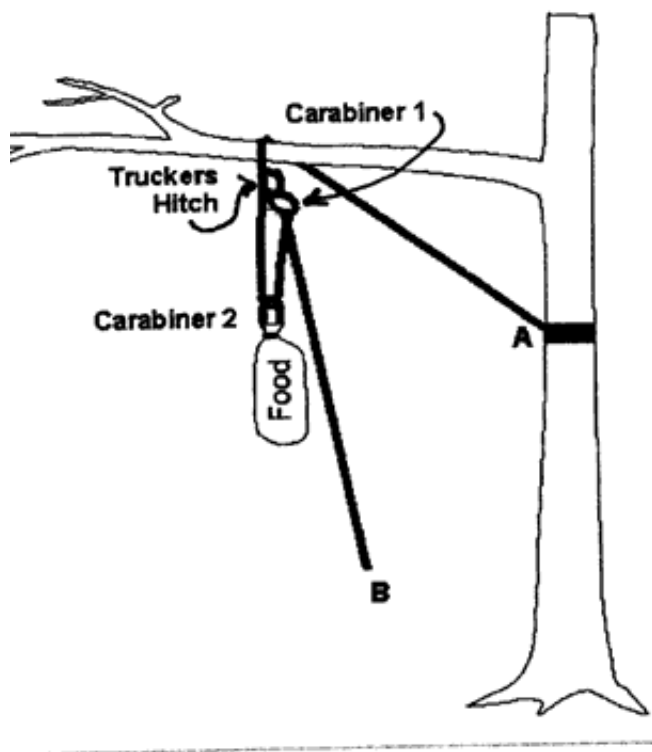
Duties and Conduct

Preparing camp is most efficient when all hands do the work. For large groups daily work assignments should be made before each encampment. You might find using a canoe as a table to lay out food and cooking items handy. Simply place logs or rocks just ahead of the stern plate and just behind the bow plate to steady the canoe. Store paddles away from traffic areas. Assigned persons prepare dinner while the others set up tents and gather firewood (if you must cook with a fire).

Secure the campsite at night and especially carry all canoes well away from the lake and tie them down. Voyagers have lost canoes overnight because of sudden storms (Author's and others' experience). For various reasons the Canoe Country experiences more extremes of weather than most other parts of the country. Shelter all packs from the rain at night by

stashing them under overturned canoes or placing a tarp over them.

You should always haul your food pack up into a tree with the bottom of the pack at least 10 feet off the ground and the top of the pack at least six feet below the branch. Here's an illustration of a simple way to do this. First tie a rock on a fifty foot 3/8 inch nylon rope and throw it over a tree branch that is about twenty feet up. Next tie a loop encompassing carabineer 1, then rope end B is looped through both carabineers. Note that carabineer 2 is attached to the food pack. Next rope end A is pulled to raise carabineer 1 up near the tree branch then rope end A is tied off about six feet up the tree. Finally, haul the pack up to the recommended height with rope end B and then tie it to the same or a nearby tree. A much more convenient solution to bear-proof your food is to use plastic barrel packs that have been recently marketed. Barrel packs do not have to be raised up a tree. Food packs stored on the ground will, without a bear visit, at least invite mice and chipmunk invasion. To prevent bear damage to tents, never bring food into them. If you leave a camp your food pack should be taken with you or suspended in trees, as you would overnight.



Campsite bear intrusions (very rare) can almost always be countered by loud yelling and banging on pots or throwing fist-sized rocks (as a last resort) at the bear. If a bear refuses to leave after all these actions are taken, then you should quickly pack up and leave. This is only prudent, such bear behavior is very unusual and signals a potentially vicious animal.

Try to be quiet in camp and on the water so as not to disturb nearby parties. Noise travels great distances over water. It is not uncommon to observe wildlife from campsites if conversation is reasonably muted. It is one of the wonders of the Canoe Country that it is so removed from the noises of civilization that on windless days the complete silence of the region is striking. Cliff Jacobson found that stranding individual youth at various places for several contemplative hours was a popular event in his guided trips.

If you are building campfires it is good courtesy when you leave to clean out the cold fireplace ashes and scatter them in the woods if the grate is quite full.

