

# **Study Plans Catalogue**

Professional Canoe, Kayak & Small Boat Plans for the Casual Builder

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#### THE ORIGINAL BEAR MOUNTAIN SMALL CRAFT PLANS

#### The Bear Mountain system...

Building exquisite small craft using the Bear Mountain woodstrip/epoxy method is a series of simple steps that will be familiar to you or easy to learn. Our building method is ideal for the casual builder with basic woodworking skills.

Using Bear Mountain Plans and the step-by-step guidance from either of our books, **Canoecraft** or **KayakCraft**, professional results are possible even if this is your first boat project.

To build the hull, thin softwood planks are edge glued over a form constructed according to the full size plan. After planking and sanding, the outside and inside of the hull are covered with fiberglass cloth and epoxy resin. The hull is then trimmed, varnished and the appropriate fittings are installed to complete the boat.

The building technique is very simple and approachable as well as strong and beautiful. While it may not be the fastest or cheapest way to build a small boat, we think that the results can be the most rewarding.

#### Good boats begin with good plans...

The foundation of most successful boat building projects is a good plan. Since it takes the same time and materials to build a poor design as it does to build a good one, choose a plan you have confidence in, serves your needs and pleases your eye.

Our **traditional** designs are taken from historical craft that exhibit good characteristics and have stood the test of time. Traditional canoes that were designed for work and play will suit the eye of the traditionalist and respond to classic paddling techniques.

We are pleased to offer **contemporary** style canoes and kayaks designed by Steve Killing, one of Canada's foremost yacht designers. His designs incorporate many of the lessons he has learned about hull shape from paddling, sailing and rowing. He is also an artist, combining perfect balance of proportion with graceful, functional lines.

Ted Moores and Joan Barrett Peterborough, 2008

#### THE ORIGINAL BEAR MOUNTAIN SMALL CRAFT PLANS

#### Building the boat that's right for you...

We understand the importance of knowing what kind of boat you will be paddling on launch day. Steve Killing developed this unique formula to express stability in measurable terms, and capacity as the optimum load a boat can efficiently carry. This capacity and stability chart will help you choose wisely between our many designs.

Some manufacturers list capacity as the amount of weight that can be loaded into the boat with an unspecified amount of freeboard remaining – information which is of little use in making a safe intelligent decision. Others assume a wide hull is more stable than a narrow one, disregarding the fact that the maximum beam is only one of many factors that affect stability.

For those technical folks, our stability figures are measured at 15 degrees of heel and are related to the height at which the vertical line through the center of buoyancy intersects the hull centre line. For comparison purposes, we have chosen a value of 100 to be midrange, with higher values indicating more stability.

Keep these terms in mind...

**Capacity** – optimum safe load the boat can efficiently carry **Displacement** – weight necessary to sink the boat to the design waterline

Weight to immerse – number of pounds necessary to sink the hull each additional inch past the design waterline

Consider the shape of the hull:

**Traditional hull shapes** are most often symmetrical (the bow is the same as the stern) which permits the boat to be paddled in either direction.

Asymmetrical hull shapes are most often found on modern craft with a finer front end and a slightly larger aft end which increases the over all speed of the boat and makes it easier to paddle.

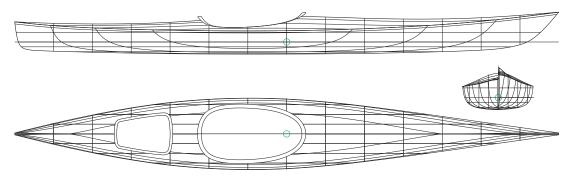
While modern canoes may be more efficient, we would suggest that a more important decision for you is which style you like the look of. Our modern designs all have bows without re-curve and some people love that look while others prefer the traditional look.

Use our chart along with the description accompanying each design to assist you in choosing the plan that is right for you.

#### CAPACITY AND STABILITY CHART

Canoes	Stability Factor	Optimum Capacity	Kayaks	Stability Factor Optimum Capacity	
Marathon 18/6	49	150-250	Venture 14	72*	90-200
Rob Roy Solo 13	71*	110-250	Endeavour 17	100	150-260
J.G. Brown 16	74	280-390	Resolute 16/6	121	130-290
Canadien 16	86	280-390	Reliance 20/8	121	250-500
Hiawatha 15	88	150-390	True North 19/3	124	300-460
Huron Cruiser 15/9	92	180-450			
Champlain 16	92	280-450	<b>Small Boats</b>		
Solo Day Tripper 17	92	150-250	Stoney Lake Skiff	141	180-600
Red Bird 17/6	92	280-510	Ontario Whitehall	168	160-780
Freedom 15/3 & 16/2	95	150-330	Rice Lake Skiff	169	180-600
Cottage Cruising 15/6	97	150-450			
Freedom 17	98	150-510			
Bob's Special 15	100	150-450	requires skill and experience (except the Rob Roy & Venture – see below) requires skill but with experience will be comfortable comfortable for most paddlers very stable and comfortable for all paddlers  * The stability factor for the Rob Roy and the Venture are deceptive. Both boats are designed for single paddlers seated low in the boat so, even though the stability numbers are low both craft are comfortably stable.		
Nomad 17	102	350-680			
Prospector 16	103	350-540			
Freedom 15	104	150-450			
Ranger 15	104	150-450			
Chaa Creek Expedition 19/9	105	430-820			
Freedom 17/9	111	400-680			

### Venture 14' Sport Kayak



This sport kayak is suitable for small adults and children up to a weight of about 140 lbs. The rocker at the aft end has been straightened to aid in straight line paddling - so necessary on a small boat made for cruising. The bow is slightly more vertical than either the Resolute or the Endeavour to be more in scale with its size. The boat has a perky feel with a springier sheer line, compact length and the upright bow. The beam although less than the Endeavour 17 will give an apparent stability equally as good because of the lower centre of gravity of smaller paddlers. With the lowest low speed resistance of all the kayaks it will be a pleasure to paddle in calm bays or open lakes.

