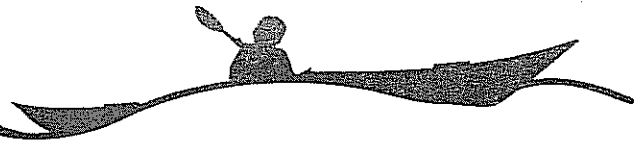


# CONNAYAK



CONNECTICUT SEA KAYAKERS

April 2000

## Greenland Skin Boats

by Jay Babina



Dean Bertoldi

I'll never be allowed into the Royal Society of Greenland Skin Boat Builders. I wasn't into the project more than 2 days and the epoxy came out to scarf pine boards into longer lengths to make the 18 foot gunnels. It's almost impossible to find clear pine over 16 feet long in New England. However, most of the kayak is made with fairly authentic building methods using lashings and pegs (and a little glue).

Last fall Dean Bertoldi and I expressed mutual interest in building a Greenland style skin boat and planned our strategy. It wasn't more than minutes into the early stages of our research that the thoughts of power tools came to mind. A router made cutting the mortises (slots) that hold the ribs a half hour chore for the entire boat. In Mark Rogers classes at Superior Kayak in Wisconsin, the students cut them out using a knife in the traditional methodology. I'm sure there's a spiritual connection with the origins of the craft working that way and a meditative value in doing it, however I like the impeccable job the router does.

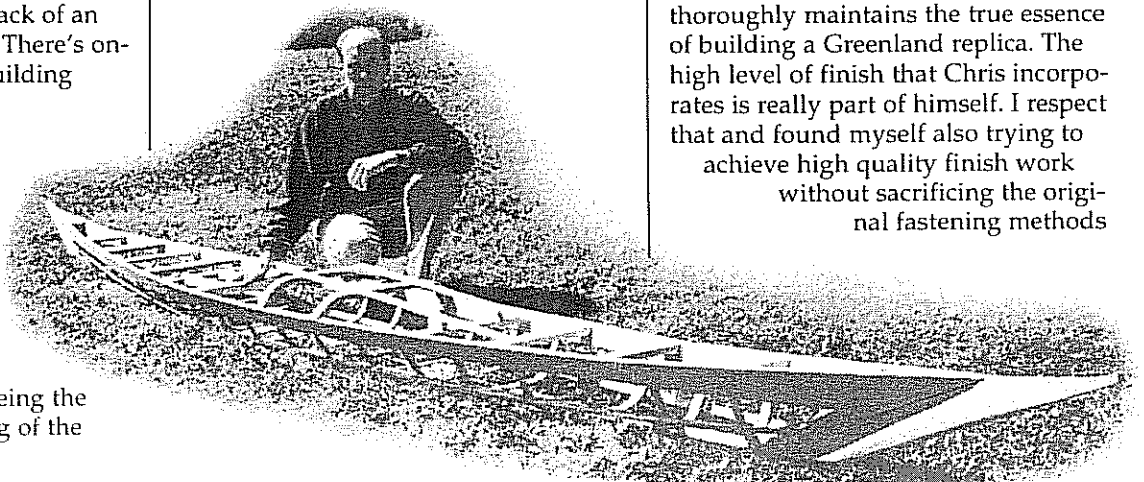
The major frustration that both Dean and I agreed upon was the lack of an instruction manual or book. There's only two pieces of "how to" building reference in existence.

One source is the Bob Boucher Video which captures the entire process of building and skinning a Greenland Kayak. It's an excellent reference and notable effort on Bob's part to bring forth an entire building methodology on film. There's nothing like seeing the rib bending and the skinning of the kayak done in real time.