Camp Ecology

Campsite impacts from heavy use is a serious concern for the Canoe Country, so please tread lightly. Quetico campsites do not have latrines, so travel at least 150 feet from the water and bury your excrement in eight inch deep "cat holes." Also bury your feminine sanitary products or carefully burn your toilet paper to prevent unsightly backwoods appearances. Bury all fish cleanings to discourage bear campsite intrusions (except fish entrails may be left on shoreline rocks well away from the campsite, if gulls are present). Use biodegradable detergents and soaps sparingly and do not ever wash in the water. Note that even biodegradable soaps pollute. Strain your dishwater and throw this gray water at least 150 feet away from streams or lakes. Pack out all garbage (food scraps and dishwater strainings). As was stated above, it is illegal to burn plastic. Do not dispose food scraps into the latrines or bears may destroy the latrine to retrieve the food and clean up all food

scraps on the ground or a bruin may be attracted to that campsite to the chagrin of the next campers.

Make sure your campfire is dead out before leaving - drown and stir the coals to make sure. Do not peel live birch trees, use a chemical fire starter instead. Keep fires to a minimum (both size and frequency) and instead cook with a stove. In many areas firewood is getting difficult to find. It is better to canoe out and gather firewood at another location rather than near the campsite as most others attempt to do. Fuel should be downed wood rather than sawing dead limbs from trees as such a practice creates an unsightly and unnatural forest appearance. Do not cut green trees or carve into trees.

The author recommends that toothpaste not be used because, when flushed out of the mouth, it leaves an unsightly mess. Bicarbonate of soda is an acceptable alternative to toothpaste or simply brush alone using a new toothbrush. Pick up all foil scraps, twisties and even debris left by others and pack them out. Do not "improve" campsites by building tables or seats. Sit on Crazy Creek type camp chairs or logs and use your overturned canoe or flat rocks as a table. It is illegal to remove moss or pick flowers, instead leave the campsite in its natural condition. Note, however, that it is legal to pick berries in the Canoe Country and many pancake breakfasts have been delightfully supplemented with wild raspberries or blueberries.

A Note on the History of the Region

The Canoe Country is rich in history and, in small part, because of this the area was designated for wilderness canoe travel. Prior to the coming of white men the Sioux and Ojibwa battled over the rich fish and wild rice resources of the region. The French came to exploit the fur resources in the late seventeenth century using the waters now forming the U.S. and Canadian border. During the British era the famous Northwest Fur Company eventually dominated the fur trade of the region with the company's wilderness headquarters located at Grand Portage, Minnesota. Some of these old Northwest fort facilities have been restored as a National Historical Monument and are worth a visit.

A half century after the fur trade era, beginning in the mid-1890's, lumbering interests commenced to log much of the Canoe Country. The interior of the BWCAW still has large areas of virgin forests, however.

Soon after the great saw timber lumbering era ended in the early twentieth century a battle began in the BWCAW to salvage and foster what wilderness character that remained against the growing resort and fly-in business, road building efforts, mining and pulp-wood lumbering interests. Thanks to the efforts of many conservation organizations and individuals who loved this land it was slowly, with great battles forcing begrudging compromises on both sides, given the legislative protections we have today. We must not become complacent however since the struggle continues, with many people living in the area still pushing for more motorized use of the region. This continuing battle is primarily an offshoot of the compromises built into the BWCAW - while it is officially part of the wilderness system as defined by the Wilderness Act of 1964, large portions of the BWCAW are still open to motorized boats, including parts of the Basswood, Lac La Croix and Saganaga Lake and the entire Moose Lake route to the border. Those seeking solitude might want to consider this when planning their trips.

Canoe Country Reservations and Regulations

Both Minnesota and Ontario charge for fishing licenses. No live bait is allowed in Quetico. In the BWCAW canoes must be licensed either in Minnesota or your home state. Both canoe areas require permit fees (Quetico: CN\$12.00, BWCAW: \$12.00) Camping fees in Quetico are CN\$13.00 (\$18.00 for Cache Bay, Prairie Port.) per night for adults and CN \$5 per night

for children. There is no charge in the BWCAW for camping but there is a one-time user fee of \$10 for each adult or \$5 for each child. For those entering Quetico from Prairie Portage, Saganaga Lake or Lac La Croix a Remote Area Border Crossing Permit (RABC) is required (CN\$30) as those border route custom stations are now closed. An RABC is good for one year. Call (807) 624-2162 or visit www.cic.gc.ca at least six weeks before departure to obtain one. Your canoe must be registered (from any state) in order to bring it into the Boundary Waters. All campsites in the BWCAW are designated by fire grates and open latrines and you are not allowed to camp anywhere else.

