



# *The Binnacle*

*March 2023*

*Volume 45 Issue 3*

**Ken Lockley. In the Workshop**



**Ron Hillsden on the \$20 Challenge**

**Edward White on the Grand Banks and the Dory.**



**Calvin with links for the 2023 membership survey, and the Zoom meeting for this coming Thursday.**

**Mike Claxton. An Invitation from Ladysmith.**



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All above area code (250)



Well round one of the survey went out and we received 17 of 41 responses so far. We are sending the survey out again with this month's binnacle to ensure all members received it. So far responses have been well received. Please have a say in how your club is run by filling in the survey and submitting.

We have had some interesting weather the past month that has affected Sunday morning floats at the pond. Hopefully now that we are fully into the month of march we will see warmer temperatures and more people out to the pond. It was good to see a large number of members out on Sunday.

Our summer events calendar is starting to populate and it is looking good. May 7 will be our annual Battle of the Atlantic Commemorative Sail Past. In preparation for that, Sunday Apr 30 we will be having a practice, as with last year we would like to get as many boats out as possible to have a two-column sail past.



**Regular General Meetings**  
 2 nd . Thursday, 7:30 pm. St Peter's Anglican Church Hall, St. Peter's road, Lakehill.

The first running of the Denton Cup will also take place Sunday May 7 after the BoA Sail Past.

June 18 is the proposed Point Hope Open House which the club is looking to attend again. More info to follow.



Saanich Fair is the Sep Long weekend so keep that open.

**Sunday Mornings at Harrison Pond, Dallas Road.**  
 9ish to noonish

This month's entertainment will be a chance for you to show off your \$20 boat builds so have what you have so far and show it off. What are you building? Feel like showing it off? Show it off at the Zoom meeting this Thursday. Calvin will be showing off his 3-D submarine build.



See you all on Thursday.

The Langford Lake Navy.  
 Wednesday Mornings 9 :30 ish, Leigh Rd. At Tillicum.

David Nelson

# The \$20 boat challenge

## My first design Ron Hillsden

Hopefully everyone has heard about the \$20 boat challenge.

There are 2 rules

1. It has to cost less than \$20. and
2. It has to be able to cross Harrison Pond.

Should be simple for a bunch of skilled and resourceful model shipbuilders like us, right?

Several people had mentioned they picked up a motor, shaft and propeller unit from Lee Valley Tools.

It is called "Make your own Motor Boat" and sells for \$12.50 including battery.



So I bought one and made a boat from a piece of 1 inch Blue foam insulation, just cut and sand, with a little work to make a motor mount. No more money, all junk. The white in the photo is the foam, the yellow is the Lee Valley part, and there is a shadow beside the keg. I took it to HMYP, arranged for an escort tug and dropped it in the water.

Result: It cost less than \$20. When it hit the water, the RPM dropped to about 2. If it is going to cross the pond, it will only do so if there is a following wind. The unit doesn't have enough torque to swing its own prop effectively in water. Therefore, it is back to the drawing board.

Please share some thoughts or experiences in designing a boat for this challenge.

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Ron Armstrong has Styrofoam

Ron is offering 2 3inch sheets roughly 3 feet by 2 feet and another 1inch thick sheet about 2 feet square, free for anyone wanting some to take up the \$20 challenge.

Ron is at [captinca@gmail.com](mailto:captinca@gmail.com).

**IN THE WORKSHOP MARCH 2023**

**by Ken Lockley**



My little tug is coming along very well with the side deck almost completed. I am using 1.5 mil aircraft type plywood. This type of plywood isn't easy to purchase. In past years most hobby shops would carry some. I ended up purchasing a 5x5 sheet at Westwind Wood products in Sidney. Don't ask the price!!!!!!



As you see, the decks are almost complete with the exception of the stern area.

The biggest challenge ahead is the bulwarks which is so important on any vessel. So getting this looking realistic and at the same time realistic correct profile and deck widths etc is hard. The last couple of tugs I found it easier to do each side in two pieces.

The next few pictures show how I built up the stern to accommodate the bulwarks .

It's necessary to get the bulwarks right so vessel looks good at the pond. I have found using 1.5 mil plywood the most satisfactory material. The cant or angle of the bulwarks, facing inwards along the cabin is another important trick to create the right aspect to the overall looks. Try hard to get both sheers the same as well as a nice curve up to the bow. Some times I have installed a bow block to fasten the plywood bulwarks to. As you can see, clamps of every verity are in use. When I see a garage sale or at a swap meet I look for anyone selling clamps , never have too many in the model boatyard.

