



THE WOODEN CANOE BUILDERS GUILD PRESENTS

A BUYER'S GUIDE TO CEDAR CANVAS CANOES



Travel a thousand miles by train and you are a brute; pedal five hundred on a bicycle and you remain basically a bourgeois; paddle a hundred in a canoe and you are already a child of nature. -Pierre Elliott Trudeau

HOW CEDAR CANVAS CANOES ARE MADE

Cedar canvas canoes have a long romantic history in Canada and the North Eastern United States. They have been built by small independent shops in these areas for over 125 years. Many people think of them as 'old fashioned' canoes and are surprised to learn that they are still being made today. In fact, the method of manufacture has changed little in the past 125 years, ensuring the same high aesthetic qualities and superior handling characteristics of the classic canvas covered canoes.

Before a cedar canvas canoe can be made, a form has to be built. This is an exact replica of the shape of the canoe to be produced and the canoes are actually built over this solid form. Building the form is an exacting and lengthy process that can easily run to two or three hundred hours. However, once the form is made a large

number of canoes with the same shape may be built on it, one at a time.

To build a new canoe, the inwales of the canoe to be, and the stems are secured to the form. Next the cedar ribs are steamed and bent, one at a time, over the form and nailed at their ends to the inwales. This forms the skeletal shape of the canoe. Next the ribs are covered over neatly with red or white cedar planking. Each plank is secured to the underlying ribs with 3 or 4 brass tacks at each spot where it crosses over a rib. Metal bands on the form help to clinch each tack into the surface of the ribs making a secure bond between rib and planking. In a typical 16' canoe about 2,000 of these hand clinched brass tacks hold the canoe together.

The canoe is then removed from the form. The ends of the canoe are closed up and the sheer planking is completed. The canoe is sanded and cleaned inside and then receives

a minimum of 4 coats of a high quality marine spar varnish. Decks, seats and thwarts are added and the canoe is ready to be canvassed.

The canvas is folded lengthwise to form a trough and then stretched lengthwise until taut. The canoe is slipped into this trough of canvas and the canvas is attached to the canoe near the top of each rib with Monel staples or brass tacks. At the ends of the canoe the canvas is carefully slit and pulled one side at a time around the stem and fastened. The canvas is then 'filled' with a product that fills in the weave of the canvas and makes a smooth solid base for the finishing paint. At this point the outwales may be added and the canoe is then given a minimum of 3 coats of a high quality marine yacht enamel. Finally the canoe ends are finished off with the addition of gleaming strips of polished brass. The time required to make a canoe varies with the size of the vessel and the degree of finish, but can range from about 80 to 200 hours.

CEDAR CANVAS CANOES



Your personal link with our historic past

Your heirloom for future generations

THE CEDAR CANVAS CANOE



NATURE'S GETAWAY VEHICLE

WHAT IS A CEDAR CANVAS CANOE?

This type of canoe is a handmade wooden canoe with white or red cedar planking and white cedar ribs inside. The planking and ribs are held together with hand clinched tacks - over 2,000 in a typical 16' canoe. The exterior of the canoe is covered with canvas or Dacron that has been filled and painted to make an attractive and waterproof skin on the hull.

The naturally buoyant materials, flexible hull and independent skin combine to make a truly unique craft that many avid canoeist consider to be the 'Cadillac' of canoes. A good quality cedar canvas canoe offers high aesthetics, a comfortable quiet ride, a lively responsiveness and subtle handling characteristics that are unmatched by any other type of canoe.

These high quality characteristics coupled with a rugged durability and a long useful life span make a highly prized family heirloom that is often passed on down through the generations. Cedar canvas canoes are easily repaired and restored and canoes that have been in service for 50 years and more are common place. With minimal care and proper storage, a cedar canvas canoe bought today should easily be able to bring the same great performance and pleasure to your grandchildren.

There is one thing I should warn you about before you decide to get serious about canoeing. You must consider the possibility of becoming totally and incurably hooked on it. -Bill Mason

THE WOODEN CANOE BUILDERS GUILD

The Wooden Canoe Builders Guild is an organization of canoe builders who hand craft wooden canoes. We are united in our interest and occupation of quality building and restoration of cedar canvas canoes.

