

HARD WATER SAILING

BY JUDY DUNSTAN

Michael Dunstan, our son and a Squadron Member, first experienced the thrill of hard water sailing while living in the Netherlands. Now resident in Montana, USA, he has recently purchased a DN iceboat.

Jim and I were present when Michael acquired the boat, which is kept during winter at Canyon Ferry Lake, a large reservoir on the Missouri River in western Montana. Michael and Jim were keen to experience hard water sailing, so took the boat for a spin under the watchful, and no doubt bemused, eye of local sailors. They described the experience as frightening but fun. They experienced the greatest unease when turning downwind from an upwind course. Continuing the bear away despite the unnerving and 'unnatural' acceleration took mental strength; chickening out would almost certainly result in a spin and possible ejection from the boat. High on adrenalin, they competed for the fastest ride, all the while dodging ice fishermen and their huts, tents and auger holes. Jim won by a whisker at 43kts!

On day two of sailing, Michael was joined by Nick Cleary, a New York-based RSYS Member, and Andrew Cochrane from Sydney. Fresh from sailing with Michael and winning a VX One Winter Series event in Pensacola, Florida, they too were keen to test their mettle on hard water. It was another adrenalin high. With more wind

Jim Dunstan in the cockpit being supervised by Michael.



and better ice, the top GPS-recorded speed was 45kts on a downwind run, despite sailing with sheets eased to help reduce the fear. They were confident that Andrew broke the 50kt barrier on one of the two-handed iceboats owned by a local ice sailor. Michael returned from one sail with his face bloodied by ice shards thrown up from the front runner when he didn't put the face shield down on his helmet.

Iceboating evolved from cargo and passenger transport to a pastime and sport around the end of the 19th century. The iceboats were stern steerers and built for speed. They were large, made of wood, sailed by six or seven crew and reached speeds which, at the time, were the fastest ever attained by any vehicle on land or water. The largest of these boats, an unlimited A Class stern steerer called *The Deuce*, designed and built in 1930, is still sailing following a rebuild in 2006. She is just over 16.6m long, nearly 11m wide, 16.5m tall and weighs 1,633kgs. She carries 74m² of sail and is said to have sailed at over 90kts.

The modern iceboat is supported on three sharpened metal blade runners for skating over the ice. It has been described as something like a sail-equipped bobsled. The crew normally lie feet forward and steer a single steering runner by tiller, wheel or foot pedals. Most boats carry only one sail, one or two crew, and rarely have brakes. Helmets are mandatory as are ice claws for any unplanned break throughs into icy water. While some boats have high-tech construction, carbon fibre bodies and fully enclosed canopies, most iceboats are more humble: lovingly handcrafted



Left: Some of the fleet at Canyon Ferry Lake.

Below: Michael Dunstan at the helm.

in hobbyists' garages, made of plywood, home-fabricated hardware and hand-me-down parts. Design development has led to several classes of iceboat, with two dominating: the Skeeter, described as the Formula 1 of iceboats with a hull 6.7m long and capable of 90kts, and the DN (Michael's boat and the world's most popular iceboat class) with a hull 3.6m long, 2.5m wide, a nearly 6m mast carrying 5.6m² of sail and capable of 60kts. DN world championships regularly have more than 200 entries.

Conditions for iceboating are simple. Smooth 'black' ice is preferred with a minimum thickness of 8-10cms. With the right ice, iceboats will easily sail in 4-5kts of wind. In the right conditions, the fastest modern iceboat can sail 8 to 10 times the wind speed. Serious courage is required above 18kts. Some days and lakes are better than others, but iceboaters nevertheless value the camaraderie that waiting around for the right conditions engenders. Michael's Montana group have been generous with their time and support. Iceboat racing is like its soft water cousin with some differences. Typically, a date range and a region are scheduled, then the best ice is scouted in the days before the regatta starts. Last minute and even mid-event venue changes are not uncommon. The 2022 World DN Championship switched from Sweden to Norway after the first day of competition when heavy snowfall made the first venue un-sailable.

Races start with boats lined up in a straight line for an upwind start; their order determined according to previous finishes, and with half the fleet on port tack and the other half on starboard.

The race is started with the drop of a flag. Like Olympic bobsledders, the racers have spikes on their shoes and push their boats until they start to accelerate and then scramble aboard. For safety, boats approaching head-on must both veer right; a leeward boat must keep clear of a windward boat sailing downwind.

Michael's boat is now registered on the Squadron Yacht Register. Her name is *Fier*. The pun is intended, but the word is also an old Dutch word meaning proud, high spirited and was the name of his canal boat while in Amsterdam.

It is worth scouring YouTube for videos of these amazing boats in action! ⚓