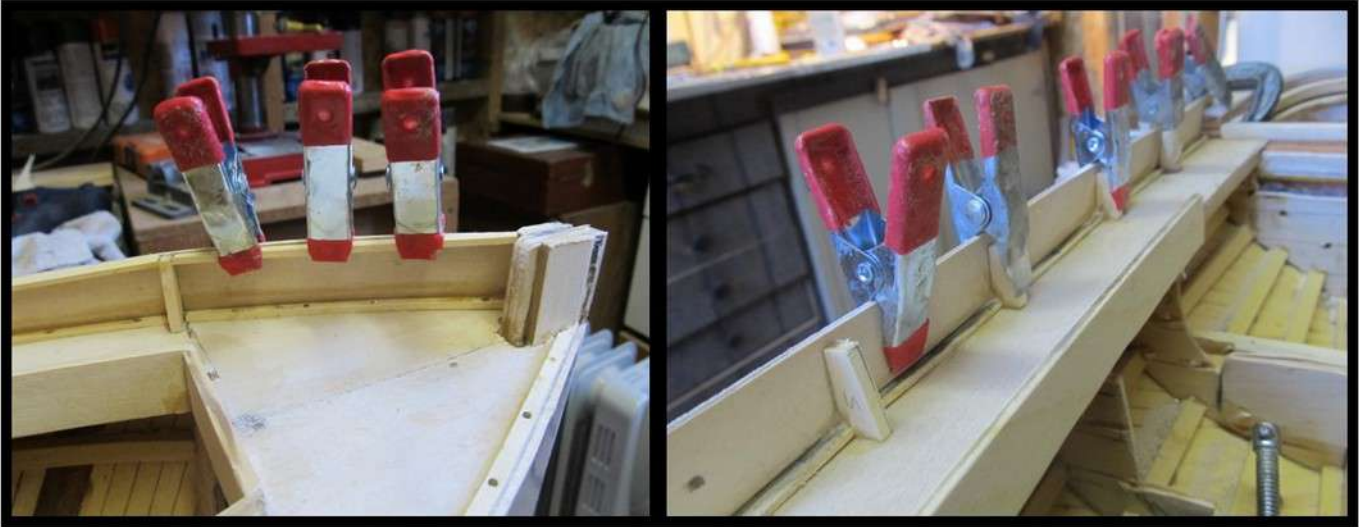


The single handed blue clamp above was purchased at KMS Tools. Very handy

I have recently, on the last few boats, used forma to make laminated outward gunwale strips and the same idea around the stern.

It's a bit hard to see in the picture to the left but that's 3 layers of 1/16 x1/4 " material clamped between the layers of the shaped plywood .

I have done a similar thing for the gunwales which beats turning to bend a solid piece of wood the bow area.



You can see on this page and previous pages how much I am using the little red handle clamps which are available at most dollar store. These you see were bought at the new Dollarama in Hillside. These pictures show the cap rail installed on the starboard side of the hull. You also see the clear epoxy coating on the inside, described in last months Binnacle. The stern deck is also visible and I have used 3mil plywood there. The cap rail is built from yellow cedar and soaked over night to make the bend near the bow.

I have talked previously about using Yellow Cedar as my main and most desirable building wood for model ship building and I guess that's only a personnel choice.

Recently, having the chance to look at a few boat kits the manufacturer's seem to favour mahogany. So I looked up the qualities of mahogany and it's considered one of the most sable woods for expansion and contraction and of course it glues very well. I have been given a bundle of Mahogany strips which I have used for the outer gunwales. So we have Yellow Cedar, One strip of Oak on the keel and Mahogany for the Gunwales.



The Pictures below show the steady progress with our little 40 ft. Tug, "Beamsville". It's almost ready for paint on the hull and deck. I recently purchase "Zinsser" Primer and stain blocker for my undercoat paint base. This is a new product to me this year but used it in another application and it worked well, available at "Lumberworld" for \$23 per one liter.



The picture to the left shows my gunwale strip laminated up and at the same time bent around a form that is the same curve as the sheer. The same process described in the previous page to do with the stern.

