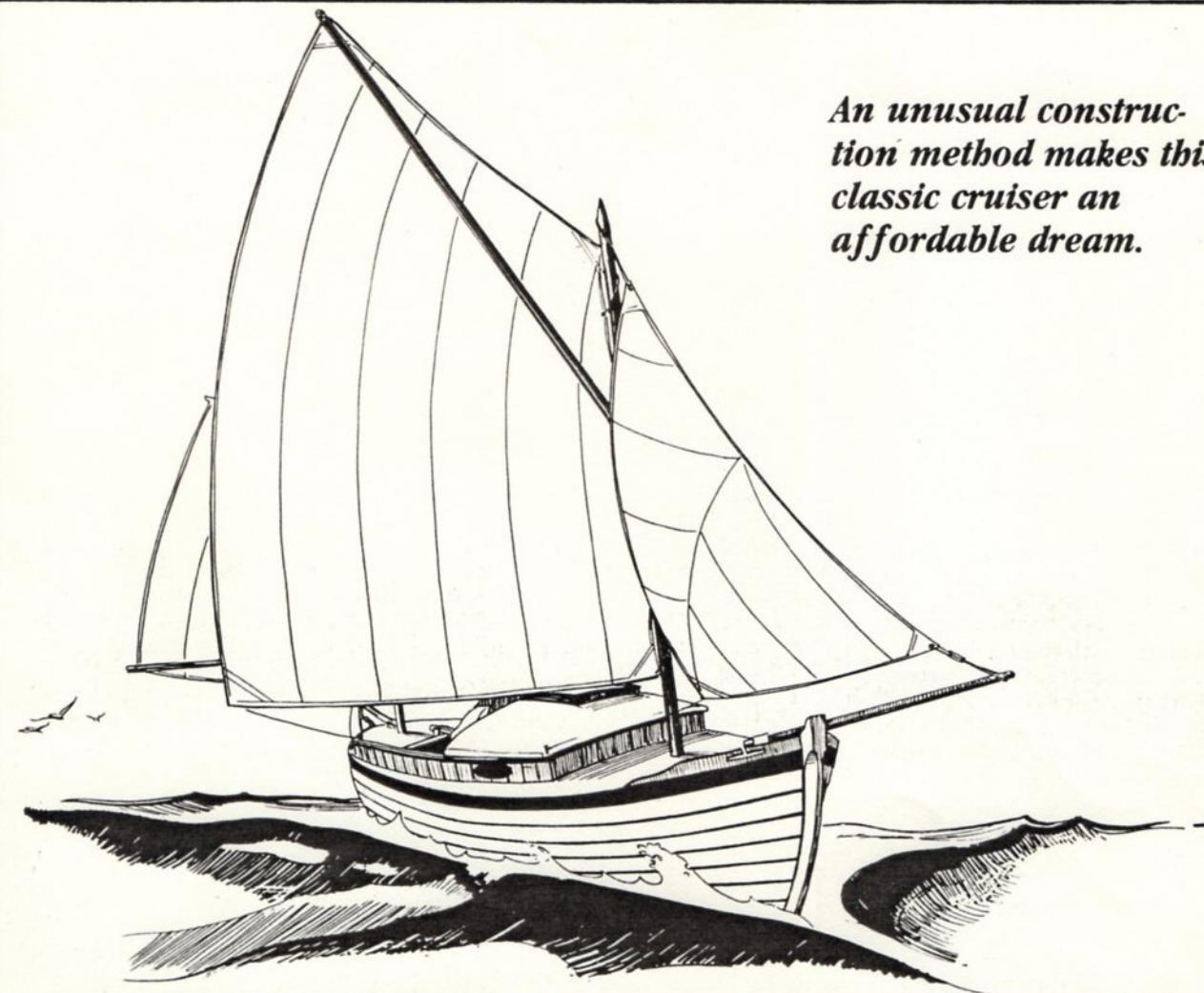


Elver: A Canoe-Yawl For The 80s



An unusual construction method makes this classic cruiser an affordable dream.

by Steve Redmond

A well-proportioned double-ended sailboat has a special appeal, a natural grace and beauty. At anchor in a peaceful spot, she symbolizes the old-fashioned romantic aspect of cruising — the stuff that cruising dreams are made of.

While many of us dream, however, few of us can afford today's reality. The large, traditional, blue-water double-enders are no longer suitable for the fabled hand-to-mouth, island-to-island existence many yearn for; not a new vessel anyway, unless you have a substantial fraction of a million dollars to put into her.

No, there's often little enough cash in the family budget to maintain even a small daysailer and no time for sailing to Tahiti either. But that doesn't mean we have to give up the dream. We just have to modify it a bit.