The members of the Guild are owner operators of their businesses with few shops having more than one or two additional employees. Membership in the Guild is voluntary with individual members agreeing to adhere to a set of building standards and a code of ethics. The Guild seeks to promote high standards but since it is an educational and support organization for independent builders it does not directly control, inspect or certify the work of individual members.

OUR MISSION

To preserve the art and craft of wooden canoe building.

To promote high quality workmanship by its members.

To pass on the skills of wooden canoe building through workshops, courses, and apprenticeship programs.

To preserve the heritage and history of wooden canoes through education and the restoration of canoes.

A GLOSSARY OF CEDAR CANVAS CANOE PARTS

ASYMMETRICAL HULL: The bow end of the hull is a different shape than the stern end. This is not common in cedar canvas canoes but is seen in some types of synthetic canoes. See *symmetrical hull*.

BANG STRIP: Metal strips, usually brass, that cover the stems (ends) of the canoe. They protect the underlying seam in the canvas and give the canoe a smart finished appearance. Sometimes called *stem bands*.

BEAM : This is the width of the canoe at its widest point. Generally a canoe with a wide beam will tend to feel fairly stable, while a narrower beam will cause the canoe to feel more tippy.

BOW: The front end of the canoe.

BOW SEAT: The seat in the bow (front end) of the canoe. This seat is further from the end of the canoe than the stern seat is.

BILGE: The curved portion of the hull where the bottom of the hull blends into the side walls. Very flat bottomed canoes have a small sharp bilge. Shallow arched and round bottomed canoes have a fuller rounded bilge which makes them more suitable for solo paddling in the *heeled position*.

CANVAS: The outside of the hull is covered with cotton duck canvas. It comes in a range of weights with No. 8 being the heaviest and No. 14 being the lightest. It is filled and painted to make the canoe waterproof.

A standard weight canoe is usually covered with No. 10 canvas.

CARRYING YOKE: Specialized sculptured center thwarts that come in a variety of shapes and designs. They are intended to make it more comfortable to carry the canoe over head when it is being portaged by one person.

CECONITE: A brand name for Dacron. This material is sometimes used instead of canvas to cover a canoe. see *Dacron*.

CENTER THWART: A structure that goes across the open side of the canoe from gunwale to gunwale, generally at the middle of the canoe. Not all canoes have the thwart in the center of the canoe but all canvas cedar canoes have at least one thwart. The majority of canoes will have a second thwart between the center thwart and the stern seat. The thwarts help to maintain the shape of the hull and provide structural support to the canoe.

COTTAGE CANOE: This is a general term referring to any canoe designed for relatively light loads, or short day trips, like fishing from a cottage or base. It would not have the volume, freeboard, or capacity necessary for safely undertaking extended tripping.

CRUISING CANOE: A canoe designed for covering extended distances with maximum paddling efficiency. See *touring canoe*.

DACRON: Dacron is a synthetic polyester material that may be used in place of canvas to cover canoes. It is rot resistant and lighter in weight than canvas. Ceconite is a brand name of Dacron.

DECKS: The triangular shaped pieces of wood that hold the ends of the inwales together on either end of the canoe.

DECK RING: Brass rings inserted into the decks that serve as a place to attach a rope. Not all canoes have deck rings.

DECK THWARTS OR HANDLES: Small thwarts or handles that are at either end of the canoe just in front of the decks. They are used as a handle to move the canoe around on land and as the preferred spot to tie ropes to when car topping the canoe. Not all canoes have deck thwarts.

DRAFT: The vertical distance from the bottom of the canoe to its waterline. This would be the depth of water needed to float the canoe.

FILLER: A product that is rubbed into the canvas or Dacron by hand to fill the weave of the material and to act as a smooth hard base for the exterior paint.

FINE ENTRY: A canoe with a fine entry has a relatively fine, narrow, and low volume leading edge. These canoes tend to cut through the water more easily than canoes with a blunt entry. They are preferable for a touring, cruising or tripping canoe but are less desirable on a white water canoe.

FREEBOARD: The distance between the gunwales and surface of the water at mid ships. All canoes should have at least 6" of freeboard when loaded. Typically a large volume tripping canoe will have much more freeboard than a shallower cottage or day tripping canoe.

