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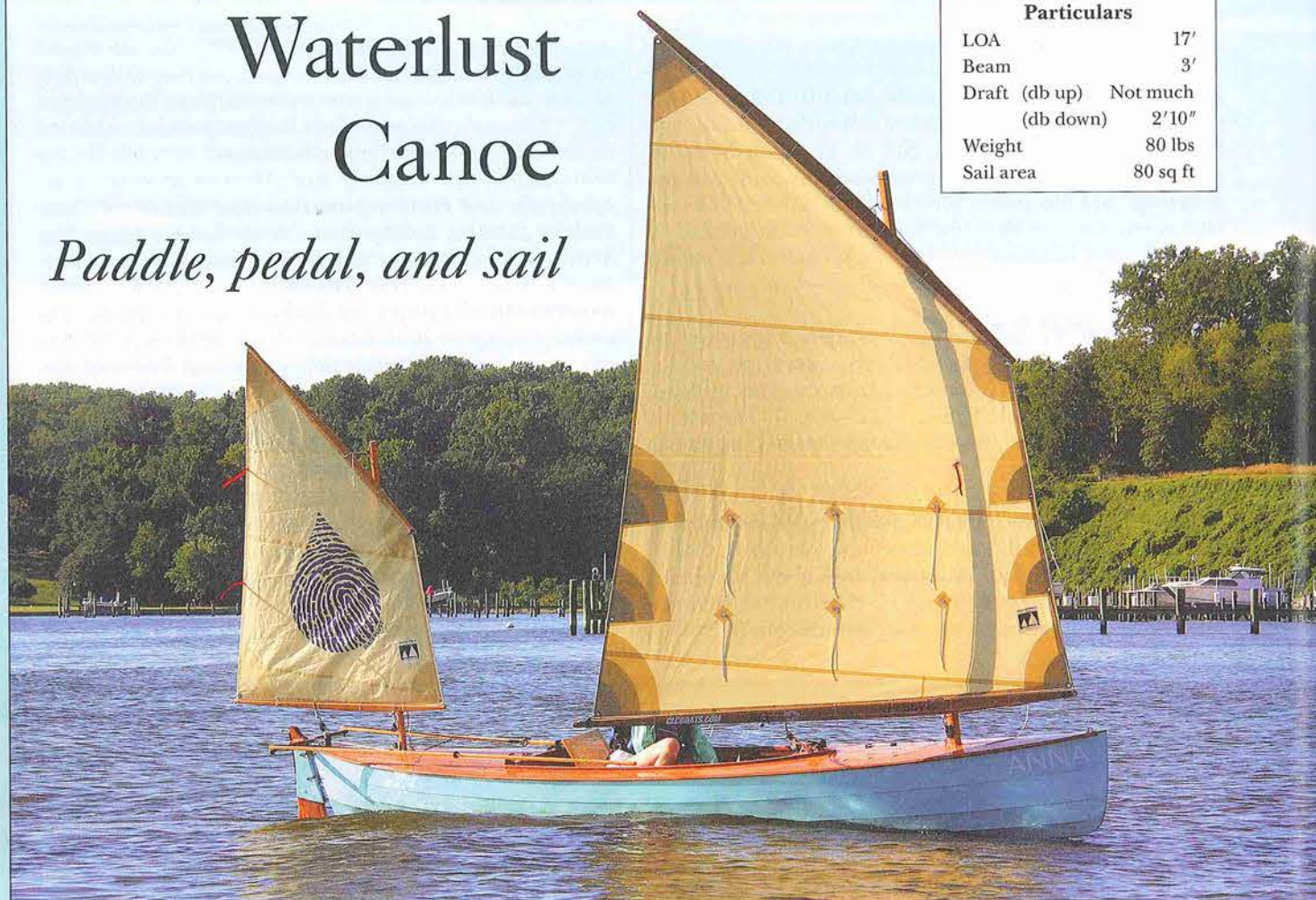
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Waterlust Canoe

Paddle, pedal, and sail



Particulars	
LOA	17'
Beam	3'
Draft (db up)	Not much
(db down)	2'10"
Weight	80 lbs
Sail area	80 sq ft

Design by Dillon Majoros
Commentary by Mike O'Brien

Here's a good little boat that will take us across the bay to its far shore, where we might rest in that secluded cove out back of beyond. When the time comes for our return to the workaday world, the 17' Waterlust sailing canoe can ride atop (or behind) the old family car.

