

***Built for the Sea!* – the evolution of Nova Scotia’s Lobster Boats**

Setting the scene

Early settlers in Nova Scotia quickly discovered the value of the rich fishing grounds off the coast. Fishing communities sprang up around the Province, and a boatbuilding industry to build, repair and maintain the fishing fleet was born.

In the 1800s and 1900s, fishing boats were powered by sail or oars – or a combination of both for smaller boats. Sail was gradually replaced by steam-powered engines driving propellers, then gasoline, and finally diesel – the type of engine we see used almost exclusively in commercial lobster boats today.

The development of engine technology brought with it new possibilities in vessel speed and overall performance – limited only by fundamental factors like hull shape, hull weight, and propeller design.

The choice of hull shape was influenced by construction materials available at the time. In the heyday of wooden boatbuilding, builders knew they could only achieve a certain amount of curvature, depending on the type of wood being used. The resulting hulls reflected the more natural and elegant curves that wood takes.

While fibreglass started to be used for boatbuilding in the US and Europe in the late 1950s and early 60s, it wasn’t until the 70s that this material was seen in common use in boatshops around Nova Scotia. With it came the opportunity to mould almost any shape into the hull – something that had not been possible with wood.

The other factor influencing hull shape was the intended area of operation of the lobster boat. It’s well known that wind and wave conditions vary depending on the geographic location of the fishing grounds, and fishermen quickly learned what hull shape worked best for their particular fishery and in their particular area.

To illustrate this point the Northumberland Strait-type boats we see predominantly along Nova Scotia’s north shore, evolved to have pronounced flare in the bow area to help knock down the short, steep waves often present in the Northumberland Strait. The fore and aft lines of the hull are straight and the bottom is relatively flat aft of amidships. The end result is an easily-driven hull capable of semi-planing speeds – well suited for the fishery of this area.



Northumberland Strait lobster boats

Courtesy of David MacDonald Boats, Doctor's Brook, NS

Compare these Northumberland Strait-style boats with the Cape Islander – a design of boat evolved to cope with the big swells and often rough seas of the North Atlantic off the southwest coast of Nova Scotia. Here, speed is not as big a concern as the ability of the boat to safely ride large, often breaking seas, while carrying a load of lobster. The Cape Islander style of lobster boat is easily recognizable with its high bow, stepped sheer line, and high freeboard. The hull is typically of displacement form, meaning its top speed is a function of its length at the waterline – no matter how big the engine is.

Meanwhile, other influencing factors appeared that were not driven by technology changes, but by government rules, regulations and licences created to help manage the fishery, and to help make fishing safer.

In the lobster fishery, as with many other fisheries in the Western world, efforts by designers and builders to optimize hull designs for best at-sea performance are often at odds with the challenge of complying with government rules and regulations – resulting in vessel shapes that might bewilder students of naval architecture.

Lobster Boats of today

With the scene of the development of Nova Scotia's lobster boats now set, let's take a look at the fleets of lobster boats we find around the coast of the Province today.

In the Northumberland Strait area of the North Shore, you'll see that the lines and shape of the hull actually haven't changed that much from days of the early, gasoline-powered, wooden-built, edge-nailed boats. While the hulls and topsides are now fibreglass, not wood, the fishermen have optimized the design over time to work well for their particular fishery, and in their particular waters.

In southwest Nova Scotia the situation's a bit different today than 30 or 40 years ago. Nearly all the lobster boats are of fibreglass construction, and their length is dictated either by the Fisheries & Oceans and/or Transport Canada. This has resulted in boats with very low length-to-beam ratios as designers are challenged to create as much boat as possible within a given length limit.



Typical Cape Island-style lobster boat of today
Courtesy of James E. d'Entremont Boatbuilders, Lower West Pubnico, NS

As mentioned earlier, students of naval architecture may gaze in wonder at these boats whose shape appears to defy what they were taught at school, but if you ask the owner or crews of these boats - they will tell you how well they perform at sea, and how stable they are.

Given all this, the Nova Scotia lobster boat has a good reputation as being reliable, strong and seaworthy. They are the heavy duty pick-up trucks of the sea, and are fondly referred to as "Novi" boats by fishermen along the east coast of the US. To support these statements, Nova Scotia Boatbuilders Association staff have often heard young US fishermen comment : " . . . one day, I'll own a Novi boat. They're awesome!"



Nova Scotia lobster boat safely riding the seas
Courtesy of Wedgeport Boats, Wedgeport, NS

We agree.

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