FLAT SAWN: Wood that is cut so that the grain makes the familiar 'V' shaped patterns seen on most pieces of wood. Ribs and planking may be flat sawn. Also called plain sawn.

FLOORBOARDS: Wooden slats that go in the bottom of a canoe to protect the surface of the ribs and planking. They also help to distribute weight in a loaded canoe. Not all canoes have floorboards.

FORM: A solid replica of the canoe to be made. The actual canoe is built on the form and then removed. The form can be called a mold. See the section entitled '*How Cedar Canvas Canoes are Made*'.

GARBOARDS: The 2 planks running along the bottom of the canoe on either side of the center line.

GUNWALES or GUNNELS: The 4 pieces of wood that run full length along the inside (**INWALE**) and the outside (**OUTWALE**) of the top edge of the hull.

HALF RIBS: Partial ribs that only extend to the *bilge* of the canoe and do not go up to the inwale. They lie between the regular full ribs. They serve to add increased stiffness and strength to the bottom of the canoe hull. Not all canoes have half ribs.

HEELED OVER: A paddling term that refers to sitting in the bottom of the hull at midships and tipping or 'heeling' the hull so that only one side of the canoe is in the water. The canoe is tipped up so that it is floating on its' bilge. Solo paddlers do this to attain maximum control and maneuverability of the canoe. Many cedar canvas canoes perform very well in the heeled over position which makes them very popular with competent solo canoeists.

HULL: The body or the combined walls and bottom of the canoe that give the canoe its shape. The hull is composed of ribs and planking.

KEEL: A wooden strip that runs length wise down the middle of the bottom of the hull on the outside. A *shoe keel* is a flat wide keel, generally about 2" wide and 3/8" thick. A *standard keel* is generally deeper than it is wide and could measure about an inch deep and 7/8" wide. Not all canoes have a keel.

KEELSON: A keel like strip that runs the full length of the cance on the inside. Most canvas covered cances do not have a keelson but occasionally they are encountered.

KNEELING THWART: A specialized thwart that is usually placed low in the canoe and angled so that a canoeist can lean against it to take the weight off his/her ankles and knees when solo paddling.

is resistant to many more corrosive agents than regular stainless steel. Monel staples are used to attach the canvas and dacron to the canoe.

MOLD: A term for the form upon which cedar canvas canoes are made. See form and the section entitled 'How Cedar Canvas Canoes are made.'

OUTSIDE STEM: Some, but not all canoes, have an additional stem on the outside of the canoe. It is referred to as the outside stem. See stems

PAINTER ROPES: Ropes that are attached to either end of the canoe, preferably to the deck thwarts. They are used to moor the canoe and to secure it when car topping the canoe.

PLAIN SAWN: Same as flat sawn. See flat sawn.

PLANKING: The pieces of white cedar or red cedar, usually about 3 or 4 inches wide, that run lengthwise in the canoe on the backside of the ribs. The ribs and planking together form the structure of the hull.

QUARTER SAWN: Same as radial sawn. See radial sawn below

RADIAL SAWN: Wood that has been specially sawn so that the grain appears as parallel lines rather than the familiar "V" shaped patterns seen on plain sawn wood. Radial sawn wood (same thing as vertical grained or quarter sawn) shrinks less across the width of the board and is stronger than plain sawn lumber. High quality canoes will have a lot of radial wood used in the planking and ribs.

RAILS: Same as gunwales or gunnels. See gunwales.

RAIL CAP: A thin strip of wood that covers the gap between the inwale and outwale on some historical canoes. Rail caps would not normally be found in new canoe construction.

RECURVED STEM: When viewed from the side of the canoe the stem curves in an arc so that the top is pointing back towards the interior of the canoe. Recurved stems are very common on canvas cedar canoes. The degree of recurve can vary from slight to the extreme such that the stem tip is pointing directly into the canoe.

RIBS: Steam bent pieces of white cedar that run across the hull from inwale to inwale to give the hull its 'U' shape. The planking is attached on the back of the ribs and together they form the hull.