Dillon Majoros of Chesapeake Light Craft (CLC) designed this appropriately named canoe for the folks at Waterlust, an organization that combines marine science, sport, and art—and makes videos about all of it. These young people, working

with the CLC crew, built a matched pair of prototype canoes at CLC's Chesapeake Bay shop in just three weeks. They then paddled, pedaled, and sailed down the Intracoastal Waterway to their home base in Florida.

Let's take a look at this striking and competent canoe. Waterlust gives us the option of traveling by paddle, pedal, or sail. A simple double-bladed paddle will allow us to move along while pleasantly seated and facing forward. This paddle, unlike most oars, doesn't rest on a fulcrum; the resulting freedom lets us employ a

variety of strokes and braces for sport, fun, and safety. Of course, comfortable life jackets should be worn when we're aboard any small boat.

If we tire of paddling, Waterlust offers the option of pedaling with the Hobie MirageDrive. This well-engineered device will let us propel our canoe to hull speed by pumping our legs. It consists of pedals connected to a couple of flexible fins that extend below the hull and oscillate from side to side. Viewed from underwater, the smooth motion of these fins seems almost lifelike. (Follow the Hobie link at

the end of this review to find an enlightening video.)

Although the Mirage fins are reasonably sturdy, we'll want to be careful as we pedal through extremely shallow water. To avoid damage, we might push the pedals far forward; this will cause the fins to swing up and rest nearly flush against the bottom of our canoe. We can still move along by employing a "flutter stroke"—that is, we'll keep our feet far forward and use only the first few inches of the normal full stroke. When a rough landing on a rocky shore seems likely, let's grab the double-bladed paddle and stow the

MirageDrive. It lifts easily out of its trunk as if it were a daggerboard.

I've experienced the MirageDrive only aboard a short, fat, sit-on-top "kayak" intended for fishermen. This bright-yellow plastic contraption proved quite maneuverable and brutally stable, but fast it was not. Installing a MirageDrive in the long and slender Waterlust canoe seems a great idea! If we lose upper-body strength to injury or age, we can keep on pedaling.

This pedal drive, when combined with the lug rig, gives us an option of "motorsailing" in light-to-moderate breezes. We're told the experience will be "as natural as walking." Even so, we might take a few minutes to become accustomed to that push-pull tiller before motorsailing through the harbor within view of spectators.

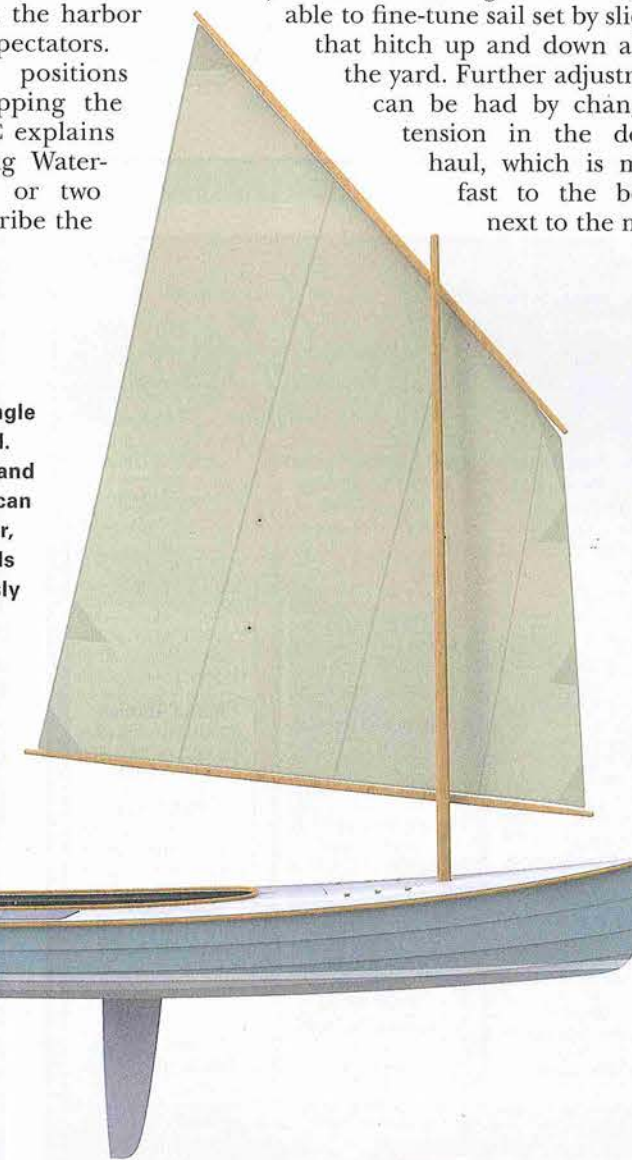
With two positions shown for stepping the mainmast, CLC explains that we can rig Waterlust with one or two sails. They describe the