Chris Cunningham, editor of Sea Kayaker Magazine also broke the ice and wrote a two part article with pictures on building a Greenland Kayak. He's an avid Greenland skin kayak paddler / builder and has built many. His article is from winter '92' and spring '93'. Re-prints of the article are available from Sea Kayaker Magazine. Chris's article incorporates some new ideas of handling old problems, like steam bending ribs - with some ingenious methods. Chris also incorporated angled forms to hold the bend in the boat that's a stable and friendly method that both Dean and I used. Chris is very engineering oriented and has made major contributions with his methods. Other than these two sources, there's some historical reference books with pictures and dimensions but no other actual "how to" building guides.

The Boucher video and Cunningham's article are quite different in methods although I'm sure the Greenlanders had different methods according to regions. In the Boucher video, Bob builds or constructs like a native Greenlander

would. He uses hand-span type of measurements, knives, axes and rough tools, no sandpaper and incorporates a bit of spirituality in his verbal narration. He also makes a complicated project for the first time builder seem quite easy with his step by step reassuring approach. He comes across as friendly and very dedicated to what he's doing. When I spoke with Bob, he told me that he learned from somebody who lived in Denmark that learned from the Greenlanders first handed. He also mentioned that Mark Rogers from Superior Kayak was in his first class. I noticed on bulletin boards and in pictures, Mark Rogers does use the Boucher methods in his classes. Bob Boucher uses a lot of pegs whereas Chris Cunningham uses more lashing especially where the keel and chines attach to the ribs. Bob's boats look authentically crude when they're done which is a beauty in itself. Chris Cunningham's boat although it's authentic in every way, reflects a high level of craftsmanship and finish. From what I make out in the photos, Chris's attention to finish is admirable yet he thoroughly maintains the true essence of building a Greenland replica. The high level of finish that Chris incorporates is really part of himself. I respect that and found myself also trying to achieve high quality finish work without sacrificing the original fastening methods



as both Bob and Chris have done. Of course, both these references are from the early 90's and their outlook and building methodology might have evolved a bit since then.

When I spoke to Chris and discussed some concerns, I remember telling him that I was going to travel somewhere between the two methods and that's exactly where both Dean and I ended up.

Although the video is excellent, the problem is that your always rewinding trying to find something although Bob did included a quick guide with the video. I probably spent about 7 hrs watching the video. Chris's article is excellent although subheads would have helped isolating various building details. This is why we both felt a book with chapters and loads of photos would have been a major asset. If someone writes one, I hope they can incorporate the diversity of building methods between Chris and Bob. Both are highly responsible for promoting Greenland skin kayak building on a world wide basis and I'm glad I had both!

People have asked me, where did you get the plans. Well, there are no plans. You build the Greenland kayak using your body as a guide for the boat's size. Two fists wider than your hips establishes the width. So many arm spans establishes the length etc. Dean and I are avid rollers and have the luxury of owning low volume boats to use as a guide for an approximation or use as a final size. We incorporated a lot of these dimensions into our thinking. Chris Cunningham warned me that getting in and out is a new experience since you have ribs to contend with and not a smooth surface to slide in and out on. We both wanted our boats as low volume as possible. The only failure point for us would be making a kayak too small to get into! Typical of our personalities, I went about a half inch safer than Dean in volume. We both ended up at 20 1/4" wide. Mine is 18" long and Dean's is 17'4". The trade here is: if it sinks too deep, you loose speed: if it sits low in the water, it will roll easily. Dean and I actually made three masiks (the rounded beam in from of the cockpit) and reinstalled two. We kept rejecting each one, trying to tweak it lower and lower and still get our 6'2" bodies into it yet still allowing a tiny bit extra for a dry suit.

Fortunately we're not long distance since Dean and I were on the phone sometimes twice a day comparing findings between the video and the article

and discussing the merits of each. Maybe we're obsessive, but we put a lot of research into it. I also spent a lot of time on the Biadarka Bulletin Board on line where there's even more conflicting information and opinions.