ROCKER: The curvature of the bottom of the canoe hull lengthwise from end to end. The more rocker a canoe has the easier it is to make the canoe turn. A completely flat canoe has no rocker and is hard to turn, while too much rocker on the other hand, can make it hard to paddle the canoe in a straight line. Most canoes would fall between these two extremes.

RUB STRIPS: Same thing as outwale, gunnel or gunwale. see gunwale.

SEAT: Most canoes have a bow and a stern seat that paddlers can sit on while paddling. Often smaller canoes will only have one seat and some canoes do not have any seats. See bow seat and stern seat.

SEAT BOLTS: The long brass, silicon bronze, or stainless steel bolts used to attach the seats to the inwales.

SHALLOW ARCHED HULL: One of the cross sectional shapes of a hull at midships. It is a very gentle shallow arched shape midway between a flat bottomed and a round bottomed canoe. This is a very common hull shape in cedar canvas canoes. It offers a good compromise between stability and tracking ability.

MONEL STAPLE: Monel is a very high quality stainless steel alloy that SHEER LINE: The shape of the top edge of the canoe along the gunwales.

SKIN: The exterior canvas or Dacron is sometimes called the skin.

SOLO PADDLING: Paddling with one person in the canoe. Many pedar canvas hulls excel as solo canoes when paddled in a heeled position. See heeled over.

SPONSONS: Solid flotation chambers that run full length on the outside of the hull just under the outwales. They are intended to add additional flotation and stability. They were common on some historical canoes but are not normally used today in new construction.

STEMS: The stem is visible on the inside of each end of the canoe. It is a strip of wood that curves upward and forms the shape of the end of the canoe. The ends of the hull planking are attached to the stems and the brass stem band covers it on the outside. In a less precise context, the ends of the canoe are sometimes referred to as the 'stems'.

STEM BANDS: See bang strip

STERN: The back end of the canoe.

STERN SEAT: This is the seat in the stern (back) of the canoe. This seat is closer to the end of the canoe than the bow seat.

SYMMETRICAL HULL: One end of the canoe hull is the mirror image of the other end. Almost all cedar canvas canoes have symmetrical hulls. See asymmetrical hull.

TANDEM PADDLING: Paddling with one paddler in the bow and one paddler in the stern of the canoe.

TRACKING: The tendency of the canoe to 'track' or go in a straight line. This characteristic is highly dependent on hull shape and is influenced by hull length, width and cross sectional shape. Rocker, keel, stem shape and sheer line can all affect tracking ability as can weather conditions, and the skill of the paddler.

TOURING CANOE: A canoe designed for covering extended distances with maximum paddling efficiency. Perhaps best used for light tripping or short trips. Many builders would use the terms cruising and touring canoe interchangeably.

TRIM: The position of the canoe in the water. A properly trimmed canoe will be level end to end and side to side on the water. In this position it will paddle most easily and efficiently. Trim can be affected or changed by having a load or person too far off to one side or end of the canoe.

TRIPPING CANOE: This is a canoe designed for covering large distances with maximum paddling efficiency but with the necessary volume and free board to carry enough equipment and food for an extended trip. It would have the depth, volume and capacity to handle a load and rough weather and water conditions.

CANVAS COVERED EXTREME CANOES

extremely sleek and beautifully handcrafted! extremely smooth and quiet ride! extremely environmentally friendly! extremely fuel efficient and non polluting! extremely pleasurable to paddle! extremely nice to own!

THE CONSTRUCTION STANDARDS OF THE WCBG

The WCBG is a support and educational organization for builders and it does not directly control, inspect or monitor the products of its members. The Guild promotes high standards and all Guild members voluntarily agree to meet or exceed the following construction standards. The members build a range of canoe models, each one suited to a specific purpose. It is up to the purchaser to determine what type of canoe will best suit his or her needs through reading, trying out canoes, and talking their needs over with the builder.

The following standards are intended to ensure that each canoe will be built in such a way as to be strong, durable and sea worthy, regardless of its intended purpose, its degree of finishing details or its price range.



STANDARDS MET OR EXCEEDED BY GUILD MEMBERS WITH A COMMENT (*) ON THEIR SIGNIFICANCE TO THE CANOE

1. CANOE FORM - The form on which the canoe is built shall be fair and **t**rue so that the resulting canoe hull is symmetrical about the center line, has vertical stems and is not hogged. (lower in the middle than the ends when inverted.)