We learn to appreciate what we have

and what we can afford. That may mean a smaller boat; it may mean sailing on nearby waters. As it turns out, with the proper approach these things often further our enjoyment rather than restrict it.

A little vessel can be modified to reflect one's needs and preferences more easily than can a larger yacht. There's room for a lot of ingenuity. Such a boat becomes a personal thing, a reflection of our own tastes and our style of seamanship.

If the boat is light, shoal and trailerable, she can be a real explorer — able to investigate the intricacies of coast, river, or lake. We can even make a landing at a pretty spot if we please. (A landing; now there's a real explorer's word, somehow more satisfying than "beaching her," which has the sound of dead whales about it; or worse, "grounding out," the prerogative of larger and deeper vessels.)

Light weight, shoal draft, small size, portability, a sharp-sterned hull taken

together, these are the elements which make up that distinguished traditional breed of yacht, the canoe-yawl. These little cruisers were developed nearly one hundred years ago from the decked sailing canoes made popular by John MacGregor and W. Baden-Powell in England and J. Henry Rushton and W.P. Stephens in America.

MacGregor, the great genteel advocate of canoe cruising, made several well-publicized long-distance voyages during the 1860s in a succession of tiny paddle-and-sail vessels which he called Rob Roy canoes. His classic cruising books, *A Thousand Miles in the Rob Roy Canoe*, *Rob Roy on the Baltic*, and *Rob Roy on the Jordan, Nile, Red Sea, etc.*, were widely read and appreciated in their time. These books fostered canoeing as a sport, a new idea at a time when canoes were considered essentially primitive workboats.

Canoe-yawls were a later development. They were too large to portage, which is the fundamental difference

between these vessels and sailing canoes. At some point, one-man portability had become less important to a few canoe sailors than capacity, and the hulls were gradually built larger and heavier. Many today would likewise prefer to carry more aboard a minimum cruiser than the charming one-foot-square valise MacGregor tucked aboard his *Rob Roy* for a cruise of several months' duration.

Today, 110 years after MacGregor's adventures, we've advanced to the point where we have paved highways, automobiles, trailers and the energy problems to go with them. Once again, the canoe-yawl seems a vessel appropriate to the times. A small boat trailer would lend it easy portability, a feature it more or less lacked in the past, and a compact car could easily tow it. In addition, a small light boat like a canoe-yawl is inexpensive to build, fits in the backyard and costs little to maintain.

The *Elver* was designed in appreciation of the canoe-yawl centennial (more or less), with the availability of materials and present-day costs in mind. On paper, she's 20' long on deck, 7'3" wide, draws 4" and would weigh about 800 lbs. ready to haul. It shouldn't take too much larcenous creativity to gather the building materials to fit her out for less than a thousand dollars, a little more than a sailing surfboard costs these days.

How is this economy achieved? Quite simply, through the process of elimination. In the *Elver*, we've eliminated most of the things that cost so much in a conventional small cruiser. These include lead ballast, standing rigging, heavy scantling keel and deadwood, traditional framing, cockpit well, solid wood accommodation features, a box full of yacht hardware and the need for nonstandard building materials.

All of *Elver's* masts and spars, for example, can be got out of standard 16', or shorter, 4"x4" stock. The strip-planked sides utilize 3/4" square strips ripped from 3/4" stock (1" normal). Planking may be cedar, pine or fir, depending on local availability.

The accommodation plan carries on the theme of simple economy. The cockpit seats are canvas (woven cane if you want to get fancy); a deep-blue color would be nice. In the cabin, the off-center centerboard trunk serves as a support for a three-piece sling berth. Each of the attached separate panels can be alternately hooked to the hull side for sleeping, to the cabin trunk for comfortable seating or rolled up and tied to the CB trunk to open up the

whole interior. The canvas berth and seats in *Elver* are easy to make, cheap, comfortable, removable, washable and a big factor in the canoe-yawl's light weight and low cost.

The yawl rig was adopted mostly for functional reasons. It allows an easy sail reduction in case of light crew or heavy weather by dropping mizzen and jib. The mizzen, if fully battened and sheeted home, will reduce sheering at anchor. In this case, the smaller individual sails in a yawl rig allow the use of standard timber-size spars which can be easily struck by hand and stowed for trailering.

Though the *Elver* has a lot of sail area for her weight, it is quickly shortened from the cockpit and forward hatch to an all-inboard, one-sail rig. That one sail, if set up with a proper brail, snorter tackle and reef points, offers all the reefing, scandalizing, 360° luffing, dousing and jettisoning options which make the spritsail the preeminent small boat rig. The bowsprit and boomkin are simple housing spars set through rope grommets. The jib is set flying and taken in through the forward hatch.