The part of the building process that we most feared was bending the ribs which actually went unbelievably easy. Fortunately there's a saw mill in Branford that has loads of white oak which is perfect for ribs. Ideally, you want green, non-kiln dried lumber that you pre-soak in water for a few days before steaming. We made steam tubes from house leaders (gutters and leaders) and ran steam from a tea kettle into a little hole on one end. In approximately 10 minutes the rib is like hard rubber and you can easily bend it. You have to work fast because it starts stiffening up in seconds as it cools. Both Dean and I only experienced a few re-makes, usually because the wood had a tiny knot or a grain imperfection. It doesn't actually break, it just starts to open up at the back of the bend with splinters pulling away from the wood. I plan on steam bending some ribs at one of our ConnYak meetings as a demonstration.

The cockpit coaming ring is also made from steam bent oak and has a lip made from a small piece of bent oak sewn into it. You make a form that's used to bend it into the desired shape.

Our lashing was all done with artificial sinue. It's fake rawhide that's shaped like flat shoelace and quite thin but unbelievably strong. It's synthetic, so it won't rot and holds a knot really well. I found it on-line from a company that sells historical uniform supplies.

A low volume boat is actually tougher to build than a larger one because the ribs have to be bent more precisely with stronger angles and flatter midsections. In the first few minutes of paddling, we'll know where we could have gone smaller or where we made mistakes in our calculations.

Dean and I actually started totally backward using the inner height behind the cockpit as our starting point. Having a low volume there was a must. Then the rest followed which actually creates a bit of a conflict. Having a boat that's low volume requires a higher deck than usual to compensate for the needed room to get in and out which distorts some of the symmetry. ...And, getting in and out is not easy since the floor of the boat is not smooth but an obstacle course of ribs.

The are such things as rolling boats

used by the Greenlanders. If you see some of the kayaks practically sinking under the water on videos, it's intentional. They're building them just for rolling competitions. (Greenland style choppers!) Chris Cunningham told me that the last one he built for this purpose is 17" wide. (yes, that's seventeen!) He can only get in with socks on. Apparently, that's not uncommon for a dedicated Greenland rolling kayak. There's no easy wet exits so you best have your skills together because you're not easily coming out! You sit in a straight leg position in those boats with your toes pushing up into the skin and heels making an indentation in the bottom. You'll also notice a big lump where their bottoms are pushing between the ribs into the bottom skin. They are not made for a leisurely paddle. I'm not a big person and I find myself wiggling into my 20 inch wide tank.

Dean and I wanted low volume however we had to be self contained with no pushing through the skin so our boats would be fast. Don't forget, in a conventional boat, the deck and hull bottom forces your toes down into position if they touch. There's no creating indentations no matter how tight you're squeezed in. Fiberglass is 1/8" thick where the skin boat has ribs and a keel that add up to 1" of space lost on the floor and a masik that's an inch thick eating up more space.

The skin is a controversial subject. Many builders are switching to synthetics and bypassing the traditional canvas that's been used for years. The canvas is heavy, hard to stretch, and rot prone, however it's inexpensive and does the job. There's shrinkable Nylon, Dacron and Polyester with numerous mixed opinions on each. We went with the Polyester that we purchase from George Dyson who's the guru of Biadarkas on the west coast and a major source for these fabrics. The fabric cost \$120., the bending oak was \$50., the video was \$39. and miscellaneous wood and polyurethane comes to a total of about \$220. for one boat - assuming you have all the tools.

Overall, I found the skills required to build the kayak much easier than the strip built kayaks I'm used to and far less of a time commitment. Most of the kayak could be built with hand tools except for the milling of the stock.

*Due to limited space, Dean Bertoldi will address skinning the boat and our paddling impressions in the next issue.*

## KAYAK DEMO DAYS

BOAT TRIALS AND SALE

Collinsville Canoe & Kayak

Collinsville, CT - April 15, 16 Sat., Sun.,

Information - 860-693-6977

North Cove Outfitters

May 6, 7 Sat., Sun. Cedar Lake, Chester, CT

Information - 860-388-6585

Columbia Canoe Club

Canoe and Kayak Day - Sunday, May 21,

Mansfield Hollow State Park from 11:4. Annual

demo / instructional day is open to the public. A

small insurance fee will be charged.