* This is important since it ensures that the hull will be true and straight without twists or a hogged bottom. A badly twisted hull is very sluggish, responds and handles poorly and is not fun to paddle.

2. INWALES - Inwales shall have cross sectional dimensions of at least 3/4" by 3/4" before shaping.

* These dimensions allow the inwales to maintain hull shape and provide adequate bulk for attaching seats and thwarts.

3. STEMS - Stems shall be notched to engage at least 3 full ribs.

* Stems provide shape and structural integrity to the ends of the canoe. With quality construction, the stem will be notched to accept the rib underneath and will engage at least 3 full ribs. Stems that are so short as to not engage at least 3 full ribs, or stems that are not notched and just lie on top of the ribs, do not provide sufficient structural strength to the end of the canoe.

4. RIBS - All full ribs shall have a minimum thickness of 5/16" - The maximum edge to edge spacing of ribs in the bottom of the hull shall be 2"

* A minimum rib thickness of 5/16" and a maximum rib spacing of 2" ensures adequate bulk to give good hull strength. Thinner ribs are more prone to breaking or deforming with a heavy load or a heavy solo canoeist. Large or heavy people who are going to paddle solo in the middle of the canoe would be best to have a canoe with ribs at least 3/8" thick.

5. FAIRING - The outer surface of all ribs shall be faired before planking and the outer surface of the hull shall be faired before canvassing.

* Fairing the ribs and hull during the building process helps to remove minor bumps and irregularities from the backs of the ribs and the outside of the hull. This helps to produce a smooth curved surface to the hull.

6. PLANKING - Planks shall have a minimum thickness of 5/32"

The space between adjacent runs of planking shall not exceed 1/16".
The separation between butt joints in adjacent rows of planking, below the gore planks, shall be a minimum of four ribs.

- The planking shall be secured with long enough tacks to provide a full strong clinch.

-Depressions in the hull which would show under the canvas shall be avoided and hammer blossoms shall be raised with water prior to hull fairing.

- There shall be a minimum of three tacks at each rib for a $\ 3"$ wide plank and 4 tacks for a 4" wide plank.

* A minimum plank thickness of 5/32" ensures a strong hull. Thinner planking lacks the stiffness to provide the desired hull strength. Use of at least 3 tacks per 3" width of planking ensures that the planking is firmly attached to the ribs. A narrow gap between adjacent rows of planking helps to keep sand and other foreign material from getting between the planking and canvas. Staggering the butt joints between adjacent rows of planking helps to prevent weak spots. Soaking hammer blossoms and filling any small voids in the planking helps to remove irregularities in the hull that would show up after canvassing and detract from the appearance of the canoe.

7. DECKS - Decks shall have a minimum thickness of 3/4".

- Decks shall be fastened to the inwales with at least 3 screws per side. * Decks are subject to a lot of stress as they anchor and hold the ends of the canoe together. A minimum of 3/4" thickness and secure fastening with 6 screws ensures that they won't pull out with normal use.

8. COVERING - Canvas (or Dacron) shall be fastened at each rib along the shear.

- Canvas shall be treated with a preservative which is applied directly to the canvas, at least to the areas under the outwales and keel, or which is contained in the filler.

- A suitable filler shall be applied to the canvas (or Dacron).

- A minimum of 3 coats of paint shall be applied to the filled canvas (or Dacron).

*The use of Monel staples or brass tacks to fasten the covering ensures that these fasteners will not rust. Plain steel fasteners will eventually rust and promote rotting of the wood and canvas that they are fastened into.

Putting at least one fastener at each rib ensures that the canvas is well secured. Preservative is put on the canvas under the keel and the outwale to retard rotting of the canvas in these areas that typically trap moisture.

A filler must be applied to the fabric covering to fill the weave of the material. This waterproofs the fabric and provides a hard solid base for the top coats of paint to adhere to. A minimum of 3 coats of a high quality marine yacht enamel are applied to produce an attractive durable surface.