Further economies in building time and cost were achieved by incorporating a straight, rockerless plywood bottom with rounded strip-planked sides. Though at first glance this may seem an unnecessarily complicated hybrid hull form (compared for instance to an all-ply, straight-sectioned dory or sharpie), it allows construction simplifications. The relatively thick, curved side planking provides enough shell stiffness to reduce framing to three convenient accommodation bulkheads and widely spaced unbeveled floors to stiffen the ply bottom. A side benefit of rounded sides is that they eliminate the boxy sharpie look and slightly improve the sailing lines.

The topside sections don't require lofting in the usual round-bilge sense because their shapes are taken from a single master curve. This simple variation on the venerable whole molding system, which shaped the hulls of 17th and 18th century ships (and more recently Barnegat Bay sneakboxes), was worked into the design to take the pain out of lofting.

The procedure works something like this: the master curve and inner stem and sternpost curves are shown full scale on *Elver's* plans. The plan sheet is pasted to ply or hardboard stock and the curves cut out to form patterns for marking the molds and bulkheads. Each mold is a segment of the master curve, indicated along that curve by an individual pair of marks. The molds are marked out using the pattern and

set up with the floors, bulkheads and cross spalls atop the leveled and trued plywood bottom. Stem and stern posts and flat chine pieces are attached and beveled with the aid of a batten, and the strip planking commences. This is a very rapid setup — certainly rivaling most other straight-sectioned craft procedures for speed of assembly.

Strip-planking seems well suited to available lumberyard stock. Wide boards are not required, nor is clear or long stock a necessity (they are helpful, though), as short pieces are quickly scarfed with the help of a jig. Fastenings between strips are galvanized finishing nails, and though glue may also be applied for a super-strong hull, it isn't essential. It would also be possible to build the *Elver* in any of the traditional plank-on-frame methods with a solid dory-style bottom.

In all, it would be hard to build a light cruising boat of her capacity with less expenditure in time and materials — materials which can be found in most parts of the country.

At the risk of sounding a bit swell-headed, I think that for a boat intended for amateur construction, the *Elver* has an uncommonly graceful appearance which belies her structural simplicity. A few added touches by an enthusiastic builder, say tanbark sails and bright topsides (if he or she is really energetic), would yield a truly spectacular result. Why not? The canoe yaws of the turn of the century were often highly finished—the small size encouraged it. In fact, one of these pretty little vessels furnishes the best excuse I can think of for showing off in style.

For more information about *Elver*, write: Steve Redmond, Redmond Designs, 456 North St., Burlington, VT 05401. (Enclosure of 50¢ to help cover mailing costs would be appreciated.)



Steve Redmond designs and builds boats in his one-man shop in Burlington, Vermont. His boats are traditional in appearance but often non-traditional in underbody, materials and construction (see *Red Peril*, SBI Sept. '79 & Dec. '79).