The plain white masking tape has more adhesive than the coloured varieties and I use it constantly for clamping, like you see in the picture. Before actually starting to paint, I will give the hull a very close inspection and mark any spots with a "Sharpie" that need any filling or sanding as this is my final chance for any attention before starting the paint build up process.

Unfortunately, to achieve good results, attention to detail never ends until finished and you can be pound of your results.



## Two invitations from Calvin

Calvin van Elsakker has sent me two links to transmit to all the club members.

Because I haven't yet learned how to make the click links survive the Binnacle's publishing process, I have forwarded Calvin's two e-mails direct to you

The first is a link to the club membership survey site. This is a questionnaire for you to fill in to let the executive know better what the members want from the club. It is important that we should plan events that you actually want to and will attend, so try to click on Calvin's link and take part in the survey.

The URL is : <https://forms.gle/Yfs6h7z7N1Q54oDbA>

The second is the link to the Zoom meeting that will take place on this coming Thursday at 7:30 pm.

Its URL is : <https://us02web.zoom.us/j/81978281085?pwd=cGRiNEtLZk96Z3UrRkVldFRTWIBpQT09>



## The Grand Banks Dory

This one's got everything, Canadian history, oodles of it, terrific modelling potential, relative simplicity, and lots of fun. Let's get to it.

20,000 years ago all the Canadian coastline was underneath kilometres of ice. As the glaciers moved outward to melt into the sea they reshaped the edges of the land underneath. By about 13,000 years ago the ice age was mostly over and there were low islands off the Canadian coast south-east of Newfoundland. Sea levels continued to rise and these islands were submerged about 8,000 years back to form what we now know as the Grand Banks, a shallow continental shelf. The depth of water in these areas ranges from 15 metres to 90. Shallow enough for some sunlight to penetrate and support plant life.

Moving northward up the American coastline is the Gulf Stream, a warm current originating in the Gulf of Mexico, and moving southward along the Canadian coastline is the Labrador current from the Arctic Ocean. They meet and start to mix over and around the Grand Banks, pulling up nutrients from the deep water. Plant growth thrives on the nutrients and the light, and the weed forests are ideal breeding ground for algae and plankton, giving rise to one of the most fertile areas in all the world's seas.



The resulting fishery was likely discovered by Europeans, Basques from Southern France and English from Bristol, some time in the 1400s, and they became more generally known in Europe after John Cabot's voyage of 1497. It's not an easy place, the mixing of the air above the two currents makes for frequent and dense fogs, and it is completely exposed to storms in the Atlantic. But the yield from the fishery was enormous, and Europe had an insatiable demand for fish.

The Spanish and the Portuguese soon took up the Grand Banks fishery and that is reflected in their cuisine with its dishes made from salt cod.

It wasn't until 1583 that the English government awoke to the value of both the fishery and the potential of the new lands beyond it. Sir Humphrey Gilbert took an expedition to Newfoundland to formally take possession of it for England.

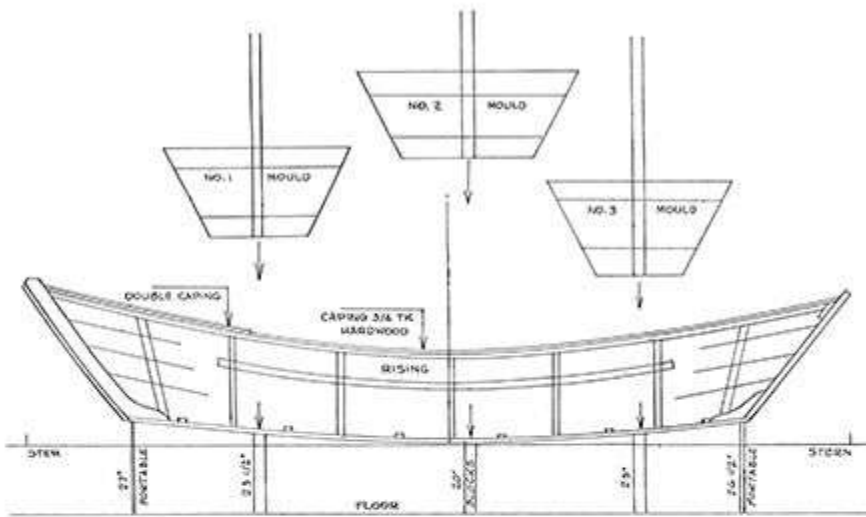
In 1585 a state of war was declared between England and Spain after England declared support for the Dutch rebellion against Spanish rule. Not surprising, England had been encouraging piracy against the Spanish for many years, provided the Crown got its commission. It was convenient for England and for its ever cash-conscious Queen Elizabeth that the Spanish possessions in the New World were easy to attack, especially the flow of treasure from the Spanish colonies in central and south America. So Francis Drake was given command of the