9. BEDDING COMPOUND - Bedding compound, filler or double sided tape shall be used as a sealant when closing the ends of the canvas.
Bedding compound shall be used as a sealant under stem bands and keels.

* A sealant is used under the canvas seams on the stems of the canoe, under the stem bands and under the keel to prevent leakage in these areas. In all of these areas the canvas is either slit, or has screws going through it so it is necessary to use a good bedding compound to prevent water penetration.

10. FASTENERS - All fasteners shall be made of brass, copper, bronze, silicon bronze, stainless steel or Monel stainless steel.

*Non ferrous (non steel) fasteners will not rust and are utilized in quality water craft. Plain steel fasteners (screws, nails, staples) eventually rust and this leads to rotting of the wood around them.

11. OUTWALES - Outwales shall be fastened to the inwale at least at every 3rd rib.

- The projecting lip of outwales shall be a minimum of 3/16" thick. *Outwales have a rabbet on their back to form a lip that projects over the top edge of the planking and canvas. A minimum depth for this lip ensures that it won't be easily damaged. Fastening the outwales to the inwales at a distance not exceeding every 3rd rib makes a strong, secure job.

12. PAINT - A minimum of 3 coats of a marine paint shall be applied to the filled canvas.

*A good quality canoe will have at least 3 coats of paint to ensure an even coloration, an even surface texture and to give durable protection to the fabric underneath.

13. VARNISH - A minimum of 4 coats of marine spar varnish shall be applied to all exposed wood work (including the decks, seats, thwarts, deck thwarts, planking and gunwales.)

- A minimum of 3 coats of marine spar varnish shall be applied to all hidden surfaces (including the underside of decks, all thwarts, yokes, seats, and the back of the gunwales.)

-the varnish used shall be a marine spar varnish.

*Varnish is the only thing protecting the wood from the harmful effects of UV light and moisture. A minimum of 4 coats on exposed surfaces is required to ensure a good degree of protection from the elements and 3 coats on hidden surfaces helps to keep them from absorbing excess moisture and dirt.

14. THWARTS - Center thwarts and yokes shall be fastened to the inwales by 2 bolts at each end.

*2 bolts at each end of the thwart ensures a tight attachment that won't twist when the canoe is lifted overhead and portaged.

15. SEATS - Joints in seat frames shall be of doweled, mortise and tenon or buscuit construction.

- Joints shall be glued using epoxy or other waterproof glue.

*Seats take a lot of stress and it is important to have well made joints held together with water proof glue. Joints that are simply screwed or nailed together will not be durable over the long term.

16. STEM BANDS - Stem bands shall be installed on every canoe. *Stem bands are strips of metal , usually brass but occasionally copper or aluminum that cover the seam in the canvas on the ends of the canoe. This protects the seam and gives a finished appearance to the canoe.

17. KEELS - The underside of keels shall be painted or varnished prior to installation.

- The keel shall be bedded full length with bedding compound or other sealant.

- Inside the canoe, keel screws must be fitted with cup washers and screws must be spaced no more than 10" apart.

*Completely sealing the keel with paint or varnish helps to keep moisture out of it, thus prolonging its life. The keel is sealed with a bedding compound to ensure a water tight seal around the screws that fasten it to the hull. Cup washers inside the canoe provide a neat finished appearance while ensuring a tight joint and preventing damage to the ribs. A maximum 10" space between screws ensures that the keel is securely fastened to the hull.



you are invited to visit our website at

http://www.wcbguild.com

CONSTRUCTION STANDARDS, THE DEGREE OF FINISH AND PRICE OF GUILD MEMBER BUILT CANOES

Each Guild member builds to his or her own market and while all the canoes are built to at least the specific standards stated above, some will exceed this standard by varying amounts. Some of our builders make canoes that are intended for heavy use by camps and others serve a market that wants a canoe that has the finish and presence of fine furniture. The finishing details in these canoes, such as the types of wood used for decks and trim, and the number of coats of varnish or paint above the stated standards will vary. The more time and effort that is put into the finishing and 'looks' of a canoe, the more it will cost. It is up to the customer to shop around and find a combination of finish and price that best meets his or her needs. A complete list of Guild member builders can be found at http://www.wcbguild.com.