#### Specifications

- Length 14'
- Maximum beam 22"
- Beam waterline 20.5"
- Beam gunnel 22"
- Bow height 13"
- Centre depth 12"
- Draft 3.5"
- Displacement 200 lbs.
- Wetted surface 16.7 sq.ft.
- Weight to immerse 74 lb/ in
- Prismatic coefficient 0.557
- Weight 45 to 50 lbs
- Cockpit opening 31" x 16"
- Stability Factor 72
- Optimum capacity 90-200 lbs
- Price \$125

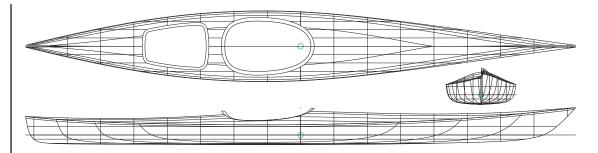
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# Resolute 16'6" Touring Kayak

#### Specifications

- Length 16'6"
- Maximum beam 25.5"
- Beam waterline 24"
- Beam gunnel 25.5"
- Bow height 13.5"
- Centre depth 7"
- Draft 3.5"
- Displacement 260 lbs.
- Wetted surface 22.2 sq. ft.
- Weight to immerse 102 lb/ in.
- Prismatic coefficient 0.569
- Weight 45 to 50 lbs
- Cockpit opening 30.5" x 18"
- Stability Factor 121
- Optimum capacity 130-250 lbs
- Price \$125

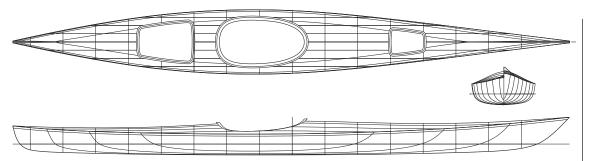
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Developed in response to requests from heavier and wider paddlers who also wanted a shorter boat, this stable load carrier is excellent for the novice kayaker. It will inspire confidence and lead to a continuing enjoyment of the sport. Like the 14 footer, the rocker has been reduced aft to aid in tracking ability. The beam is ample at 25.4" and the cockpit has been widened to match. The hull is a very shallow vee, the flattest of the hulls shown here to permit the width for stability and yet maintain a moderate displacement. A maximum beam of 25.4" compared with the 17 footer at 23.5" is more stable and has good load capacity. Average load is 260 lbs. but it can handle up to 340 lbs. without a problem.

## **Endeavour 17'**

#### **Touring Kayak**



The beauty of this kayak will hit you when you first set up the station molds. It is sleek, graceful and a pleasure to paddle. Perfect for day trips or week long excursions, you will find the boat tracks well, goes fast and behaves itself in waves. Mike O'Brien, senior editor of **WoodenBoat Magazine** had this to say: "the sharply raked stem and well shaped forward sections will provide increasing buoyancy as the Endeavour punches into large waves. The fine run, and nearly vertical sternpost, will help ensure positive control when we are running off in a big sea (one of the scariest elements of sea kayaking). In all, this hull has a friendly and competent look to it."

#### Specifications

- Length 16'11"
- Maximum beam 23.5"
- Beam waterline 22"
- Beam gunnel 23.5"
- Bow height 14"
- Centre depth 7.5"
- Draft 4"
- Displacement 280 lbs.
- Wetted surface 21.8 sq. ft.
- Weight to immerse 97 lb/ in.
- Prismatic coefficient 0.561
- Weight 45 to 50 lbs
- Cockpit opening 31" x 15.5"
- Stability Factor 100
- Optimum capacity 150-260 lbs
- Price \$125

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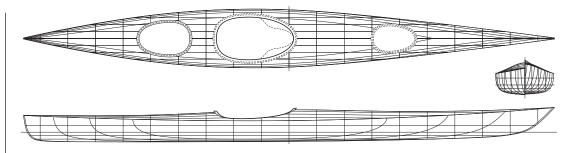
### True North XPD

a high capacity modern solo kayak

#### Specifications

- Length 19'3"
- Maximum beam 25.5"
- Beam waterline 24"
- Beam gunnel 25.5"
- Bow height 15"
- Centre depth from sheer 9"
- Draft 4"
- Displacement 360 lbs.
- Wetted surface 26.8 sq. ft.
- Weight to immerse 120 lbs/ in
- Prismatic coefficient 0.563
- Weight 50-60 lbs
- Cockpit opening 33.5" x 18.5"
- Stability Factor 124
- Optimum capacity 300-460 lbs
- Price \$125

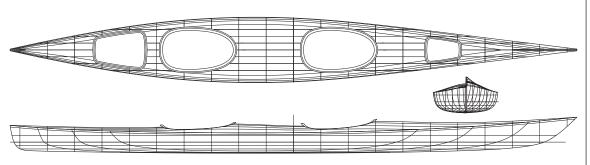
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The True North XPD Expedition brings the thrilling performance and graceful styling of the Endeavour 17 to the big or tall paddler. The True North was inspired by Ron Frenette and friends at Canadian Canoes in Mississauga, Ontario. Ron and his keen group of builders needed a kayak with more capacity for the bigger than average paddler taking extended trips. The generous keyhole cockpit aids in getting in and out while providing effective knee support while paddling. Deck height has been increased by over an inch to accommodate big feet and allow room to move around and stretch during extended periods of paddling.

# Reliance

20'8" Tandem Kayak



This boat has a comfortable feel to it. The length gives an incredibly calm unhurried impression even when the boat is moving at top speed. The beam of 28.5" provides room for cargo and gives a stability that makes kayaking in any weather comfortable. Moderate flare above the waterline will increase the stability as the boat heels. Two water tight compartments with access only by deck hatches provide enough flotation to keep the boat afloat in the event of a capsize.

#### Specifications

- Length 20'8"
- Maximum beam 28.5"
- Beam waterline 27"
- Beam gunnel 28.5"
- Bow height 15'8"
- Centre depth 12.9"
- Draft 4.8"
- Displacement 500 lbs.
- Wetted surface 32.8 sq.ft.
- Weight to immerse 145 lb/ in
- Prismatic coefficient 0.561
- Cockpit opening 31"x 17"
- Weight 50 to 60 lbs.
- Stability Factor 121
- Optimum capacity 250-600 lbs
- Price \$125

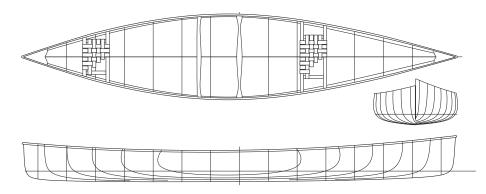
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# Freedom 15 Modern efficient pleasure canoe

#### Specifications

- Length 15'
- Maximum beam 35.25"
- Beam waterline 33.4"
- Beam gunnel 34.3"
- Bow height 19.25"
- Centre depth 13.1"
- Draft 4.46"
- Displacement 400 lbs.
- Wetted surface 28.0 sq.ft.
- Weight to immerse 133 lb/ in
- Prismatic coefficient 0.566
- Weight 45 to 50 lbs.
- Keel-less or shoe keel
- Stability factor 104
- Optimum capacity 150-450 lbs
- Price \$85