## CONNAYK BULLETIN BOARD

WWW.CONNAYK.ORG

We now have a bulletin board thanks to the work of Bobby Curtis. We are going to open it up to all clubs sharing any announcements, inquiries, trips or events that they want. Any personal kayaking messages or information can be shared as on any bulletin board.

## CONNAYK PICNIC SUN. JULY 30

BRODIE PARK - WEST HILL POND  
NEW HARTFORD, CT

We have been able to secure the old Boy Scout Camp (Brodie Park) at the end of the lake for our annual summer picnic. To help with planning we will be asking for e-mails or phone calls as to attendance. This will not be strict and you can change your mind, we just need some approximation for our food planning.

## Greenland Kayak Building Instruction

We're very fortunate to have Jim Hsiang as a new member to ConnYak. Jim is a new resident to the area and runs classes in Greenland kayak building and will do a Greenland paddle making class in the summer and is finalizing space for Greenland kayak building classes. He learned from the same person who taught Bob Boucher mentioned in the cover article. More on this as it develops.

203-287-7517 jhsiang@earthlink.net

\$60 Paddle making - early July

\$800 - Kayak building - to come

(materials supplied)

## CONNAYK MOCK T-SHIRTS

Long sleeve Mock T-s are available in dark blue with the ConnYak Logo embroidered on the chest. Yours for our cost of \$15. They will be at all the meetings and pool sessions.

## DEREK HUTCHINSON CLASSES

\$60 - 1 DAY CLASS - AVAILABLE AUG 19 & 20

LOCATION - PROBABLY GREAT ISLAND, LYME

Derek Hutchinson (leading paddling coach from Britain) has signed on to do two days of classes for ConnYak. Novice and Intermediate levels welcome. He's very flexible with whoever attends.

## CLARK BOWLEN TRIPS

Maine - Kennebec Area

Saturday-Monday, June 3-5

Cobscook Bay Encampment

Monday July 3 to Friday July 7

Malpeque Bay Exploratory

Monday July 10 to Friday July 14

For information, registration

contact Clark Bowlen

cbowlen@snet.net (860) 623-6587.

(These are free personal trips shared by

ConnYak member Clark Bowlen )

## CONNAYK TRIP RATINGS

Our trips range from Novice to Intermediate and usually fall in between the two with expert trips being offered and screened by those who run them. The rating categories describe the basic standards and will be designated on trip listings. As you know, trips can change dramatically due to conditions.

**(N) Novice:** Paddler knows how to get in and out of their boat without falling in and can do a "wet exit", paddle in a straight line and knows what a channel marker is. On ConnYak trips, novice paddlers are expected to be able to keep up with the leisurely group pace or will be turned back.

**(I) Intermediate:** Fully capable of self rescue, confident paddling stroke, can turn 360 degrees in a 15 knot beam wind and is capable and comfortable doing high and low braces in seas up to 3 ft.

**(E) Expert:** A dependable roll, able to rescue others, able to land and launch in a 3 foot surf, paddle in a 30 knot beam wind, able to hold a straight course and turn 360 degrees, can sustain a 3 knot (3 1/2 miles per hour) speed for a period of three hours with minimal rest periods and understands paddling in various sea & wind conditions.

**Note:** All paddlers are responsible for their own safety, including dressing for immersion. You must wear a CG approved PFD and a spray skirt. The boat and equipment must meet CG requirements, including an appropriate signaling device.

Beginners must have taken a basic course and be proficient in performing a wet exit, paddle float re-entry and carry a pump. Kayaks without bulkheads should have floatation installed. (always carry extra dry clothes, food and water) Paddlers are expected to show a sense of awareness as far as staying with the group.