CARE AND MAINTENANCE OF YOUR CEDAR CANVAS CANOE

With a bit of care your cedar canvas canoe will give you many years of canoeing enjoyment. Many of these canoes become treasured family heirlooms and are passed on down through the generations.

- When the canoe is not being used, remove it from the water, let the water drain off the hull and turn it upside down in a dry location off the ground, if possible. If the canoe gets a lot of water inside, drain it and set the canoe open side up in the **shade** to let the water evaporate.

- storage in a sheltered area away from the destructive UV rays of the sun will greatly lengthen the life span of the varnish and paint.

- padding on your roof rack will protect the varnish finish on the gunwales when cartopping the canoe.

- Keeping excess sand out of the interior will help to lengthen the life span of the varnish coat and prevent sand from accumulating between the planking and canvas.

A TIP: Some people who are tripping will put a piece of tarp on the bottom of the canoe to protect it from equipment, and the inevitable mud, sand and water picked up at portages.

- FOR STORAGE BETWEEN USES, the canoe should be put on racks or sawhorse on its' gunwales so that the canoe is well off the ground. A dry sheltered location and good air circulation will allow it to dry out thoroughly and prevent rot from occurring. *This is by far your most important maintenance requirement* for ensuring a long and trouble free life for your canoe.

PAINT AND VARNISH

Your canoe is varnished and painted with the aim of giving it a thorough protective coating inside and out. However, the bottom of the canoe is subject to a lot of abrasion and scraping from sand, rocks and submerged objects. Should your canoe receive deep scratches that go right through the paint coat they should be touched up with a bit of paint to maintain the waterproof barrier of the canvas. As a generality, the paint coat of your canoe should be serviceable for many years before it needs to be repainted. When the time comes to repaint the canoe, it should be sanded down by hand with 180 grit sand paper, cleaned off and then painted with a couple of coats of a marine enamel paint.

The varnish coat inside the canoe protects the cedar from dirt and moisture. If this barrier is broken the cedar will turn dark grey where it comes in contact with moisture. The bottom of the inside of the hull receives a lot of abrasion from feet, dirt, sand and equipment. If the finish is occasionally renewed with a coat of *quality spar varnish* before is gets into bad shape it will keep the interior of the canoe looking like new. If the varnish is allowed to deteriorate to the point where there is bare wood, flaking varnish etc. it is no longer able to do its job and you will end up with grey staining and weathering of the wood inside the canoe.

The wooden outwales on your canoe are also protected with varnish. They are subjected to a lot of abrasion from the paddles and eventually bare spots may develop where the varnish has been worn off. If the outwales are sanded lightly and vanished periodically with spar varnish when bare spots develop it will prevent discoloration and keep them looking like new.

CANOEING SAFETY ISSUES

In most jurisdictions the Coast Guard or other authorities require canoeist to follow certain safety procedures. The Specific requirements may vary from place to place but in general they usually include the following-

- 1. There must be one life jacket or PFD on board for each occupant.
- 2. There must be a 15 metre floating throw line on board.
- 3. The canoe must have a noise making devise on board (most use a whistle).
- 4. Each canoe must have a bailer. (most use a gallon jug with the top cut off)
- 5. After dark the canoe must have a flashlight or other lighting.
- 6. It is illegal to consume alcohol while in the care of a water craft.

The Guild strongly urges all canoeist to *wear* your life jacket or PFD at all times while on the water since a loose life jacket lying in the bottom of the canoe is useless in an emergency. It is also very good practice to carry a spare paddle in the canoe and an excellent idea to have painter ropes on each end of the canoe.

A 16' canoe is designed to carry 2 people and gear. Over loading the canoe with people, equipment or pets so that there is less than 6" of freeboard is **very** risky.

The Guild also stongly encourages people to take canoeing lessons from your State or Provincial canoeing

organizations. This will enhance your canoeing skill, greatly increase your canoeing enjoyment and familiarize you with the capabilities of your canoe. And finally but not least, always be mindful of the effects of weather, wind, temperature, and water conditions on your canoeing activities. Happy canoeing!

You can visit our website at http://www.wcbguild.com

Everyone must believe in something. I believe I'll go canoeing. - Henry David Thoreau