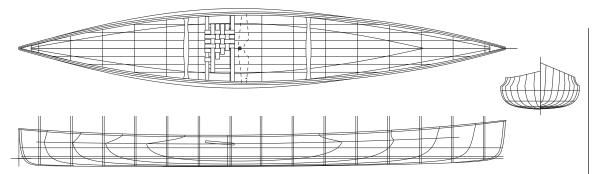
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Like its sisterships, the Freedom 15 features an asymmetrical hull with a fine bow and slightly fuller stern. The mid section has mild tumblehome for comfortable solo paddling and good structural rigidity. A small canoe has an easier time turning corners and needs some design features to aid with straight-line tracking. To this end, the Freedom 15 has less rocker and deeper aft sections for effortless steering. The 35" beam gives it a stability factor of 104 which means it will give confidence to those on board, and yet be a pleasure to paddle. We see it on lakes, rivers, and portages being used for camping, day trips, fishing and just playing around.

## Freedom 15/3 & 16/2

#### Modern efficient pleasure canoe



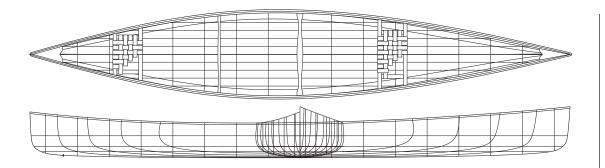
The Freedom Solo is the result of a unique project initiated in the spring of 2006. As an experiment, Steve decided to poll the opinions of paddlers and builders as he designed the boat. Predictably, opinions varied, but did so about a common theme. The boat, they felt should be short, light, medium tracking and therefore medium manoeuvrability, low freeboard, narrow, and offered in two lengths. The unique tumblehome chine was accepted (by most) as a good solution, attractive, and relatively easy to build. The result is a fine solo tripping canoe which will require at least intermediate paddling skills due to its lower-than-average stability.

#### Specifications

- Length 15-3" or 16'-2"
- Maximum beam 30.0"
- Beam waterline 26.5"
- Beam gunnel 26.2"
- Bow height 17.5"
- Centre depth 12"
- Draft 3.0"
- Displacement 220 lbs.
- Wetted surface 22.0 sq.ft.
- Weight to immerse 106 lb/ in
- Prismatic coefficient 0.564
- Weight 45 to 50 lbs
- Stability factor 95
- Optimum capacity 15'3" version 150-290 lbs 16'2" version 180-330 lbs
- Price \$85
- © Designed by Steve Killing Steve Killing Yacht Design Inc.

# Freedom 17

#### Modern efficient tripping canoe



The Freedom 17 features an asymmetrical hull with a slim bow, a maximum beam just aft of the middle and filled out stern sections to reduce the resistance. The gently rockered profile lets the boat turn with ease. Because of the slight tumblehome this canoe is a wonderful solo boat, but most of the time it can be found heading off on canoe trips with two avid canoeists on board. A fast responsive tripping canoe that's also easy to build.

#### Specifications

- Length 17'
- Maximum beam 33.4"
- Beam waterline 31.75"
- Beam gunnel 32.5"
- Bow height 19.25"
- Centre depth 13.25"
- Draft 4.25"
- Displacement 420 lbs.
- Wetted surface 30.15 sq.ft.
- Weight to immerse 143.8 lb/ in
- Prismatic coefficient 0.567
- Weight 45 to 55 lbs
- Stability factor 98
- Optimum capacity 150-510 lbs
- Price \$85

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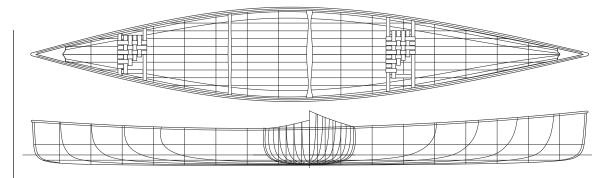
## Freedom 17/9

#### Modern efficient tripping canoe

#### Specifications

- Length 17' 9"
- Maximum beam 35.5"
- Beam waterline 32.5"
- Beam gunnel 35"
- Bow height 21"
- Centre depth 14"
- Draft 4.25"
- Displacement 420 lbs.
- Wetted surface 31.5 sq.ft.
- Weight to immerse 150 lb/ in
- Prismatic coefficient 0.553
- Weight 55 to 60 lbs.
- Stability factor 111
- Optimum capacity 400-680 lbs
- Price \$85

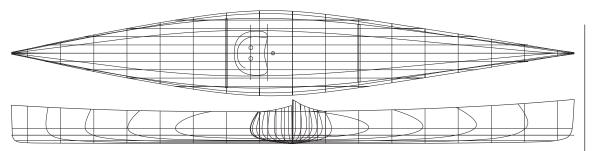
© Designed by Steve Killing Steve Killing Yacht Design Inc.



Steve Killing designed this big Freedom canoe for those who loved the feel of the 17, but simply needed to carry a bigger load. Whether it's more people, bigger people or more packs for an extended wilderness trip, they will fit. The length, beam and freeboard have been increased with only subtle changes to the hull shape. The resulting stability is high. With slightly more rocker than many modern canoes, the Freedom series has gained back the turning ability found in traditional canoe shapes, without sacrificing the speed of the modern hull.

"We haven't forgotten that canoes should look good and this is one of the prettiest canoes you'll find".

## 17' Solo Day-Tripper



For those beautiful days out for lunch on the river or an evening on the lake by yourself, this is the boat. This asymmetrical design (the forward sections are finer than those aft) can be paddled from a tractor style seat while switching sides every eight strokes or from a traditional seat with the boat heeled over. Over two and a half inches of tumblehome either side bring the gunnels in for comfortable paddling.

Designers comments: "The large tumblehome was designed into this boat for ease of paddling, but what it does to the appearance of the boat is dramatic. The narrow gunnel width emphasises the slim lines and the high section curvature near the waterline looks dramatic. And I think you will find this boat paddles even better than it looks."