bulk of the British Navy to attack the Spanish New World and scores more of privateers were commissioned to harrass Spanish shipping wherever it could be found.

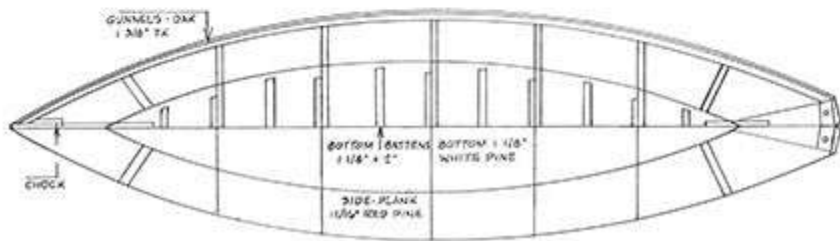
Then Bernard Drake, a remote cousin to Sir Francis, was given the right to press vessels to form a fleet and attack the Spanish fishing fleet on the Grand Banks. In this they were very successful, effectively destroying the Spanish fishery and incidentally the Portuguese one as by-catch. Bernard Drake followed it up with raiding Spanish shipping from the West Indies and got back home with a profit of at least 600%.

Now you understand why Philip of Spain stopped trying to marry Elizabeth and concentrated on building and sending the Armada in 1588. The Grand Banks became for a while the exclusive province of English and Basque fishermen. The Portuguese eventually rebuilt their Grand Banks fleet, but the Spanish never recovered.

We don't know for sure how and when the dory evolved, but quite likely it was with the Basques. Once a fishing vessel got to the Grand Banks, it needed to spread out its effort by launching a number of one or two man boats to do the actual fishing. The basic design of the dory is ideal for the purpose, it is easy to build and repair, seaworthy when loaded with a substantial cargo, and when empty, can be stacked, one within another on a very small deck space. Here are some pictures of dories and their construction....

