

## BΩLGER YELLΩW LEAF

#### A second boatbuilding project by Matthew William Long

Revised Sunday, August 11, 2002 ©1999-2002 by the author. All rights reserved.

### Introduction

Hooked on boatbuilding

If boatbuilding is an addiction, then I must be hooked.

After building a Bolger Brick in the fall of 1998, I was already looking forward to my next project, reading books and studying plans

to try to narrow the field. I wanted a minicruiser, and I had settled on a Bolger Storm Petrel, a 16' decked skiff with a boomed lateen sail (Sunfish-style), a small outboard, and a tiny cabin, sort of a mini-motorsailer.

But, "the best laid plans of mice and men...." and the different sort of building

activity. I was busy looking after my wife, Agnès, pregnant with our first child, and preparing for the arrival of our beautiful son Fletcher, born September 20,1999. Much of the summer (I was a teacher then) was spent visiting my in-laws in France. Looking for a project to keep me busy while my wife enjoyed familial pampering, I decided to build a "quick-and-dirty" little boat while I was there.

I settled on a Bolger Yellow Leaf, a very simple canoe. In the end, I had less time than I thought I would, but I did manage to finish the boat and get it in the water--once!

This article, very little revised, has simply been reformatted and transformed in to a .pdf to try to reduce the headaches of web site maintenance on a free server without .ftp file transfer. Be sure to follow the link below for more boatbuilding info and resources.

Enjoy,

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Yours truly, wife Agnès (8 months pregnant), and Canoe. summer of 1999 was to niece Charlotte on lac d'Aiguebelette in France. described in Chapter 12 be filled with a very Note both ends of the boat clear of the water.

# Design

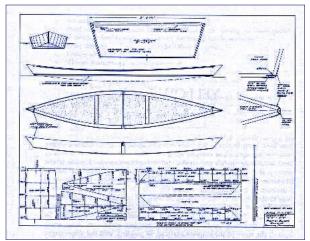
Simply beautiful, beautifully simple

Yellow Leaf is very simple, quick-to build, lightweight, flatbottomed plywood canoe, actually more like a Cajun pirogue than the round-bottomed usual Yellow Leaf is of Philip C. Bolger's now out-of-print book

Small Boats.

The design was inspired by an annual race in the Buzzards Bay area of Massachusetts in which pairs of competitors in homebuilt boats run, slosh, and paddle a mixed course of dry land, swamp, and water. Bolger outlines the design parameters for this race like so:

...the boats have to be light enough carried some distance at a run; they have to float two husky people; should be fast when propelled by paddles or oars; the less water they draw when loaded, the more



Yellow Leaf plans © Phil Bolger & Friends, Inc. Used by permission.

of the swampy part be paddled; and the shape ought to be suitable to being skidded mud. Incidentally, of the homebuilt rule spirit should be observed by keeping to a design that can be run up in a day or two without more exotic materials than can be found at the town hardware store.

The result is an elegant flat-bottomed pi rogue, 15' 6" X 3' 0", with a single thwart and rope lifts at each end for easy handling, light to carry and pleasant to paddle.

# **Building**

### A little extra effort goes a long way

As designed, Bolger admits that Yellow Leaf is a flimsy, flexible, almost disposable boat. Two sheets of 1/4" (5 mm) plywood are cut to shape, then joined with butt straps made from the scrap. The ends are stitch-and-glue, pulled together with wire (I used electrical cable ties) and reinforced with a single layer of glass tape on the outside. The chines are simply nailed with fine brads through the sides into the end grain of the bottom, glued with epoxy, and again reinforced with a single layer of tape on the outside.

I followed this construction, knowing that I

would get very little use out of the boat before heading back home from France. I did use reinforced putty (sort of Bondo with fiberglass cat hair, like the kind used for car repairs) for a fillet in both the stem and stern joints and the chines. In the photo, the chine fillet is visible as a white band. I also used a wooden spreader with galvanized corner braces instead of an aluminum tube.

This construction is truly minimal--the brads soon started to work their way out though the tape. Also, my father-in-law's heavy-handed help in strapping the boat to the roof of the family Citroën cracked the chine fillet before we even got to the lake, though with no ill effects.

Bolger suggests a number of alternatives for stronger, longer lasting joints. Five or six layers of glass tape, inside and out, are one option, as are conventional wood chine logs 1/2" (13 mm) square. Another option is to use a resin-and-chopped-glass slurry poured in the chine and sandwiched between a couple layers of tape.

If I were to do it all over again, I would go with one of the more substantial construction method, since very little time is saved over the disposable one. Personally, I would take the few pounds of weight penalty to go with wood chine logs, and maybe wood stem and stern posts, to avoid working with fiberglass altogether. It's not the resin that bothers me, it's all the sticky strands of glass.



Yellow Leaf in progress in the tractor hangar on the family farm in St.Priest, France.



On lac d'Aiguebelette with brother-in-law Stéphane. Without flotation (but with life vests at our feet), we stayed close to shore.

For finishing, I went with French hardware superstore porch paint (polyurethane?), thinned for the first coat and full-strength for the second. I also made my own paddles, though the final shaping (they were essentially carved from boards) took so long that I only finished one of them in time to use. Mystery varnish found in my in-laws' basement served for the paddle, and for the 3/4" x 3/8" (20 mm x 10 mm) wood strips that I added to stiffen the gunwales and provide something for passengers to hold on to.

### Conclusion

#### A fine little canoe

All in all, Yellow Leaf makes a great little project and a fine little canoe, especially if you heed Bolger's advice and beef up that chine joint somehow. Also, there is no flotation, so it would be a good idea to add some, perhaps inflatable kayak floats or even plastic soda bottles in a net, in addition to keeping a life vest handy. But for putting around in shallow water, it's a perfect little boat and a great use for two pieces of plywood.

So what are you waiting for?





The happy builder...thanks, Phil Bolger!