#### Specifications

- Length 17'
- Maximum beam 30.7"
- Beam waterline 28.5"
- Beam gunnel 25"
- Bow height 16"
- Centre depth 11.25"
- Stern height 14"
- Draft 3"
- Displacement 244 lbs.
- Wetted surface 25.2 sq.ft.
- Weight to immerse 123 lb/ in
- Weight 45 to 55 lbs.
- Stability factor 92
- Optimum capacity 150-250 lbs
- Price \$85

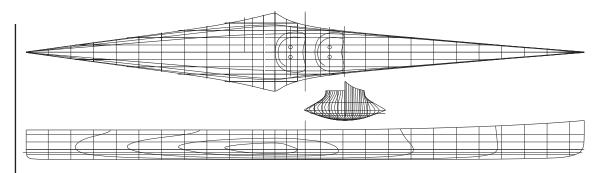
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## 18'6" Marathon

#### Specifications

- Length 18'5.5"
- Maximum beam 32.2"
- Beam waterline 27.7"
- Bow height 15.5"
- Stern height 11.75"
- Centre depth 11.75"
- Draft 3.09"
- Freeboard 12.75"
- Displacement 230 lbs.
- Wetted surface 22.76 sq.ft.
- Weight to immerse 101 lb/ in
- Prismatic coefficient 0.514
- Weight 28+ lbs
- Stability factor 49
- Optimum capacity 150-250 lbs
- Price \$125

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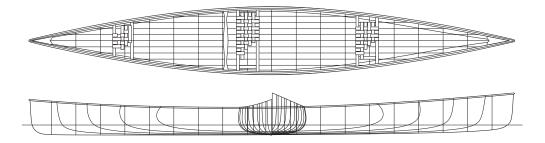


This racing C1 is designed to the marathon racing rules and hence the unusual shape. The wings just aft of the middle of the boat are now commonplace on most C1 designs and are there to meet the beam requirement of the rule. Forward and aft of that point the hull narrows quickly to reduce weight, wetted surface and beam. The narrow beam just forward of the wings provides an ideal location to finish the paddling stroke without having to reach over a wide gunnel.

This construction project is for the advanced builder as the shapes to be planked around the wing are challenging.

## Chaa Creek

#### **Expedition Canoe**



The Chaa Creek Expedition is a high volume, high performance boat first built on the banks of the Macal River in 2000 for use in Ruta Maya Belize River Challenge – a four day race which takes place every March in this central American country. Steve Killing designed this hull to go far and fast while carrying a good load. It has proven to be a good wilderness boat as well as a great family recreational canoe.

The relatively narrow beam makes for an efficient hull shape. It is still very comfortable with a stability factor of 105.

For more information on La Ruta Maya race: www.bearmountainboats.com/ news 03.htm

#### Specifications

- Length 19.9'
- Maximum beam 33.4"
- Beam waterline 32"
- Beam gunnel 31.75"
- Bow height 20.6"
- Centre depth 13.5"
- Draft 5"
- Displacement 580 lbs.
- Wetted surface 37.1 sq.ft.
- Weight to immerse 170 lb/ in
- Prismatic coefficient 0.570
- Weight 60 lbs
- Stability factor 105
- Optimum capacity 430-820 lbs
- Price \$110

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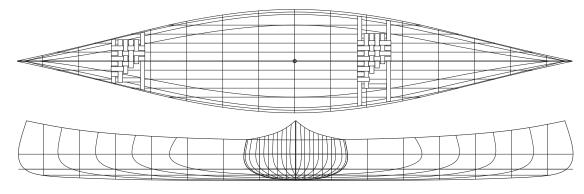
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# 15"6" Cottage Cruising Canoe

#### Specifications

- Length 15' 6"
- Maximum beam 35"
- Beam waterline 31.75"
- Beam gunnel 33"
- Bow height 20"
- Centre depth 13.5"
- Draft 4"
- Displacement 337 lbs.
- Wetted surface 12.8 sq.ft.
- Weight to immerse 58 lb/ in
- Prismatic coefficient 0.553
- Weight 55 to 60 lbs.
- Stability factor 97
- Optimum capacity 150-450 lbs
- Price \$85

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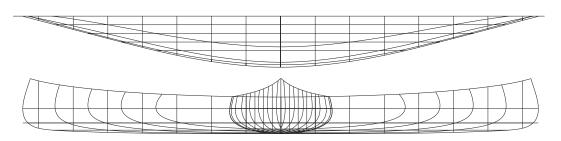


The Canadian Canoe Company just north of Toronto spearheaded this project in 1997. They love traditional boats but wanted a midsize hull that had a little more capacity than the 15 footers. This new design quite obviously borrows some of its heritage from the Prospector series but is graced with a little more tumblehome in the hull sides and less curvature in the sheer. We think it is even better looking that the boats you remember as a kid.

Don't let the cottage reference fool you, this boat is happy playing near the beach, on portages or off on a two week canoe trip. It planks up beautifully and will make you look like a professional.

#### DESIGN BASED ON 15' 'BOB'S SPECIAL' - CHESTNUT CANOE CO.

# 15' Bob's Special Traditional Work & Pleasure Canoe



"The Chestnut 50-lb. Special has been designed to meet a certain demand for an extremely light weight canoe of good carrying capacity and has proved very popular. Owing to its width and flat bottom it is very steady and the ends are low, making it easy to portage through the brush." ...from the 1950 Chestnut Canoe Co. catalogue.

One of their Chestnut's better known models, it is favoured by fishermen and solo trippers. The moderate rocker and soft bilges make this a great canoe for traditional style solo paddling.

In order to adapt to strip planking, some modifications to the original lines have been made. A shoe keel was recommended on the original canoe because of the light weight ribs and planking. Since they are not saying it is for directional stability, we can assume that the keel is optional.

#### Specifications

- Length 15'
- Maximum beam 36"
- Beam waterline 32.5"
- Beam gunnel 34.5"
- Bow height 19"
- Centre depth 12.5"
- Draft 4"
- Displacement 325 lbs.
- Wetted surface 25 sq.ft.
- Weight to immerse 125 lb/ in
- Weight 45 to 55 lbs.
- Stability factor 100
- Optimum capacity 150-450 lbs
- Price \$85

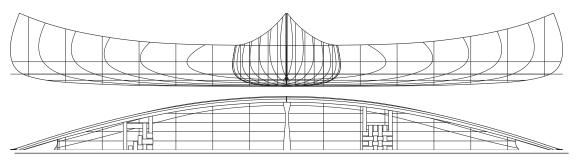
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#### PROSPECTOR TYPE CANOES

### 15' Ranger Traditional Pleasure Canoe

#### Specifications

- Length 15'
- Maximum beam 35.2"
- Beam waterlinel 33.7"
- Beam gunnel 33.5"
- Bow height 22"
- Centre Depth 13.5"
- Draft 4"
- Displacement 375 lbs.
- Wetted surface 26.8 sq.ft.
- Weight to immerse 132 lb/ in
- Prismatic coefficient 0.557
- Keel-less or shoe keel
- Weight 45 to 55 lbs.
- Stability factor 104
- Optimum capacity 150-450 lbs
- Price \$85
- © The Bear Mountain Boat Shop 1993 Lines taken by Ted Moores, 1993 Redrawn by Steve Killing, 1999

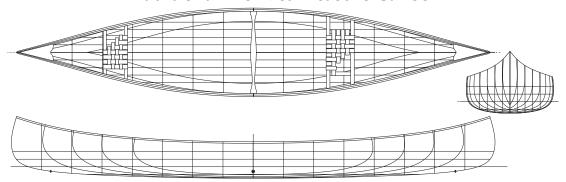


The **Prospector** models built by the Chestnut Canoe Company were made in lengths from 12 to 18 ft. filling a need for a canoe with greater carrying capacity than the Pleasure and Cruiser models but not as large as the Freight canoes.