## UPCOMING TRIPS / EVENTS

April - all paddles - wetsuits or drysuits

8 Sat. Ct. River Hartford (Novice)

**Directions** - I-91 Northbound - exit 27. When you come to the traffic light, go straight through onto Murphy Road for about 1.2 miles to the next light - go straight through onto Reserve Road for 1/2 mile to Charter Oak Landing which is directly under the Charter Oak Bridge and is marked by a large masonry arch - go 0.4 mile to the boat launch and parking. In the water by 10:00 a.m. (pack a lunch)

22 Sat. Norwalk Islands (Intermediate)

In the water by 10:00 am. Depending on conditions, paddle to Sheffield Island and return, visiting other islands. Pack a lunch and expect to return around 3:00 pm. Contact Bobby Curtis (203) 263-3437 or e-mail bobbycurtis@snet.net for more information. Foul weather or rain cancels. **Directions:** Take Exit 16 I-95 in East Norwalk. Go South on East Ave 0.5 mi to small cemetery on left. Go left at cemetery then make a quick right on to Gregory Blvd. Follow Gregory Blvd. for 0.7 mi then go left around rotary and make a quick right on to Calf Pasture Rd. Go 0.7 mi to Calf Pasture Beach entrance. Go through entrance and bear right. Follow road 0.5 mi around to boat launch. Unload boat, then park in spaces near ball field.

30 Sun. Bluff Point - Groton (Novice)

**Directions** - I-95 to exit 88 in Groton. Head towards water (south) thru two lights to the junction of Rt. 1. Right on Rt. 1. Left at first light (Depot Road). Continue on to Bluff Point State Park. In the water by 10:30 a.m. (pack a lunch)

May

13 Sat.. Branford Harbor (I)

20 & 21 Sat.. & Sun. Selden Island -(N)  
Camping and Day paddle (N)

June

3 - 5 Sat. - Mon. Camping & Day

Trippers Kennebec, Maine Area - dry or wet suit  
Clark Bowlen 860.623.6587  
cbowlen@snet.net- intermediate,

10 Sat. Narragansett Bay wsmith16@snet.net (I)

17 Sat. - CT River Harbor Park (N)

Mattabessett River into wildlife refuge

July

12 - 15 Wed. - Sat. Tall Ships

New London - We'll do a trip.

23 Sunday - Antique Boat Parade

Mystic (N)

30 Sunday Annual ConnYak Picnic

Brodie Park, West Hill Pond (-N)

August

12 Rescue Instruction Day - Essex -(N)

19, 20 Sat., Sun. Derek Hutchinson

On-the-water classes Great Island - Lyme

## CONNAYK MESSAGE SYSTEM (203) 603-4615

Information regarding events, trip schedule updates, cancellations, changes etc. will be heard at this number.



# CLASSIFIED

Wilderness Systems Alto with rudder. Yellow. 2 years old, excellent condition. Includes spray skirt and floatation bags. \$650/obo. Call (203) 457-9983.

Kayook plus with rudder. 8 months old, like new, \$900.00. 860-526-1410, 860-663-2069

Wilderness Systems Pamlico: 14'9", red. Double or single seat kayak, skirt. \$700. 860-684-6168 or lynes@uconnvm.uconn.edu. ecky

Aquetera Sea Lion, granite, 2 hatches, rudder. 2 yr old. Mint condition. Paid \$1,500 will sell for \$850.00 Call 203 847 2090.