two-masted rig as a yawl, but some folks will classify it as a ketch. This question of definition can make for a lively discussion. Many books differentiate between these rigs according to the location of the mizzenmast...ahead or abaft the rudderpost or the after end of the waterline. However, functional definitions might prove of more value here. Aboard a ketch, the mizzen provides significant force for propelling the boat. Aboard a yawl, the small mizzen serves primarily for balance and control. As may be, the specified balance lugsail holds many advantages. Its relatively short spars are easily handled and stowed, and it doesn't require much hardware.

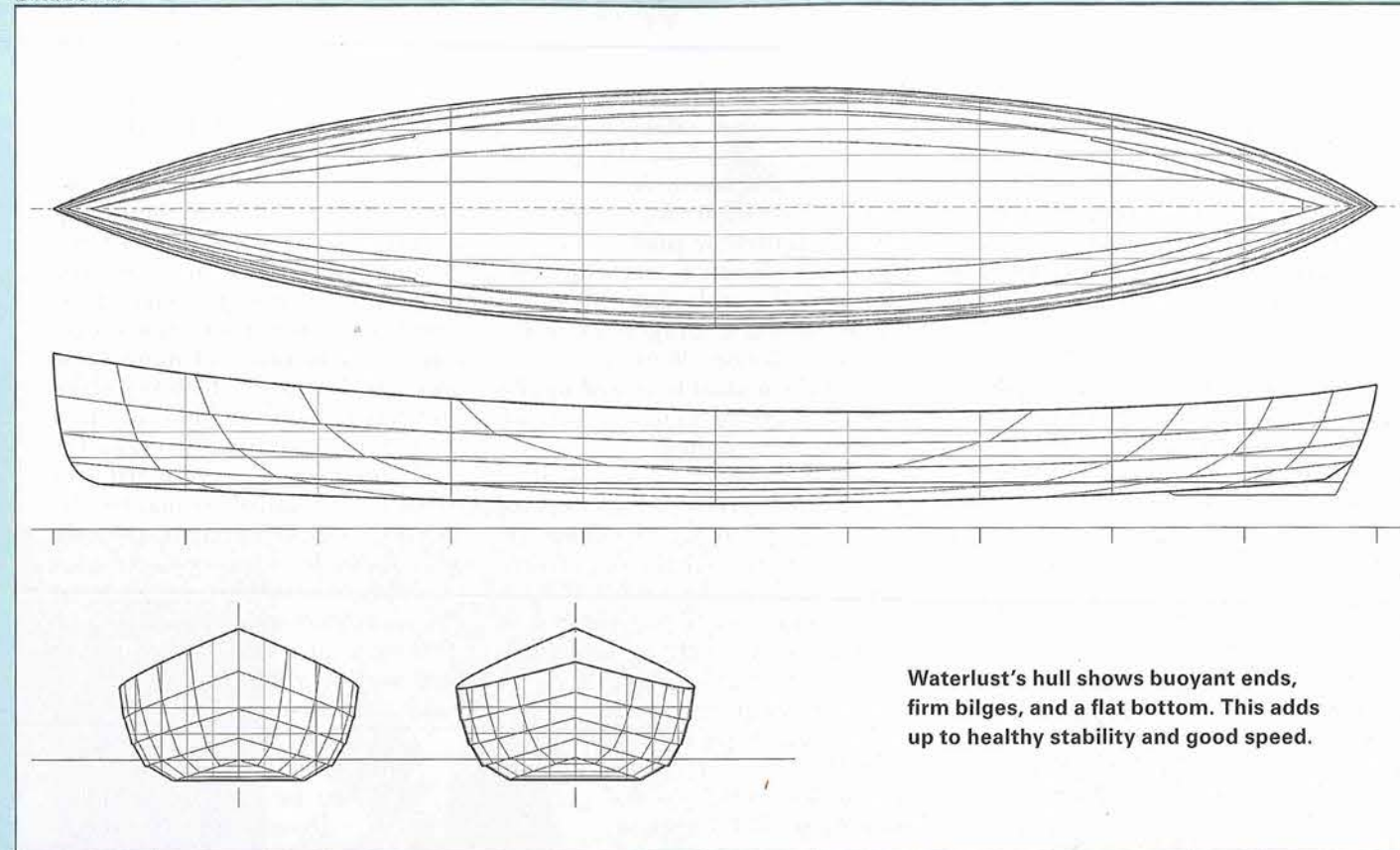
If we secure the halyard to the yard with a rolling hitch, we'll be able to fine-tune sail set by sliding that hitch up and down along the yard. Further adjustment can be had by changing tension in the down-haul, which is made fast to the boom next to the mast.