This model, the 15' 'Ranger' is a sweet shape and Ron Frenette of Canadian Canoes decided we should have it in our catalogue. It has the same end shape and highly rockered hull of our 16' Prospector. With a flattened shallow arch bottom and full ends, the Ranger is stable, strong and a good load carrier. If you are looking for a canoe in the fifteen foot range with some history and good all round paddling characteristics, this might be the one you are looking for.

# 16' Prospector

#### Traditional Work & Pleasure Canoe



The Chestnut Canoe Company built this "workhorse of the North" to meet the specific needs of the prospector - good maneuverability through whitewater and wilderness, with capacity to carry substantial loads. The 16' Prospector features a flattened, shallow arch hull with its fullness carried into the bow and stern, good depth amidships to maintain freeboard and deepened ends to keep paddlers and gear dry. The rockered keel-line makes it very maneuverable in whitewater. This was the favoured canoe of the late Bill Mason, Canada's premier paddler..."it is amazing that such a large-volume tripping canoe can also be so beautiful to paddle solo in the leaned position - canoe ballet, as I call it. It is the ideal all-round canoe."

#### Specifications

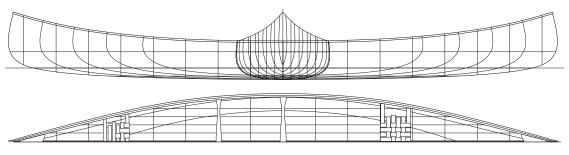
- Length 16'
- Maximum beam 35"
- Beam waterline 33.25"
- Beam gunnel 34.4"
- Bow height 19.25"
- Centre depth 13.25"
- Draft 4.75"
- Displacement 420 lbs.
- Wetted surface 27.2 S.F.
- Weight to immerse 120lb/ in
- Prismatic coefficient 0.510
- Prismatic coefficient 0.510
  Weight 45 to 55 lbs.
- Stability factor 103
- Stability factor 103
- Optimum capacity 350-540 lbs
- Price \$85
- © The Bear Mountain Boat Shop 1993 Lines take by Ted Moores, 1981 Drawn by Ted Moores, 1993 Redrawn by Steve Killing, 1999

# Nomad 17 Prospector Type Traditional Recreational Canoe

#### Specifications

- Length 17'
- Maximum beam 35"
- Beam w/1 32.6"
- Beam gunnel 34"
- Bow height 25"
- Centre Depth 14.5"
- Draft 4.5"
- Displacement 416 lbs.
- Wetted surface 28.6 sq.ft.
- Weight to immerse 169 lb/ in
- Mom to trim 600 in-lb/ in
- Prismatic coefficient 0.532
- Weight 55 to 65 lbs.
- Stability factor 102
- Optimum capacity 350-680lbs
- Price \$85

Designed for Ron Frenette, Canadian Canoes Ltd. by Ted Moores, Feb. 1994 © The Bear Mountain Boat Shop 1995



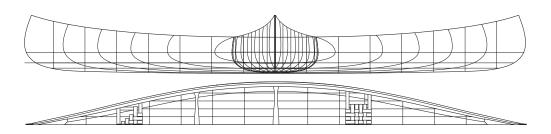
Recognising the popularity of the classic 16' Chestnut Prospector 'Fort', Canadian Canoes commissioned Ted Moores to design a 17' tripping canoe which would be a kindred spirit to the 'Fort'. The mid section and profile are similar to our 16' Prospector but with much of the hollow in the waterlines removed. This uninterupted direction of water flow allows the canoe to move through the water with the least amount of resistance. It adds some fullness (lift) to the hull below the waterline as well as being a very easy shape to plank.

A new wood canvas form was constructed in March of 1994 from the Moores' design and a number of Wilderness Nomad's are now in service. The design is so successful that Ron Frenette decided we should make this craft available using the Bear Mountain wood/ epoxy strip building technique. The Nomad-S is long, sleek, easy to plank and easier to paddle.

#### DESIGN BASED ON 15'9" HURON CRUISER - PETERBOROUGH CANOE CO.

## 15'9" Huron Cruiser

#### **Traditional Pleasure Canoe**



The lines for this canoe were taken from an original 'Huron' built in cedar/ canvas by the Peterborough Canoe Company. It was a second grade model in a series of Cruiser canoes that measured from 16'x33" to 18'x37". "They have good carrying capacity while retaining a light draft, and are an easy paddling craft that can be handled well in rough or swift waters. The gunwale line is straighter in these models and is lowered at bow and stem, thus offering less wind resistance. The rounded bottom shape may reduce carrying capacity but the paddler may expect a quick and responsive craft." ...from the 1929 Peterborough Canoe Co. catalogue.

Two types of optional keels were offered; the shoe keel (1/2" thick x 1 3/4" wide) for added protection or a lake keel (7/8" thick x 3/4" wide tapered to 3/8") for a small increase in directional stability.

#### Specifications

- Length 15'9"
- Maximum beam 32.5"
- Beam waterline 30.25"
- Beam gunnel 31"
- Bow height 22"
- Centre Depth 13.5"
- Draft 4"
- Displacement 335 lbs.
- Wetted surface 25.5 sq.ft.
- Weight to immerse 121 lb/ in.
- Prismatic coefficient 0.543
- Weight 45 to 55 lbs.
- Stability factor 92
- Optimum capacity 280-450 lbs
- Price \$85

© Steve Killing Yacht Design, 1997 Lines taken & drawn by Steve Killing for Ron Frenette, Canadian Canoes Ltd.

