

SINK OR SWIM: SURVIVING AT SEA

BY TIM LEHNERT

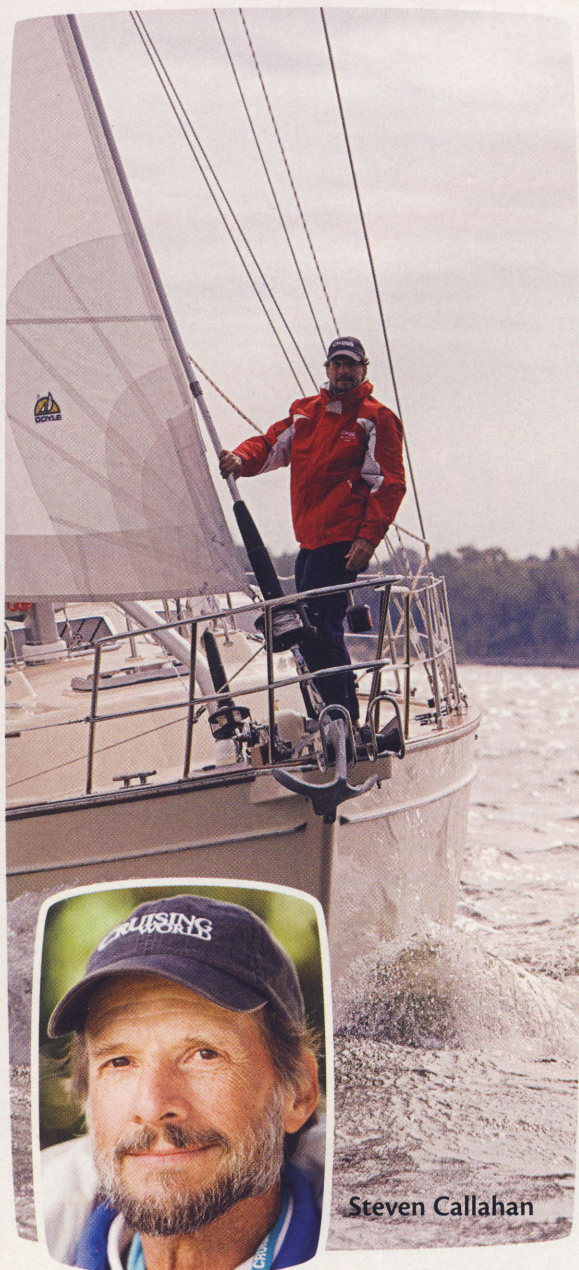
In February 1982, Steven Callahan's sailboat capsized, leaving him to navigate the Atlantic Ocean in a life raft 1.7 metres in diameter.

Callahan was bound for the Caribbean and had left the Canary Islands off the coast of Africa a week earlier. After his boat went down in a storm, Callahan traveled 3300 kilometres in an inflatable dingy that measured the length of a refrigerator. Callahan eventually made it to the Caribbean, after spending two and a half months in his raft.

SEA ESSENTIALS

Like anywhere else, if you're stranded at sea, you need water. Of course, you're surrounded by water, but it's undrinkable. Drinking salt water is worse than drinking nothing at all — it dehydrates the body. Callahan limited himself to a mouthful of fresh water every six hours. The two solar stills he had on board barely worked. These devices use the Sun to remove the salt from water. Callahan spent much of his time fixing and monitoring the stills, trying to coax some drinkable water from them.