This is not true for Quetico. Maximum group size in both Quetico and BWCAW is nine. In the BWCAW the maximum number of watercraft per party is four (there is presently no craft limit in Quetico) and these limits apply everywhere: on portages, lakes and campsites. Those who fail to observe these rules can be arrested and fined. All entry points in both Quetico and the BWCAW have daily quotas to disperse usage. Contact the U.S. Forest Service before February 1 by phoning (800)745-3399 or mail-ins accepted beginning December 1 to: BWCAW Reservation Office, P.O. Box 462, Ballston Spa, NY, 12020. Between February 1 and September 30 reservations may be obtained by calling toll free (877) 550-6777 or visit the reservation web site at www.bwca.org. There are no entry point reservations required from October 1 to April 30. Entry point reservations can also be made at any of the outfitters if you at least partially outfit with them.

Reservations to Quetico can be made by calling toll free (888) 668-7275 year around but may be made no earlier than 5 months before your departure date. Thus it is important to ensure that you lock in your desired entry point to Quetico by making reservations exactly 5 months prior to your entry point departure date. General questions for canoeing in Quetico may be addressed at (807) 597-2735. The highest travel demands in the Canoe Country are in July and August so plan to make your reservations especially early during these months.

So, those entering from Minnesota to a Quetico entry point and fish with your own canoe will need: 1.) an RABC, 2.) your canoe licensed, 3.) a self-registered BWCAW day-use permit for that portion you travel in the BWCAW, 4.) a Quetico entry permit and 5.) a Canadian fishing license (a "Conservation License" can be purchased at your Quetico check-in point with at a cost of CN\$23 for 7 days)!

The great July fourth, 1999, wind storm devastated over one-third of the BWCAW. The damage to portages and campsites has been cleaned-up but there is concern about potential fire and dead-fall dangers due to the massive downed timber. Travelers to the affected area should be aware of this and be vigilant of incipient fires. The area of greatest destruction, with nearly all trees blown down, is a four to twelve mile wide swath roughly running from Moose Lake, east of Ely, paralleling the border to Saganaga Lake and the Gunflint Trail. You may contact the U.S. Forest Service at (218) 626-4300 for advice in addition to the information you will get with your entry point confirmation.

The BWCAW has nearly 250,000 visits (about 100,000 of which are overnight trippers) and the Quetico has another 25,000 visits each season. Note that the BWCAW and Quetico are each about one million acres in size (together they form an area equal to three Rhode Islands) yet the BWCAW has about ten times more usage. There are over 1000 lakes in the BWCAW and about 450 in Quetico. The BWCAW is the largest wilderness area east of the Rockies with the exception of the Everglades. Ten percent of all wilderness treks in the contiguous 48 states occur in the BWCAW; the Canoe Country is being over-loved. Take great care to do your part to preserve this great land! May you be just as inspired with it as were the great writer/philosophers Sigurd Olson and Aldo Leopold!

Reading Suggestions

To enrich your journey consult or read books written by these Canoe Country authors: a) guide books - Robert Beymer, Mark Stensaas, Cliff Jacobson and Michael Furtman, or more importantly, b) historical, ecological or literary sources - Sigurd Olson (the John Muir of the North Country), Florence Jaques, Paul Gruchow, Sam Cook, Justine Kerfoot, Grace Lee Nute, Miron Heinselman, David Backes, R. Newell Searle and J. Arnold Bolz.

Packing lists for one week: (summer travel)

CLOTHING

Items to wear

- shorts or long pants (pack the other).
- T-shirt or item
- hat (water repellent treated)
- heavy polypropylene blend or wool socks
- trail boots of choice
- bandanna (optional).
- Items to pack
- "chamois skin" or a light-weight long sleeve shirt
- three pair heavy polypropylene blend or wool socks
- hooded rain jacket and pants
- lightweight sneakers to wear in camp
- lightweight nylon/spandex swim suit
- two T-shirts and three underwear changes
- lightweight (nylon) shell wind-breaker
- medium-weight wool or synthetic fleece Jac-shirt
- long johns for spring or fall trips (in the summer this is optional)
- Sport bras

EQUIPMENT AND PERSONAL ITEMS

Equipment for each party (all amounts in proportion to party size)

Kitchen equipment

- camp stove(s), fuel - check operation of stove
- plate, cup, fork and spoon for each camper
- spatula
- two large cooking spoons
- two-quart pot plus two smaller nesting pots inside
- 10 inch non-stick fry pan
- coffee pot/ tea kettle (optional). Use instant coffee, wet coffee grounds must be packed out.
- pot lifter
- dish wash items (steel wool, biodegradable soap, dish cloth, "chamois" towel for drying)
- quart-size shaker bottle
- fillet knife

- condiments
- hot pads
- soap bar to coat pots and pans or place soot-covered pots and pans in their own bags. Stove use will avoid this problem.
- paper towels
- measuring cup
- strainer for straining dishwater (a section of rolled-up "butter-fly" netting)
- butane lighter
- wire whisk