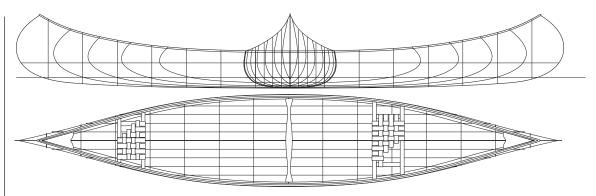
#### DESIGN BASED ON 16' CEDAR/CANVAS CANOE - PETERBOROUGH CANOE CO.

# 16' Champlain Traditional Recreational Canoe

#### **Specifications**

- Length 16'
- Maximum beam 32.5"
- Beam waterline 29.5"
- Beam gunnel 31.5"
- Bow height 26"
- Centre Depth 13.5"
- Draft 4"
- Displacement 325 lbs.
- Wetted surface 24.5 sq.ft.
- Weight to immerse 94 lb/ in
- Prismatic coefficient 0.557
- Keel-less or shoe keel
- Weight 45 to 55 lbs.
- Stability factor 92
- Optimum capacity 280-450 lbs
- Price \$85

© The Bear Mountain Boat Shop 1993 Lines taken by Ted Moores, 1993 Redrawn by Steve Killing, 1999

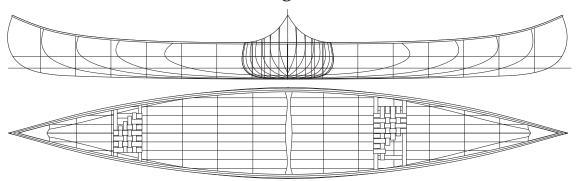


The Champlain High-ender, built by the Peterborough Canoe Company, was one of their most popular designs. Originally built in cedar/ canvas, it appeared in their final catalogue of 1961. The Champlain Low-ender, with less height in the ends, was built on the same mold.

A good traditional style general purpose recreational canoe. Features a moderate displacement, soft bilge and moderate rocker - paddles well in the 'heeled over' position. Ideal for recreational paddling (solo or tandem) and light tripping.

## 16' Canadien

'The Cottager's Canoe'



A 'Peterborough' canoe often referred to any open canoe, but this design comes from the company that made the town's name famous around the world. A direct descendant of the first "planked dugout" created 140 years ago by John Stephenson, it is thought to be the 'Canadien' model built in the original cedar strip technique. Its narrow beam and shallow arch hull make it ideal for general-purpose paddling and light tripping. Keeled, with a slightly rockered keel-line, it is responsive and easy to paddle. This favourite of the lake district has justifiably been dubbed 'the cottager's canoe'.

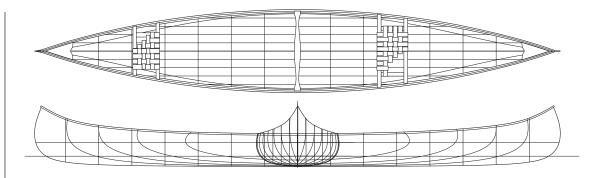
#### Specifications

- Length 16'
- Maximum beam 31.5"
- Beam waterline 30.3"
- Beam gunnel 30"
- Bow height 22"
- Centre depth 12.5"
- Draft 4"
- Displacement 350 lbs.
- Wetted surface 25.2 S.F.
- Weight to immerse 94 lb/ in
- Prismatic coefficient 0.525
- Weight 45 to 55 lbs.
- Stability factor 86
- Optimum capacity 280-390 lbs
- Price \$85
- © The Bear Mountain Boat Shop 1993 Lines take by Ted Moores, 1981 Drawn by Ted Moores, 1993 Redrawn by Steve Killing, 1999

# J.G. Brown 16' Traditional Recreational Canoe

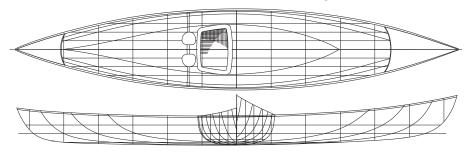
#### Specifications

- Length 16'
- Maximum beam 30.5"
- Beam water/ line 27.5"
- Beam gunnel 29.5"
- Bow height 22"
- Centre depth 12"
- Draft 4"
- Displacement 300 lbs.
- Wetted surface 23.7 sq.ft.
- Weight to immerse 91 lb/ in
- Prismatic coefficient 0.537
- Weight 45 to 50 lbs.
- Stability factor 74
- Optimum capacity 280-390 lbs
- Price \$85
- © The Bear Mountain Boat Shop 1993 Lines take by Ted Moores, 1988 Drawn by Ted Moores, Aug. 1993 Redrawn by Steve Killing 1999



The inspiration for this design was built about 1900 by the J.G. Brown Mfg. Co., Lakefield, Ontario. 'Lorna' has been paddled since 1912 by the Maclennan family on Baptiste Lake. Original lines were taken in 1988 by Ted Moores and refaired by Steve Killing in 1999 with little alteration to the original shape. 'Lorna' is a good example of the highly developed 'Canadian Style' recreational canoe. This design is a fine balance of all the features desirable in a fast traditional recreational canoe. It has some characteristics in common with the Peterborough Canadien - it is narrow, fast and a pleasure to paddle.

# 13' Rob Roy Double Paddle Canoe



Truly the poor mans yacht, the origin of the Rob Roy goes back to England and the mid 1800's. John MacGregor, after seeing our native birch bark canoes and the Eskimo kayak, designed his idea of an efficient cruising canoe, calling it the Rob Roy. Typical of this type of solo canoe were: length 12' to 15', propelled with a double blade paddle from a sitting position and often rigged for sail. Early American canoe builders like J. Henry Rushton & W.P. Stephens were influenced by this style. Until the early 1900's, American recreational canoeing was dominated by the double paddle canoe.

This hull design has been built in many versions, from a simple light weight fast cruising canoe, to a full decked version of bookmatched walnut veneer, with sliding seat, foot rest, floorboards and hand rubbed varnish.

