

Sewboat

AFTER CENTURIES of hewing heavyweight canoes out of logs, suffering wet, uncomfortable voyages and capsizing a lot in choppy seas, a smart thinking stone-age builder came up with a scheme for sewing planks with animal sinew to the gunwales to prevent water washing in.

The idea caught on and was eventually exploited by the Vikings, who made fleets of fast, light ships out of sewn-together boards and used their ocean-going armadas to conquer northern Europe.

The problem with sinew, however, is it rots or fish nibble it, so they were high maintenance boats. It wasn't surprising that civilised-world shipwrights starting switching to iron nails when they came on the market about 2000 years ago, leaving sewn-boat technology to the Eskimos. And Julian Godwin of Howick, Auckland.

Godwin, a very young 70-year old with mariner's bushy grey beard and overhanging eyebrows, resurrected the technique 27 years ago using modern materials. He designs gates for hydro dams as a living, but has built boats in his spare time since his youth. His largest project was a 8.8m conventionally constructed kauri keeler, the Odtaa, built in 1949, which he still uses to cruise Northland waters, but since 1968 he's been dedicated to making stitched-together dinghies.

Godwin got the idea from the British boatbuilders and experimented with making hulls from a new construction material, marine plywood, stitching it together with copper wire and covering the seams with fibreglass.

"The big advantage was that you could dispense with the internal framing onto which you usually nailed ply, thereby making the craft much lighter and more durable", he says. "Nails or screws are the weakest point in conventionally constructed boat. They either corrode or water leaks through the puncture holes and that's where rot starts".

Of course, copper wires used by the British also corrodes, so he played with rot resistant synthetic fibres instead.

He tests each new design by making a pint-sized model out of cardboard, pulling it together with his wife's needle and thread. Then he makes a pattern - just like a dress-maker's pattern - and cuts the shape out of four millimetre plywood. It looks like a cut-and-paste toy cut off the back of a giant cereal packet.

Godwin drills stitch holes in the plywood and uses a stainless-steel wire to pull through two-millimetre thick Terylene thread. Then he pulls the thread so edges are drawn together, and covers the stitching with fibreglass tape.

It takes him about three days to string each dinghy hull into shape. The gunwales are stiffened with Kauri beading which is also sewn in place. Even the bulkhead covers are stitched on. He refuses to use a single nail or screw in his boats.

"Fibreglass resin sinks into the thread, binding it to the ply surface and preventing stretch. That, in combination with the glass tape makes each joint incredibly strong," he says. "one of my earlier models flew off the roof of a friend's car at 30 miles an hour and crashed on the road and suffered only scratching. Structurally it was in perfect health".



Julian Godwin - with passengers Kate Greenaway and Polly - test-rows one of his light, durable, sewn-together dinghies.

His latest model is a 3.6 sailing rowboat. It's not as though he needs another one - he has dinghies stashed under tarpaulins around his Howick section - but he loves playing with avant-garde boatbuilding techniques.

Standard dimensions for marine ply is 1.2 x 2.4 metres, so that if you want a longer boat, you must join sheets end to end. Traditionally, builders plane the ends of each sheet to a taper, then glue them together with the wedged surfaces overlapping. But it's difficult to get a neat edge so Godwin's latest idea is not to taper them but instead square cut the ends of both sheets into perfectly matching zigzags, then glue and butt them together. His longest sewn boat is 4.2m but he's already made a model for a 6.4m vessel.

There are now 30 of his boats all around the world, mainly used as tenders for ocean-going yachts, yet he hasn't sold a single one. "I just give them away to friends or help them build their own," he says. "I'm not interested in producing them commercially, though maybe one day I'll get around to drawing up some plans and selling them, he says. For me, the fun is in the innovation".

Mark McLauchlan ■