Waterlust sails with a single mast (above) or as a yawl. A double-bladed paddle and a Hobie pedal drive also can provide power. In light air, we might employ the sails and pedals simultaneously for "motorsailing."



Above—The Waterlust canoe is meant to be pedaled, paddled, or sailed. A pair of prototypes, built in just three weeks, traveled on their own bottoms from Chesapeake Bay to Florida.



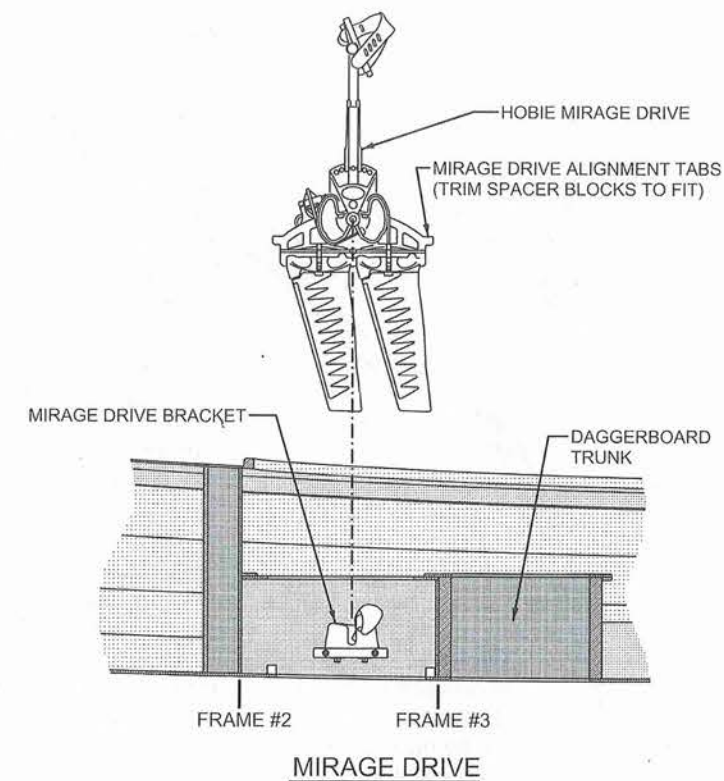
Waterlust's hull shows buoyant ends, firm bilges, and a flat bottom. This adds up to healthy stability and good speed.

This arrangement also provides an automatic boom vang, which helps to control sail twist. If the sail's clew tries to lift the outboard end of the boom, tension in the taut luff holds everything in place. Let's ask our sailmaker to work a little hollow (concave curvature) into the leech of each sail. This will avoid folds and wrinkles, and it should preclude any need for battens.

A lugsail takes well to reefing because the center of the sail when reefed doesn't move much forward. The designer points out: "Two reefs in the main and a stowed mizzen drop the sail area from 80 sq ft to 36 sq ft." That's comforting. Yet if the breeze comes on really strong, we might be tempted to drop everything that will come down without an axe... and then paddle or pedal for cover.