Ocean Kayak Frenzy with backrest-1 year old-new \$450-sell \$325 and Ocean Kayak Yak-Board with backrest-new \$350-sell \$250. 203-235-6721 after 6

Current Designs Slipstream 16' X 22", Glass, one year old. Day hatch, skeg. Green over white. Includes neoprene spray skirt. \$2,000. Men's XL Gore-Tex drytop, one year old, \$250. Call 203-256-1913

16 1/2' Kevlar Menphremagog OC 1-34#. Excellent condition \$500. will consider trade for Dagger Animas or Outburst kayak. Call 860-666-2571

Recreational Rowing Skull - 17' x 22" hand-crafted okume marine mahogany only 43 lbs, mahogany sliding seat, basswood skulls, excellent condition, fast, efficient and fun! - \$1,300 (860) 873-3854.

Nautraid One Expedition (foldable) 15'3" red & black \$1800. or best offer. 860-521-6070

Arctic Hawk - Wildernes Systems, Kevlar- 38 lbs., tan w/green trim, mahogany inlay. \$1950. 860-450-1026

Necky Santa Cruz, bulkheads, spray skirt, very stable, paid \$700. sell for \$495. 860-827-1111

Sealution, Wilderness System-fiberglass, orange on top with fixed compass - \$1200 Please call 860-693-0211.

Perception Sea Lion, 2 hatches, 1 yr old. Ex condition. Paid \$1,300 Sell - \$950.00 Call 860-674-3637.

(2) Aquaterra "Whisper" laminated wood kayak paddles, 220 cm. Good condition. \$30 each. (860) 653-5899.

Feathercraft K1 Expedition Single (foldable kayak) 15' 11"x 25", costs \$ 3850.00 sacrifice \$3000.00. Never in the water. 203-772-3174.

KLEPPER Aerius I folding Sea Kayak. Expedition hull, khaki deck, rudder. Carefully maintained by Deiter Stiller, Klepper America. Older boat but seaworthy and strong. \$2400. 212-245-0025 or ABirdson@aol.com

Never used GAIA hydration system (pod and butterfly attachment), \$40.00. Yellow -Fits onto either PFD or deck of boat. Lora (203) 250-0252

Riot Sledge Hammer Surf Kayak- yellow -great condition. Carve, surf and spin with ease also good for river. Fern Usen 860-529-4612, or fernusen@aol.com

Woid Ski Custom Terminator, Surf Kayak, Kevlar, 29 lbs, green over yellow, will do fantastic things in the waves. \$500 W (860) 441-8416 H (860) 535-8416

Wanted- used Pungo (203) 481-1881

Send newsletter articles or classifieds to:  
Jay Babina e-mail: jbabina@snet.net  
7 Jeffrey Lane, N. Branford, CT 06471  
203-481-3221 Fax 203-481-1136

Please contact the Newsletter when items are sold.

## LESSONS KAYAK SKILLS & ROLLING

Wallingford Sheehan High School  
All classes 12:00 - 4:00

Skills: April 8, May 13

Safety & Rescue: April 9, May 14 & 21

Rolling: April 15 & 16, May 20

Urban Eskimo Kayaking - Mike Falconeri

Call for specifics - Mike at 203-284-9212  
or Nancy at 860-228-0105



**Check your ConnYak dues date!**

### TO JOIN CONNYAK...

ConnYak is a non profit club that is open to all paddlers interested in sea kayaking from any location. ConnYak annual membership fee is \$15.

Send inquiries to: Ed Milnes  
35 Hampton Park, Branford, CT 06405

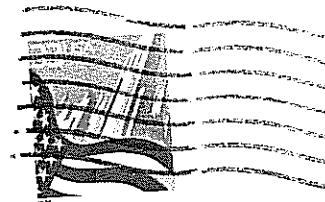
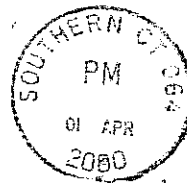
e-mail: [Connyak@connyak.org](mailto:Connyak@connyak.org)

Website: [connyak.org](http://connyak.org)



**ConnYak**  
CONNECTICUT SEA KAYAKERS

c/o Ed Milnes  
35 Hampton Park  
Branford, CT 06405



Russell Norton Jan-01  
PO Box 1070  
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