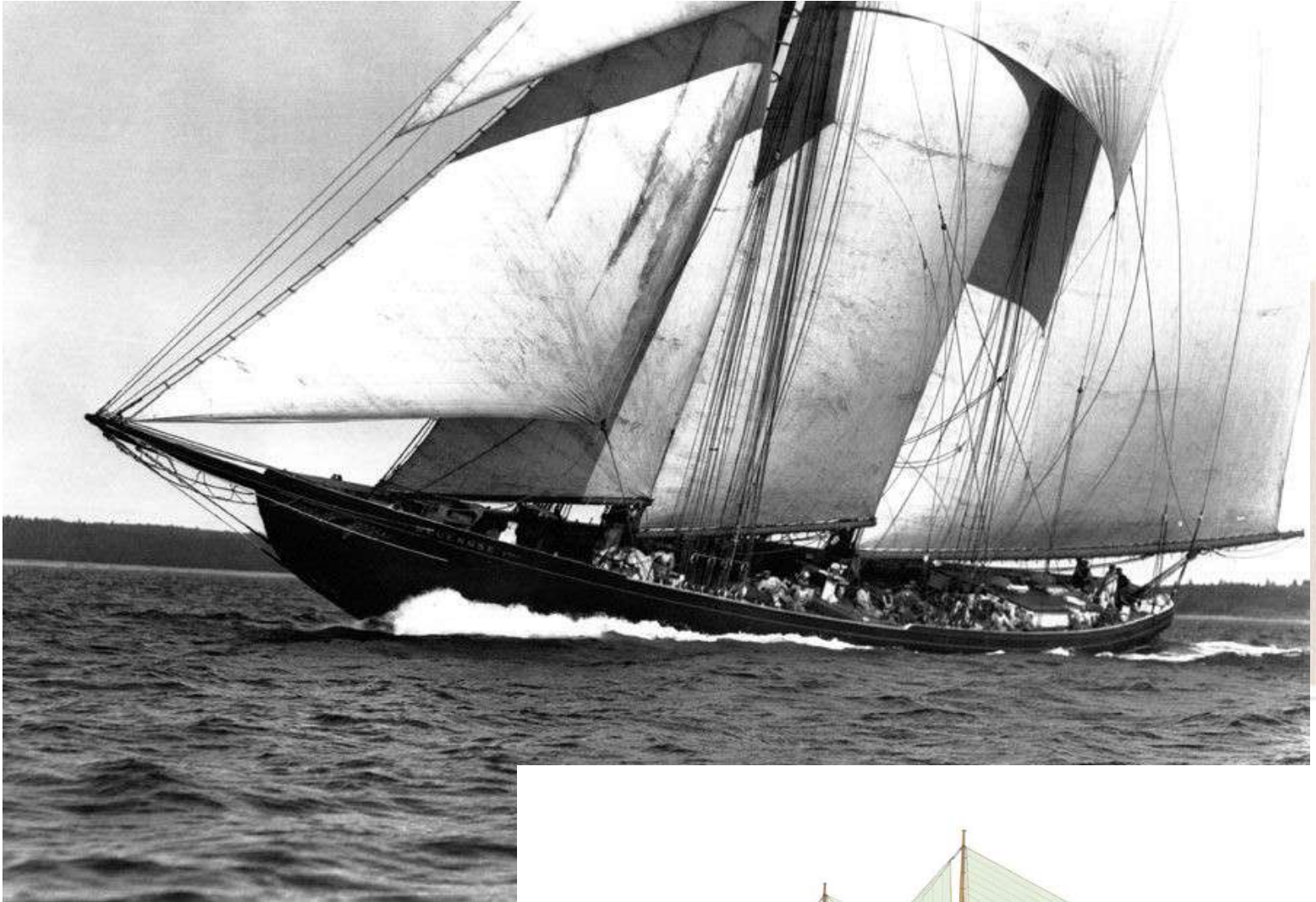


The method of fishing that evolved was to use dories to lay and retrieve long lines on the bottom with baited



hooks every 3 or 4 feet. Each length of line carried 55 hooks and the dory could carry forty lines in four tubs. Buoys marked the ends of each set of lines so they could be left in place for an

hour or two and then retrieved to pull the catch aboard the dory, the hooks re-baited and the line let down for another set. By this method the dories could spread out to cover an area around the mother ship far larger and more densely covered with hooks than could be done with one vessel alone. In good weather the dories would stay on the water from dawn to dusk, coming back to the mother ship only when full of fish. The dory crews were expected to toss the fish up onto the ships deck and then clean and salt them into the ships hold before they could sleep. A good catch meant very little sleep, especially allowing for the job of cutting bait and re-baiting the tubs before the dories were launched next morning.



*Bluenose*

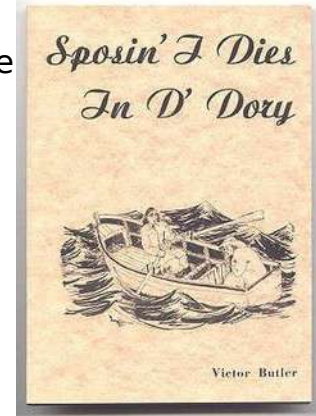
As the North American colonies developed, so did the fishery based on that coast. With it came the evolution of the sailing schooner, with a huge incentive to get out onto the Grand Banks and back to off-load whenever the weather allowed it.



*Grand Banks Schooner*

A High Enslve Print drawn by John Gardner and published by Hensel's Marine Prints.

Dories were built in their thousands. The push to mass produce identical boats may have started from the requirement for them to stack, but their simplicity along with mass production made them the cheapest boat available on the Atlantic coast, and while the Grand Banks offshore were the big prize, there was a living of sorts from the inshore fishery all the way up the Atlantic coast. So those who could find no other work might be able to finagle their way to a dory, and make some contribution to the family. Victor Butler's book, "Sposin' I dies in d' dory" gives you a vivid picture of this life.



