



## Improvements in Fishing-boat Design

Fishing boats were being improved during the whole of the 19<sup>th</sup> century and particularly after the great disaster at Wick in 1848 when 41 boats and 37 men were lost while trying to enter the harbour during a severe storm that caught the fishing fleet at sea. After that disaster the Government set up a board of inquiry under the chairmanship of Captain Washington in order to establish if anything could be done to reduce the heavy loss of life at sea. One of the most important recommendations of the Washington enquiry was that more decked vessels should be built.

Until then most of the fishing boats around the north coast of Scotland were open boats, but by the 1840s there were some half decked boats, and even some fully decked boats beginning to appear. However, like most other innovations, the Washington recommendations for fully decked boats were received with scepticism by many fishermen who thought that such boats would be clumsy and unworkable.

Fifie and Scaffie design boats were the usual kind of fishing boat in use round the coast of Scotland until experiments which took place in the latter part of the 19<sup>th</sup> century to find a more suitable fishing boat for the conditions that existed round the north of Scotland came up with a new design.

The first of the new design fishing boats was launched on 7<sup>th</sup> December 1879 at Asher's boatyard at Burghead. It was called the 'Nonsuch' probably because there was nothing like it before. At that time the war against the South African 'Zulu' Chieftain, Cetawayo, was being fought and the newly designed fishing boat was duped 'Zulu'. This name remained with them until the last working one of them was laid up in Lewis in the 1940s.

An east coast of Scotland tradition relates that the new fishing boat design came about as a result of a dispute between a newly married couple who wanted to order a new boat. The wife preferred the Scaffie design because that was the kind of boat that her father had, whereas the husband preferred a Fifie design of boat. In the end they agreed to compromise like all sensible married couples, particularly as she was defraying half the cost. The compromise was that the forepart of the newly designed boat was to be designed along the lines of a Fifie and the after part along the lines of a Scaffie, resulting in an entirely new design of hull which incorporated the best features of the old and tired Scaffie and Fifie designs. The new design embraced the straight stem of the Fifie and the raking stern of the Scaffie, hence the Zulu design.

In the 1870s and the 1880s the herring shoals moved further out from the shore of the north of Scotland and that brought about the need for larger boats, therefore the Zulu design of boat was the answer to the herring fisherman's prayer, boats with a steam driven capstan as an aid to hauling their nets. They would come about almost within their own length, and yet storm out to the distant fishing grounds in boisterous wintry weather in search of the silvery herring. They carried a lot of canvas and the least puff of wind gave them steerageway. They could also advance to within two points of the direction the wind was blowing from.

The beam of these boats was 20-22 feet, draught forward was 3-4 feet and draught aft was 7-9 feet, their overall length was from 75-80 feet. Some had a more angled stern than others. Their keel was usually of beech, their stem, sternpost and frames usually of oak, the hull and deck planking was of larch, 2 inches thick. From the 1870s carvel built boats began to replace clench built boats and therefore the fish shaped streamlined Zulu boats were all carvel built. Above the waterline they had three rubbing streaks for the protection of the hull.

They carried two masts and three booms. In their original form as they came from the builders they were rigged for fore jibs, cross jib, main sail, jigger, mizzen and spanker. It is said that the jibs which were made of light duck contained more square yards than the main sail, but were seldom used except on long journeys to the east coast or to Yarmouth in East Anglia.

Hove-to at the end of their fleet of 70-80 herring gill nets, (each about 36 yards long), they used the spanker or mizzen sail to steady the boat. Their tall tapering foremast towered above the deck to about 60 feet high. It was about 21 inches diameter tapering to 9-10 inches and raking slightly forward. It was from 16 inches at the base to 9 inches diameter at the top.

At the front of the mizzen mast was the powerful steam capstan which came into use in the early 1880s. It was fed by an upright steam boiler installed in the crew's cabin directly below where the crew slept, ate and cooked their food on a stove with guard rails for stormy weather. The table in the centre of the cabin floor was fixed permanently and also had guard rails. This was because these boats could roll and were the bane of those with

squeamish stomachs as many hundreds of young coilers learnt to their cost, particularly during the prevalent north easterly gales in May/June, gaoth 'n ear na còcairean.

The main sail was usually hoisted by the steam capstan by means of four-sheaved wooden blocks, which required three men in rough weather to move them across the deck from Gunwale to Gunwale. They were steered by a horizontal wheel with perpendicular handgrips, often painted in a variety of colours in order to give lustre to the steering gear. The skipper steered his charge in a sitting position with his feet wedged tight against the lee timbers for support. In that precarious position on the heeling deck, he had a good view of the trim of the sails and he had the spirit compass at eye level.

In conditions of strong wind, two men might be required at the wheel to keep her head out of the wind, such as at times when the skipper pressed his boat for all that it was worth in order to catch the market and avoid having to dump his valuable catch of herring back into the sea.

On one such occasion the well-known skipper Donald MacIannan, Marvig 'Domhnuill Cuagach' in the 70 foot Zulu, 'Cawdor Castle', in the late 1920s with a crew of Calbost men, called for the full canvas and asked 'Iain Ruadh' as usual to come down to assist him with the wheel after hauling their nets off Ruadh Gairloch with a good catch of herring. As they approached the entrance to Stornoway Harbour she keeled over with her Gunwale awash in the swirling sea which she scattered in a smother of foam. The east coast drifters coming out of the harbour scattered to either side of the channel in order to give way and admire the sight of their favourite craft going through her paces. In the morning many east coast fishermen came round to congratulate skipper MacIannan.

Skippers were appointed on their merits by the other members of the crew who were then duty bound to obey the skipper's commands. The discipline was quite remarkable and crews functioned harmoniously. Skippers did not normally carry out any Board of Trade Certificate or Diploma of any kind. Nevertheless they were well versed in chart reading and all necessary nautical knowledge, as indeed they had to be in order to survive as they followed the herring shoals all round the east and west coasts of Scotland and sometimes as far afield as the English East Anglia fishing ports. Sometimes some of them even acted as pilots for large ships moving in and out of anchorages and through the treacherous Sound of Harris with its numerous submerged rocks and sandbanks.

The Zulu was a safe boat, and more than one writer described the Scottish Zulu fishing boat as the noblest sailing craft ever designed in the British Isles. Be that as it may, these boats were certainly the embodiment of grace, strength and power.

An old experienced reliable fisherman once told us that it was safe enough to press a large Zulu boat to the point where some of the deck boards were under the seawater. He himself witnessed the herring being washed overboard from the deck, as the boat heeled itself over under the stress of the canvas.

The crew of a big Zulu was 6 or 7 men and a boy, with an extra man in winter. The boy's duties were to cook the food and coil the heavy three-and-a-half inch tarred spring rope, sometimes referred to as the messenger or lead-rope, hence the boys were known as coilers.

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