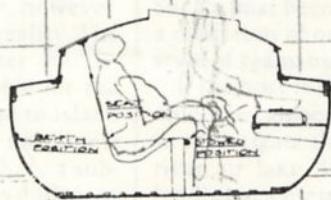
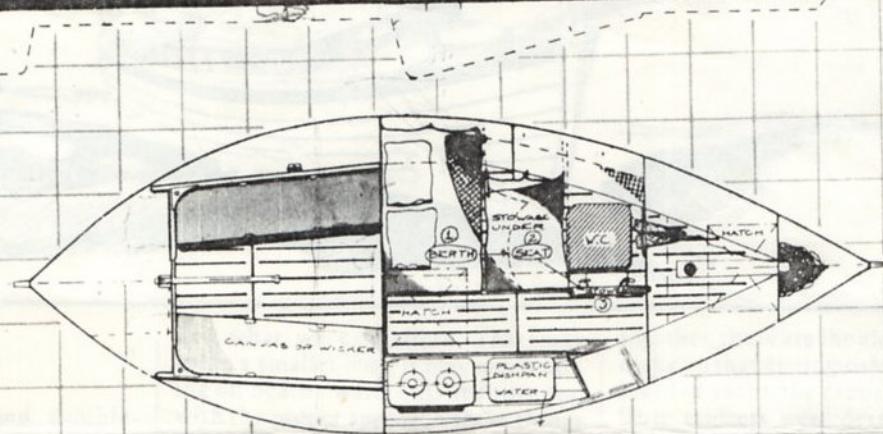
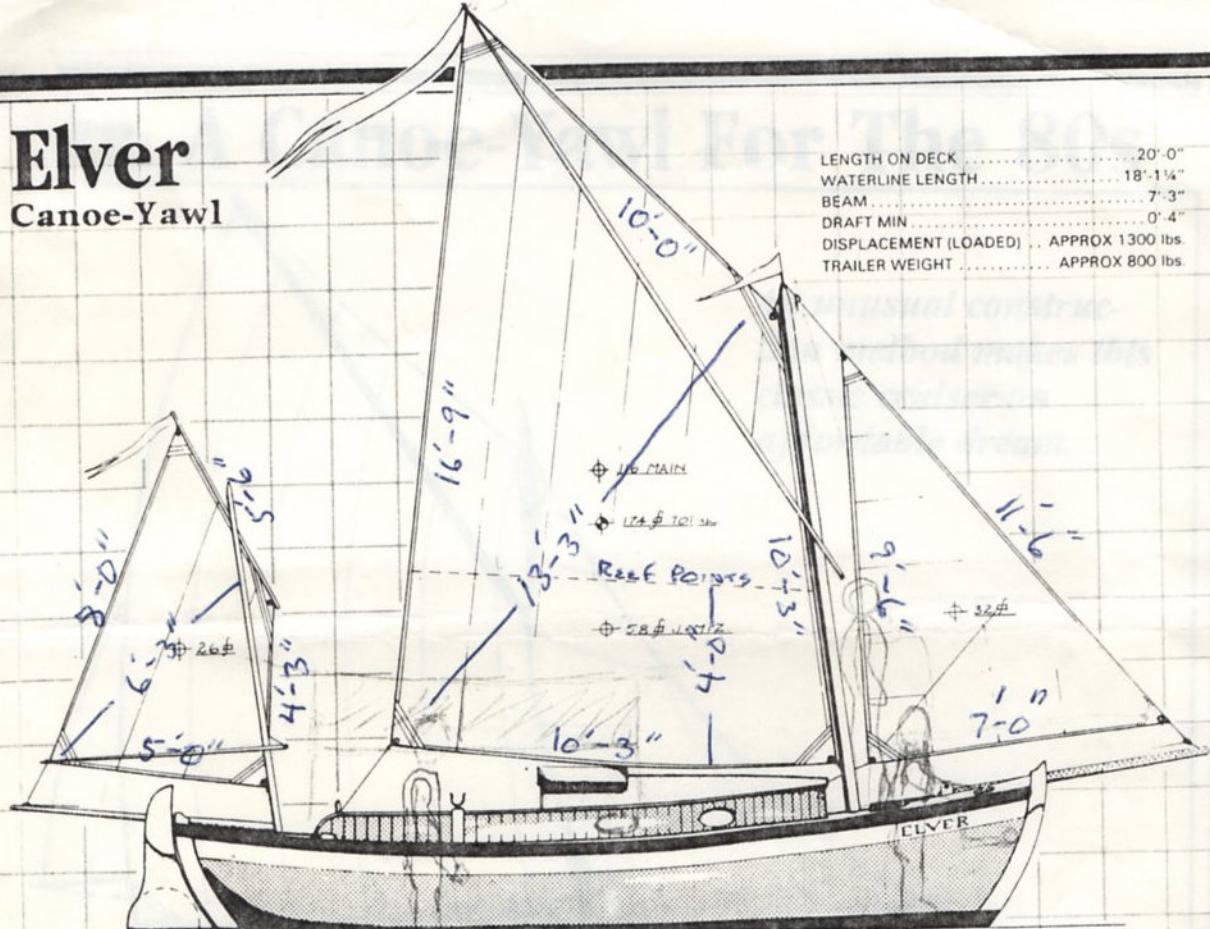
Carolyn Bates

Elver

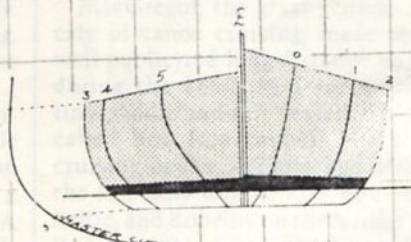
Canoe-Yawl

46

LENGTH ON DECK	20' 0"
WATERLINE LENGTH	18' 1 1/4"
BEAM	7' 3"
DRAFT MIN	0' 4"
DISPLACEMENT (LOADED) ..	APPROX 1300 lbs.
TRAILER WEIGHT	APPROX 800 lbs.



CANVAS SEAT & BERTH ARRGT.
DETAIL



WHOLE SECTION MOULDING
DETAIL

20' SPirit Yawl
SAIL & ARRGT. PLAN
DWG. NO. 116-2
STEPHEN REDMOND - DESIGNER