When drawing Waterlust's hull, Majoros began with the spirit of a classic 19th-century sailing canoe. He gave this new hull more volume and fuller ends in a search of "increased carrying capacity, stability, and performance under sail."

The Hobie MirageDrive makes fine use of the power in our legs. When not needed, the unit easily lifts out of its trunk.



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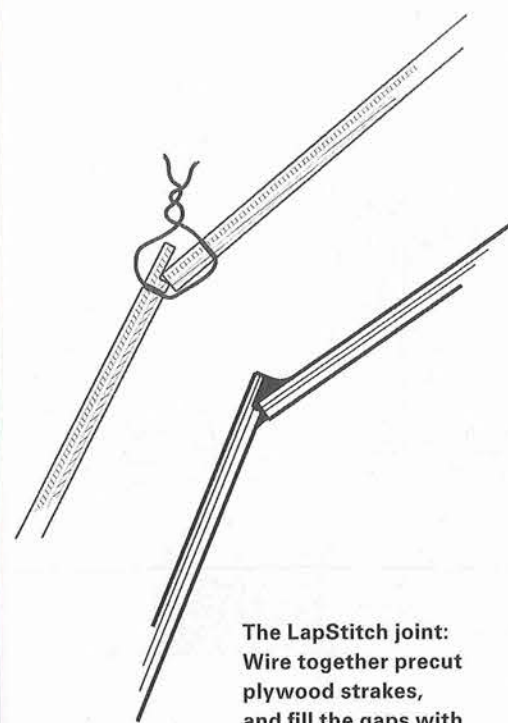
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The LapStitch joint:
Wire together pre-cut plywood strakes, and fill the gaps with thickened epoxy.

Firm bilges and a flat bottom add to initial stability. That flat bottom also will help our canoe stand bolt upright on the beach, and it will let Waterlust slide across the sand easily as a toboggan—no small matter at the end of a long day.

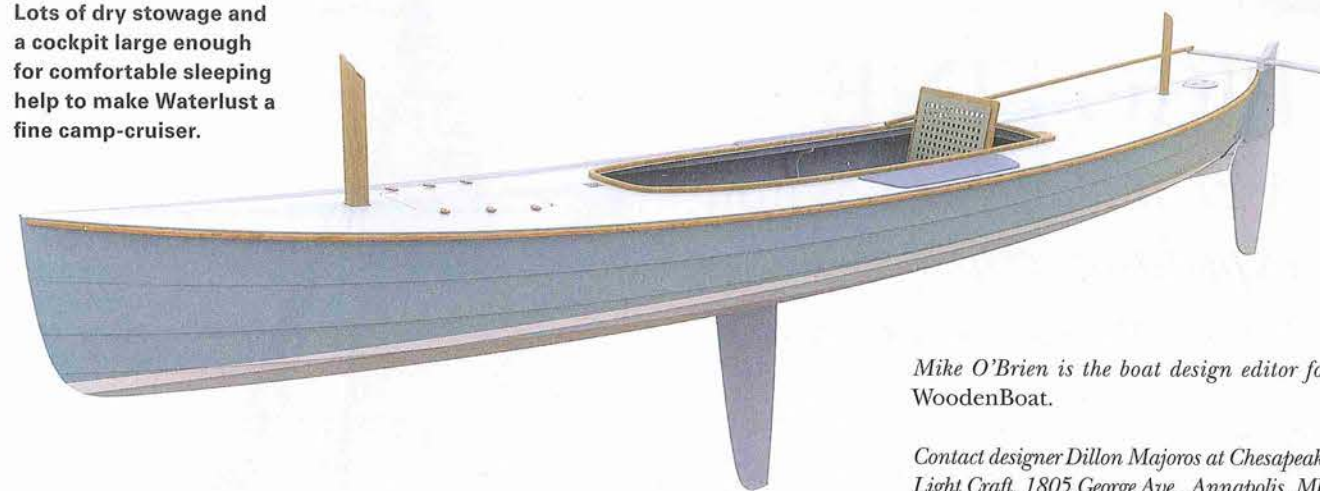
This hull goes together using the LapStitch method, which is CLC's version of glued-lapstrake construction. A constant 90-degree rabbet gets worked into the lower inboard edge of each plank. The square upper outboard edge of the adjoining plank fits into the rabbet, and wire ties hold everything together in stitch-and-glue fashion as we build the hull. Ah, you say, but there is no rolling bevel; therefore, the strakes cannot mate perfectly. True, but we'll fill the voids with silica-thickened epoxy. Working on the inverted stitched-together hull, we'll inject that goop along

the length of each rabbeted lap. Gravity will be our helper.