General equipment

- tent (extra stakes) - check for leaks
- ground cloth
- nylon tarp (used as a sail and for rain protection in camp) with set-up ropes attached. Use at least an 8x10 foot size.
- sleeping bag
- self-inflating (or foam) sleeping pad
- repair kit (duct tape, nylon strapping tape, liquid aluminum if using aluminum canoes, clothes mending kit & spare buttons, super glue, eye glass repair items, multi-purpose tool such as a Leatherman, and a pad patch kit)
- 50 to 100 feet nylon 3/8 inch bear rope, light-weight cording and string
- folding saw
- first aid kit (mole skin, antibiotic, anti-diarrhea, small scissors, elastic bandage, pain relievers included)
- trowel (Quetico only, for digging latrine)
- toilet paper (double bagged)
- fire grate stored in a bag (only for Quetico cooking, BWCAW campsites have fireplaces with grates)
- large sponge or plastic milk jug with the bottom cut away for canoe bailing (strapped under a seat)
- water sack or collapsible water bucket
- spare paddle
- life vests
- clothes pins and line
- spare zip-lock plastic bags of various sizes
- water filter and a halide treatment method to purify large amounts of water
- map sets
- day pack for each canoe party (optional)
- bungee cords or straps to fasten fishing rods to gunwale
- "chamois" towel to wipe off wet tents and canoe seats
- alarm clock (optional)
- playing cards, travel cribbage board (optional)
- spare 11 and 30 gal. plastic bags
- rescue/signal items (mirror, whistle, small flare)
- fire starter
- 2 bottles of biodegradable soap, one for dish washing and one for hand/clothes washing
- bow and stern painters (about 25 feet each)
- camp chair such as a Crazy Creek brand (optional)
- wind-proof matches & butane lighter
- sharp hatchet
- camp pillow

Personal items (in pocket, canoe, day pack or personal stuff sack)

Pocket items

- butane lighter
- compass
- one two-ounce bottle bug dope (at least 30% DEET content)
- map of the day
- chap stick
- pocket knife (multi-purpose type is best)
- handkerchief (optional)

Day pack items

- water container
- camera, film & extra batteries (optional) Expensive cameras should be stored in a waterproof bag. However, this is a dilemma, since wildlife appearances are usually sudden and brief - keep the camera as handy as possible.
- fishing gear (optional)
- head net for bad insect times (optional)
- (polarized) sunglasses (security strap highly recommended if you wear corrective glasses)
- sunscreen
- binoculars (optional)
- another two-ounce bottle of insect lotion
- insect after bite
- Stuff sack items (packed inside the large personal pack)
- mini-flashlight/head lamp with spare batteries
- toiletries are kept in a small bag [toothbrush/paste, comb, hand lotion, nail clipper, dental floss, safety pins, hand towel (a "thirsty" cloth, i.e., chamois is best), and biodegradable soap].
- small paperback book (optional but nice for camp-bound days)
- small notebook and pencil for a journal (optional)
- playing cards
- feminine hygiene products

Fishing Items

- Fresh line on reels, lube reels
- Sharpen hooks
- Tackle box
- Filet knife and glove
- Knife sharpener
- Stringer
- Hook extractor/pliers
- Fish batter & cooking oil
- Fish locator & spare batteries
- Superglue and spare rod tips
- Spool of line
- Short handle or folding handle landing net
- Live bait

Other Items and considerations

- Canadian RABC permits
- Ontario and/or Minnesota fishing licenses
- Health and vehicle insurance info
- Itinerary and phone numbers left with someone at home.
- Personal medications
- Personal identification (birth certificates for minors crossing into Canada)
- Spare contact lenses
- Boat license on canoe if supplying own canoe
- Hide key on or near vehicle to avoid carrying a key on the trip
- Do not leave valuables in your vehicle as trailhead break-ins are not uncommon.
- USFS Permit and reservations confirmations
- Get fresh and frozen foods
- Cooler and ice for traveling
- Bag of toiletries, clean clothes, and shoes for return trip
- Travel alarm
- Cable and lock for canoe to secure it when traveling over night



For additional information on BWCA & Quetico canoe camping visit:

<http://www.quietjourney.com>

Everyone who paddles Canoe Country year after year is always looking for, and constantly discovering, better ways to do things. This is an excellent place to start but please remember that conditions, rules, acceptable practices and even ethics tend to change over time. In the true spirit of QuietJourney, this is offered to you as a reference, a place to start. Everyone does things a little differently and there is no definitive right or wrong way to do anything, especially when speaking in broad terms to an unknown audience.

Enjoy your journey!

~db - QuietJourney.com