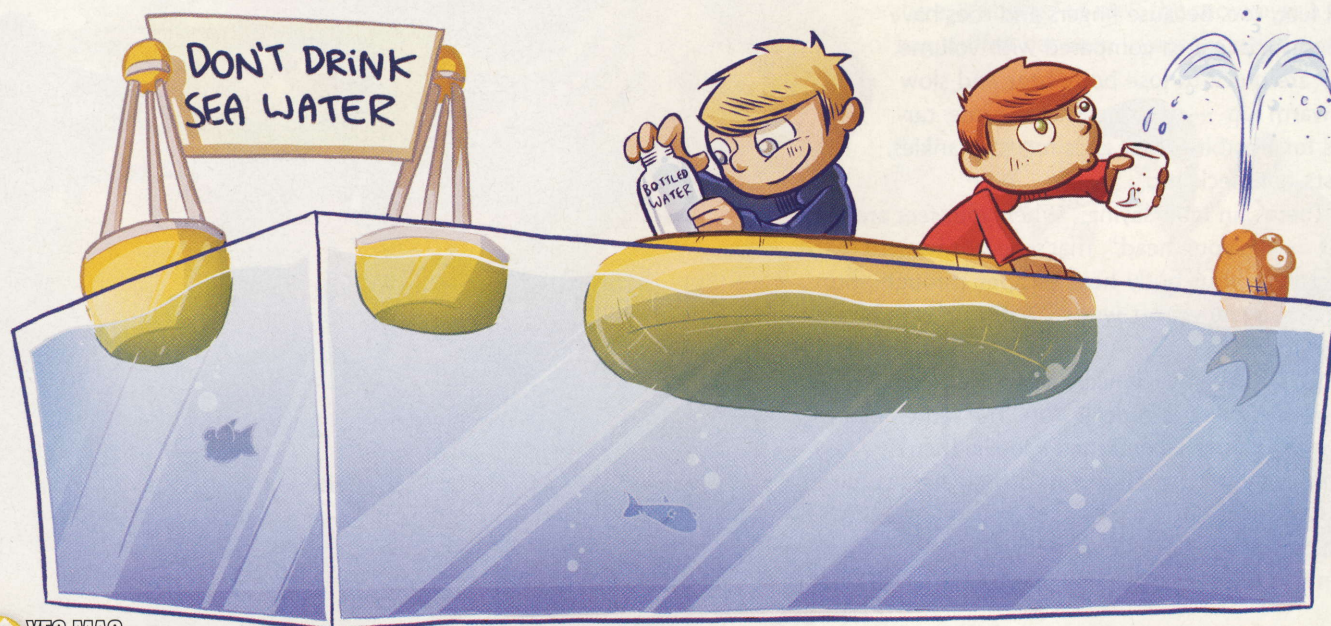
Food was less of a problem because at sea you're surrounded by food. Fortunately, Callahan had a spear gun. He would hang over the side of the raft and wait for the metre-long mahi-mahi fish to offer a good shot. When the spear tip disappeared in an escaping fish, he made a new tip using two knives tied together. He ate the fish raw, including the eyes and



Steven Callahan



- Polynesian sailors carried pigs on their boats.
- Pigs have a good sense of smell and get excited when they smell land.



Billy Black (2)

Sam Logan

Sam Logan and Philip Remy

THE COLD WATERS OF CANADA

In Canada's coastal areas, water temperatures are often frigid, even in summer. Hypothermia is a bigger danger to a person overboard than drowning. Hypothermia occurs when the body's core temperature drops because it is losing so much heat. [See Hypothermia, page 19.]

In the 1970s, researchers at the University of Victoria in British Columbia did some of the first studies on hypothermia and how it affects the body. As a result of their findings, they developed the Thermofloat coat. This life vest was specially designed to prevent the body from losing heat. The Canadian Coast Guard in Victoria has credited the invention with saving many lives.



organs. If he found smaller fish undigested in a mahi-mahi's belly, he ate those, too. Eating the wet flesh and drinking the blood provided Callahan with fluids. You need more water to digest food that's high in protein, like fish.

The sailor supplemented his fish diet with barnacles stuck to the raft and the occasional seabird. When a bird landed on the raft, Callahan grabbed it, and twisted its neck. Dinner.

SHELTER ON THE SEA

Shelter is another challenge. The raft's small canopy offered little protection against the elements, and the raft leaked and had to be pumped up frequently. It flooded several times, and was attacked by sharks, which fortunately failed to pierce it. The raft's lower tube did eventually suffer a major puncture, and Callahan would have drowned had he not ingeniously repaired it using a fork handle and fishing line.

The longer Callahan was at sea, the worse things got. While Callahan could stand when the sea was calm, he often sat or


crouched in several centimetres of salt water. Salt water irritates the skin, so he developed painful sores. Callahan grew weak, the Sun scorched him, and his equipment began to fail. His attitude is what kept him going.

STRESS AT SEA

Now a survival expert himself, Callahan stresses the same advice other experts give: it's vital to find meaning, even when things seem bleak. Initially, he felt depressed, but still established a routine. "I tried to normalize my life," Callahan says. "This is the continuation of my journey I told myself, not the end." Experience taught him that once a person escapes the immediate threat, it's important to be active and work toward the goals of survival and rescue.

Even though Callahan was technically lost at sea, as a sailor he had a good idea where he was going. He determined his speed by measuring the time it took for pieces of seaweed or paper to travel from the raft to a pole dragging behind the boat. During the day, he oriented his direction using the Sun. At night, he used three pencils tied in a triangle to gauge the altitude of the North Star above the horizon to give him his latitude.

When he saw birds, he knew land was close. But would he make it? After over two months, the raft was in poor shape, and so was he. On day 76 of his raft voyage, he saw a lush island, and soon after a small fishing boat picked him up. Callahan was dehydrated, could barely walk, and had lost 20 kilograms, but he'd made it.

You might think that Callahan would swear off boats after his near-death experience, but not at all. Over the past 25 years, he has logged many more voyages, a number of them solo. Callahan stresses training, experience, and good equipment. "Everything is a risk in life," he says. 

Fourteen days into his unexpected sea voyage, Steven Callahan saw a ship pass in front of him. He set off flares and started throwing his gear into a sack, thinking he would be rescued. But the ship never saw him and kept going. This heartbreaking scene happened several more times.