How does LapStitch compare to common stitch-and-glue multichine construction? If we're after a yacht finish, LapStitch hulls tend to go together more quickly because they require much less sanding and fairing. And some of us prefer the appearance of a LapStitch (lapstrake) hull because shadows cast by the laps help define the sweet lines of a good-looking hull.

Will Waterlust's hull be strong enough? CLC's owner, John C. Harris, tells us: "LapStitch boats now number about 15,000, and I've yet to have one 'unzip.' We've had some demo models destroyed in auto accidents (alas), and the planking tore laterally instead of ripping apart at the seams. There's actually more gluing surface than in glued-lapstrake planking."

Lots of dry stowage and a cockpit large enough for comfortable sleeping help to make Waterlust a fine camp-cruiser.




Mike O'Brien is the boat design editor for WoodenBoat.


Contact designer Dillon Majoros at Chesapeake Light Craft, 1805 George Ave., Annapolis, MD 21401; 410-267-0137; dillon@clcboats.com; www.clcboats.com.

You can learn more about the Waterlust venture at www.waterlust.com.

A video of the Hobie MirageDrive in action can be found at <https://www.hobie.com/miragedrive/>.

In addition to daysailing (and paddling and pedaling), we can take Waterlust camp-cruising. Sealed compartments offer plenty of dry stowage, and the cockpit sole is large enough to allow comfortable sleeping. For protection, and a modicum of privacy, a tent rigged to the

coaming should get us through the night. At first light we'll pedal off into the morning calm. When the sea breeze makes up, we can sail to wherever. Later, as the thermal fades, we might paddle home... or perhaps we'll head back to that secluded cove. 




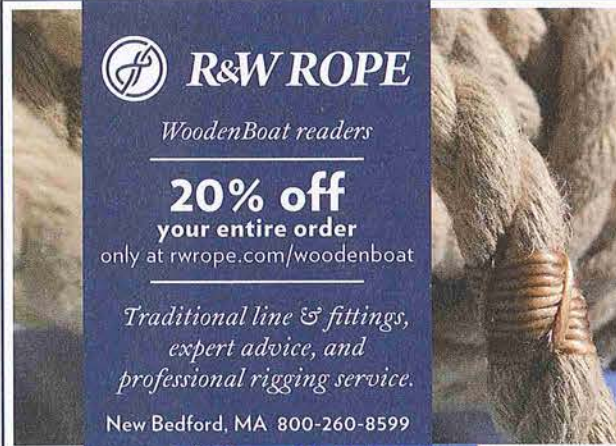
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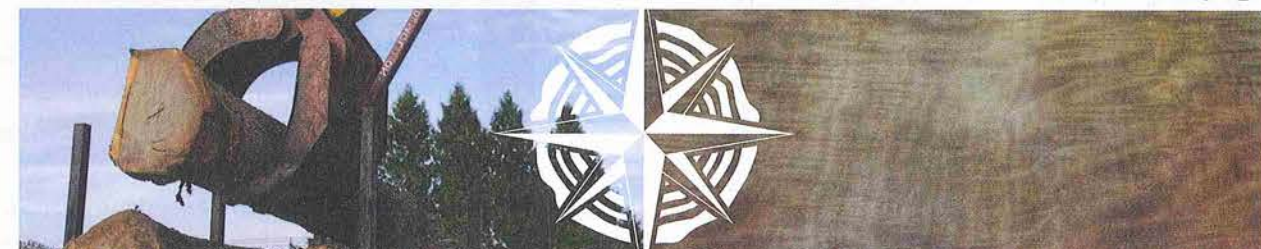
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