#### Specifications

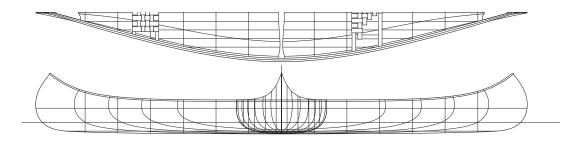
- Length 12' 10.5"
- Maximum beam 27"
- Beam waterline 24.5"
- Beam gunnel 27"
- Bow height 17"
- Centre depth 10.2"
- Draft 4"
- Displacement 210 lbs.
- Wetted surface 16.6 sq.ft.
- Weight to immerse 79 lb/ in
- Prismatic coefficient 0.535
- Weight 25 to 40 lbs.
- Stability factor 71
- Optimum capacity 110-250 lbs
- Price \$85

© The Bear Mountain Boat Shop 1993 Designed by Ted Moores 1992 Redrawn by Steve Killing 1999

## 15' Hiawatha

#### Specifications

- Length 15'
- Maximum beam 33.5"
- Beam waterline 31"
- Beam gunnel 33.5"
- Bow height 21.5"
- Centre depth 12.25"
- Draft 4.25"
- Displacement 320 lbs.
- Wetted surface 24.2 sq.ft.
- Weight to immerse 115 lb/ in
- Prismatic coefficient 0.525
- Weight 40 to 50 lbs.
- Keel-less or shoe keel
- Stability factor 88
- Optimum capacity 150-390 lbs
- Price \$85
- © The Bear Mountain Boat Shop 1993 Designed by Ted Moores 1986 Redrawn by Steve Killing, 1999

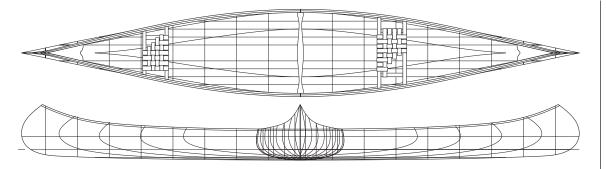


This traditional looking Bear Mountain design has a sheer-line and bow profile reminiscent of the early 'Canadian' style canoe. Below the waterline, the hull is a more up-to-date shape for paddling efficiency. The hull is a shallow arch with a moderately flat keel-line that flows into a shallow vee to become a fine deep vee at the bow for directional stability, speed and maneuverability. The vee is carried as far back as possible, acting as a keel, it contributes to directional stability without sacrificing maneuverability.

The Hiawatha is a general purpose recreational canoe of light displacement, designed in the tradition of contemporary American cruisers, achieving its optimum waterline shape when paddled level, rather than heeled over. A good solo canoe, it is also very fast and responsive with a double blade paddle.

## **Red Bird 17'6"**

#### Fast tripping canoe



This Bear Mountain design is an efficient wilderness canoe that has proven exceptionally seaworthy, even in heavy seas around the Magdalen Islands in the Gulf of St. Lawrence and the North Sea. Its keeless shallow-arch hull with moderate rocker combines with a long waterline and fine entry to make it a fast responsive boat. The bow and stern profile are reminiscent of the Long Nose Ojibwa Rice Harvesting canoe. The sides have a moderate tumblehome for lateral strength and to allow outwales wide enough to turn aside waves and spray.

#### Specifications

- Length 17' 7.5"
- Maximum beam 33.5"
- Beam waterline 31.6"
- Beam gunnel 32.25"
- Bow height 21.25"
- Centre Depth 12"
- Draft 4"
- Displacement 370 lbs.
- Wetted surface 27.0 sq. ft.
- Weight to immerse 128 lb/ in
- Prismatic coefficient 0.496
- Weight 50 to 60 lbs.
- Keel-less or shoe keel
- Stability factor 92
- Optimum capacity 280-510lbs
- Price \$85

© The Bear Mountain Boat Shop 1993 Designed by Ted Moores 1981 Redrawn by Steve Killing, 1999

#### TRADITIONAL SKIFF FOR OAR & OUTBOARD

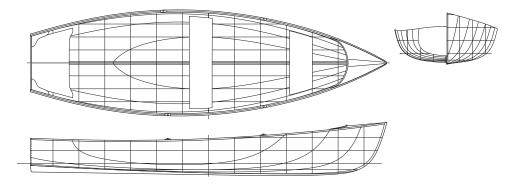
## Rice Lake

#### Traditional outboard skiff

#### Specifications

- Length 13'9"
- Maximum beam 48"
- Beam waterline 38"
- Beam gunnel 48"
- Bow height 19"
- Centre depth 16"
- Draft 4.8"
- Displacement 400 lbs.
- Wetted surface 30.7 sq.ft.
- Weight to immerse 154 lb/ in
- Prismatic coefficient 0.587
- Weight 70-90 lbs.
- Stability Factor 169
- Capacity 180-600 lbs.
- Price \$125

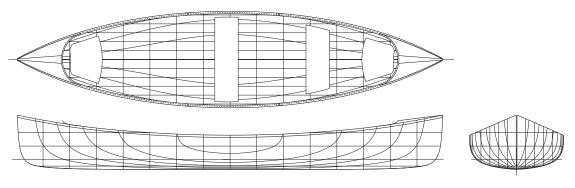
Lines recorded by Ted Moores, 1992 © Drawn by Steve Killing



This sweet little skiff was built by the Rice Lake Boat Works during the transition from muscle power to the outboard. Sure to be a very useful boat at the cottage for fishing, rowing or just knocking about. It is one of the most stable boats we offer and will row well with up to three adults on board or a whole fleet of youngsters. A small outboard or electric motor will efficiently propel the boat for trolling, bird watching or just getting home a little faster. The lines were re-faired by Steve Killing keeping the character of the sheer, body sections and distinctive transom stern. Maximum engine: electric outboard 50lbs thrust or 5 HP gasoline.

#### PETERBOROUGH STYLE ROWING SKIFF

# Stoney Lake Peterborough style double ended rowing skiff



Used by several generations of cottagers for transportation around Stoney Lake, this double ended rowing skiff became known as a regatta winner. Thought to have been built by the Brown Boat Company, Lakefield, Ontario, the style is typical of the elegant cedar strip double ended skiffs built by several Peterborough area builders. Steve Killing has re-faired the hull and added slightly more volume to the ends to make rowing at moderate and high speeds more efficient. With two rowing positions, it is a versatile craft to enjoy alone or with your favourite partner out for a little fishing or an evening of conversation.

#### Specifications

- Length 16'
- Maximum beam 42"
- Beam waterline 36"
- Beam gunnel 42"
- Bow height 20"
- Centre depth 15.5"
- Draft 4.4"
- Displacement 400 lbs.
- Wetted surface 29.8n sq.ft.
- Weight to immerse 143 lbs/ in
- Prismatic coefficient 0.520
- Weight 60-70 lbs.
- Stability factor 141
- Capacity 180-600 lbs.
- Price \$125

© Drawn by Steve Killing Steve Killing Yacht Design Inc.