So what is one of these dories. Well, it is one of the simplest boats possible. A bottom plank that is flat side to side, gently curved up end to end, (3 1/2 inches in Shelburne, 5 1/2 inches in Lunenburg) pointed at both ends. Wide planks are run in a flaring shape, lapstrake fastened together to form the sides, the fronts of the planks coming sharply together at the bow, and fastening to a narrow, triangular, back-sloping transom at the stern. The shape of the planking is set by temporary moulds, and then reinforced by 3 to 5 frames, which would

be cut from the junction of a tree's trunk and a large branch, so that they would be super strong with the grain following the shape around the corner between the bottom plank and the sides. Two of these lazy "L" shapes would be scarfed together across the bottom plank to make each frame. In later years a dory builder in Lunenburg invented a metal clip to join straight planks at the corners, eliminating the need to find suitable trees with the angled branches, and cut them on a wide bandsaw. The resulting dory could be both built and repaired from straight timber.

Leaving the plank edges straight and parallel results in an exaggerated sheer with long overhangs, high at the bow and stern, pushing aside waves that might swamp the boat and giving it considerable sea-worthiness when loaded. The weakness of the shape is a low initial stability when the boat is light, quite an incentive to get in a quick catch. The dories were classified by the length of the bottom plank, fifteen feet was typical, and all dories would be made to identical dimensions so they would stack together with the thwarts removed, a stack six high on deck would be typical.

Dories row well when light, and can carry a sail when loaded. The top of the transom was cut to accommodate an oar to scull it or steer it. Because the sides flare out so much, the load that can be carried is huge for the hull's length.

The fascination to me as a modeller is that the simplicity of the construction carries over into a model. We can make every single timber to scale, every fastening as it was (nails mostly) and choose a scale that will give us detail of every piece of equipment that the fishermen had on board.

In recent times, dory construction has been used in leisure and commercial craft up to 30 feet long very successfully, the flat bottom plank easily producing a semi-planing hull, and there is our opportunity to produce a really fun radio controlled model with modern batteries and motors. We can add a centre-board or a false keel to make a sailing model, the only certainty is that whatever we make, the dory lines will be pretty.

So, whether you fancy making a static, cased model to illustrate a really important piece of Canadian history, or want a model of simple hull construction to bounce around and look great on Harrison Pond's rough winter seas, consider the humble dory.

The simplest start is to get a copy of "The Dory Book" by John Gardner. This is a great read and has plans and construction details for many full size dories, both historic and contemporary. It's all you need if you are prepared to do a little bit of calculation and sketching yourself. It's possible to find model plans or even kits, but for me the joy of this model would be to totally immerse yourself in the tradition, and the study of the full size would be the way to do this. There's also a great article on the Shelburne dory at "<https://www.woodenboat.com/milford-buchanan-and-shelburne-dory>". The photographs and description of the construction are particularly clear.

### *Portuguese Dory*



## The Dory Epilogue.

The end of the fishery started when diesel engines replaced sail, and trawl nets supplanted dories and long lines in the 1920s and after. By the 1960s the factory trawler was developed, with processing and freezer plants aboard. The catch soared at the same time as the trawls were destroying the plant life on the bottom that was the basis of the eco-system. Between 1600 ad and 1800 ad the traditional industry took about eight million tons from the grand banks. The trawlers took that much in fifteen years between 1960 and 1975. In 1992 there was almost nothing left and a moratorium on cod fishing was declared. The economy of Eastern Canada was severely hit. But the stock hasn't recovered. As soon as a few fish appear, the government is politically forced to allow some fishing, which kills off the stock again. Recently the allowed take has been between 5000 tons and 13000 tons, and there's no real prospect of it ever improving. One of the world's great natural wonders is gone, and with Canada in charge, it appears that our country will make sure it never comes back again. This sad part of the story is told in "<https://britishseafishing.co.uk/the-collapse-of-the-grand-banks-cod-fishery/>". Something has to change!

## Ladysmith Anyone?

The weekend of 27<sup>th</sup> and 28<sup>th</sup> of May will be Heritage Weekend at Ladysmith. Mike Claxton is reminding us to get this into our diaries. This year it's going to be a double feature.

On Saturday 27<sup>th</sup> will be the Forest Festival, rolling out the newly restored steam locomotives, and on Sunday 28<sup>th</sup> will be the Heritage Boat Festival, featuring 125 years of the S.V. Dorothy.

It's only an hour and a half each way, and you could take a picnic to Transfer Beach to round out a perfect day.

*Dorothy*



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**[vmss.ca](http://vmss.ca)**