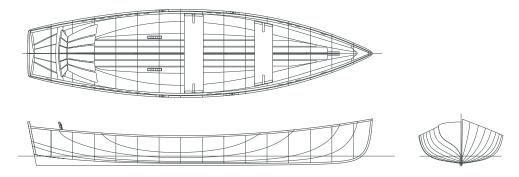
#### TRADITIONAL ROWING SKIFF

### **Ontario Whitehall**

#### A modern version of an East Coast classic

#### Specifications

- Length 15' 11.5 "
- Maximum Beam 47"
- Displacement 400 lbs
- Bow height 20"
- Centre depth 15"
- Wt to immerse 147 lb/ in
- Optimum capacity 160-780 lbs
- Stability factor 168
- Price \$140



The Ontario Whitehall is a modern interpretation of a decidedly classic rowing boat. Whitehalls were originally designed for use as harbour boats in ports on the eastern seaboard. Outfitted for rowing and sailing, they were used to move cargo between warehouses on shore and the trading ships.

The shape has been refined to accommodate the bead and cove planking . The boat may be sailed with the addition of a centreboard and sprit sail. The building notes for this project are presented on line – each purchaser receives a password allowing access to the detailed construction notes on the Canadian Canoes website.

© Drawn by Steve Killing Steve Killing Yacht Design Inc.

#### BEAR MOUNTAIN BUILDING MATERIALS

#### Hatch kits

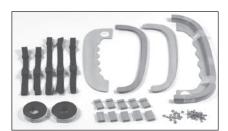
The Bear Mountain hatch cover is easy to install and very effective. It uses a cut out section of the deck with attached rim to make the cover and a lip under the deck for it to sit on. This gives us two surfaces to apply the gasket for the best chance of keeping the water out. By locating the low profile anchor system close to the cover, snug pressure on the straps is sufficient to pull the edges of the cover down and compress the double gaskets.

#### Kayak Hatch Kit

- Okume trim 6 mm Deck cut out pattern
- Straps and buckles Wooden strap anchors & brass pins
- Rubber gasket Bronze screws and cup washers

**Bow Hatch** 18" x 12" Price \$89.

Stern Hatch 22 x 14" Price \$109.



#### **Coaming kits**

Our cockpit coaming kits are an attractive option that will save you time laminating and shaping these components from solid wood or sourcing and shipping sheets of marine plywood.

Keyhole Cockpit Coaming Kit for all Bear Mountain Strip plank curved hull designs

- 5 layers 4 mm Okume plywood spacer
- 6 mm Okume plywood rim, keys

Price \$99.



#### BEAR MOUNTAIN BUILDING MATERIALS

#### Fiberglass cloth

Finding fiberglass cloth in the right quantity, width and weight and in an easy to handle package is nearly impossible. We can help. Our cloth is specially treated to be compatible with epoxy resin and is the ideal reinforcement when a clear finish is important. The cloth is carefully rolled to come off the roll in the order it will be used and packaged to avoid creasing and prevent damage.

- 6 oz x 60" cloth \$10.50/ yd (i.e. kayak interiors & canoe hulls)
- 6 oz x 38" cloth \$7.50/ yd (i.e. outside of kayak hull or hulls wider than 60")
- 4 oz x 50" cloth \$9.80/ yd (i.e. top of kayak deck)

If you are unsure of the correct weight or quantity of cloth please contact us.



#### Epoxy package

Our epoxy package includes premium quality West System® products because we know they are reliable, as safe as possible and will do the best job in the shortest length of time.

# Epoxy & Supplies to build 1 canoe or kayak

- 2 gallons 105 Resin/ 207 Special Coating Hardener for a clear finish
- metering pumps
   Microlite<sup>™</sup> for filling and fairing
- Microfibre<sup>TM</sup> for gluing
- glue brushes squeegees West System® User Manual

Special Package Price \$460.00

**INCLUDES FREE SHIPPING** 

If your group or school is building more than two boats contact us for volume pricing of West System® products.



#### BEAR MOUNTAIN BUILDING MATERIALS

#### Basic Kit for 17' Kayak

Full length western red cedar bead & cove strips 18 ft.

Gunwales full length 4 pieces White Ash

Stems inner and outer 12 pieces 1/4" x 1" x 48"

Sheer clamps 3/4" x 7/8" cedar or mahogany

Guard 1/4" x 7/8" x 17 ft. ash or cherry

King Board 5/16" x 5/8" x 17 ft.

Fiberglass Cloth 12 yards 6 oz x 60" wide

Epoxy Package: 2 B packs Premium West® System epoxy with #207 special coating hardener, fillers, pumps, squeegees, brushes

• kits start at \$1765

#### Basic Kit for 16' Canoe

Full length western red cedar bead & cove strips 17 ft.

Gunwales full length 4 pieces White Ash

Stems inner and outer 12 pieces 1/4" x 3/4" x 48"

Bass Stem Band 3/16" x 3/32" x 48"

2 Canoe Seats (cane filled) includes bolts

1 Thwart ash or cherry

Fiberglass Cloth 12 yards 6 oz x 60" wide

Epoxy Package: 2 B packs Premium West® System epoxy with #207 special coating hardener, 403 & 410 fillers, pumps, squeegees, brushes

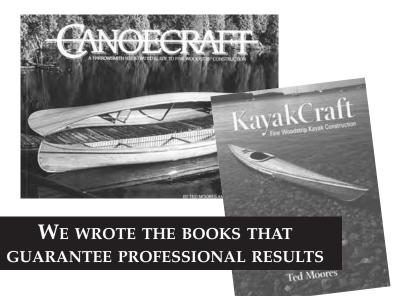
• kits start at \$1754

#### Options Available

- Mahogany and Basswood bead and cove accent planks.
- · Geometric pattern kit.
- Hand woven cane canoe seats.
- Kayak seats, rudders and footbraces.

Pre-cut Full Size Mold Stations - the vertical midline and 4" reference waterline engraved along with the station mold number. Molds are cut from 5/8" thick high density particle board. Due to weight shipping is by transport only.

International customers please note: the sample shipping prices work if you can pick the kit up at your local airport - charges increase dramatically if another delivery company has to be involved. The tube can be transported on the roof of a car or truck with racks...it is strong, rigid, 8 inches in diameter and weighs about 70 lbs.



#### **Canoecraft** by Ted Moores

Canoecraft is the standard textbook on woodstrip epoxy canoe construction. Completely revised and expanded in 2000 and includes 5 new designs and updated information and photographs. Published by Firefly Books.

#### **KayakCraft** by Ted Moores

Building a professional quality, elegant woodstrip kayak is now possible for the casual builder thanks to Ted Moores comprehensive book that gives the 'What', 'How' and 'Whys' in his usual clear language and precise illustrations. Published by Woodenboat Publications.



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