SOLO PADDLER. *Saganaga Lake at sunrise*

II The Dream of a Canoe

Long ago my smoldering dream of exploring the north woods flickered into bright flame when my dad announced after a trip to the Minneapolis sports show that we would buy a canoe. He had brought home a brochure that pictured a two-toned craft made of fiberglass, with an upswept bow and stern as swoopy as fins on a '59 Cadillac.

Looking back, I realize it was probably a terrible canoe—wide, slow, and heavy. Since no one was likely to turn it upside down to sleep beneath it, the exaggerated ends served no purpose except to catch crosswinds on the lake and obscure your vision when the boat was tied to the top of your car.

But back when I was eleven or twelve, I realized none of that. I thought only of possibilities—of traveling down the creek that flowed from the lake where we had our cabin, a stream too small and winding for the rowboat. Or of riding the rapids of a white-water stream. Or most of all, of packing tent and gear and disappearing down a wilderness waterway for days or even weeks, of traveling according to no one's schedule, but only as fast as the water and your effort would carry you.

In the end, my dad bought a different canoe—a serviceable aluminum boat fifteen feet long, and slow in the water. In later years I would abuse it in white water. But the first order of business back then, as I recall, was a trip into canoe country—my dad, my younger brother, and I. We didn't have great ambitions. Our gear was heavy. And with three of us, the fifteen-footer was severely taxed. We paddled several miles, made perhaps five very short portages, and set camp. There we stayed, crammed each night into a tiny army mountain tent, for the next three or four days.

It may have been a tenderfoot's trip, but it told me what I needed to know: There's a reason we call it canoe country, and it's not just the fact you see a lot of canoes in downtown Ely, our jumping-off point on the edge of the wilderness. The canoe is a keystone to the history and identity of the border lakes. The canoe is of

this land; and the land is of the canoe. Indeed, were it not for the canoe, we might not think of this place very much at all. The canoe has allowed humans to navigate this land for millennia. The canoe opened the door to the exploration not only of the Boundary Waters and Quetico, but the interior of North America clear north to the Arctic. And without the canoe, the border lakes wouldn't be the treasure they are today, for the simple reason they wouldn't be nearly so accessible and fun to explore.

Imagine the first people to reach the border country. Thousands of years ago, hunters followed vast herds of caribou along the retreating margin of glaciers and Glacial Lake Agassiz. It was a new and raw land—some of the last land anywhere without people. They traveled a rugged, nearly barren ground with tundra plants and stunted black spruce in the sheltering swales and lee sides of cliffs. But *how* did they arrive? By land? Or by water, paddling down the meltwater streams and new lakes in the bedrock and barren gravel?

With time, bristly spruce and, later, hardwoods and pine spread across the landscape. Melting ice and precipitation filled thousands of basins, and streams cut across the country like veins. Depressions filled with sphagnum and sedges. Water was everywhere, in every form, a confounding barrier to a person on foot, at least until ice formed in winter. It must have been a miserable land to walk. Ask anyone who has gotten turned around on a portage. Or any of the many hikers who have lost their way on the notorious Kekekabic Trail and wandered for days, their progress impeded by streams, lakes, black ash swamps, and peat bogs.

But to the clever human with a canoe, this water is a gift, a ticket to see the world. If the original inhabitants of canoe country didn't arrive by canoe, they soon developed the skill of building them. Throughout the Boundary Waters are sites where nomads camped 6,000 years ago. At some sites, according to one federal archaeologist, stone hammers and adzes exist among thick deposits of charcoal—too much charcoal to be accounted for by campfires or even wildfire. People seem to have been using hot coals and heavy stone tools to hollow out logs for dugout canoes.

We have no idea what these boats might have looked like, how big they were, or the cut of their bow and stern. No traces have been found. But dugouts are common throughout the world. It's easy to imagine that early inhabitants paddled them long distances on big lakes and the long arteries that run through the region, such as the Namakan, Rainy, and Big Fork rivers.

But if you've ever tried to carry a dugout, you know how hard it would be to leave these main waterways to hunt moose or set camp on some out-of-the way stream or landlocked lake. I paddled one once with forest rangers on a tidal stream in Java. When we encountered deadfalls across the waterway, it took six of us to lift the dense, waterlogged vessel. In canoe country 6,000 years ago, it would have taken a village to portage a canoe.

Then somehow, somewhere, a birch-bark canoe appeared. Did newcomers bring this technology? Did the knowledge spread from trading partners? No one knows much about the origins of bark canoes, in part because they are too fragile to survive in the archaeological record. But their appearance must have been revolutionary. A bark canoe weighs a fraction of what a dugout does. Now, a single person could paddle this radically nimble boat to the end of a lake and, instead of dragging it or leaving it behind, flip it to his shoulders and hike to the next body of water. Rocky shores or impassible waterways no longer prevented people from traveling farther in search of new hunting grounds. People would gain better access to staples such as wild rice and furs. They could travel more quickly, in smaller groups, in response to changing conditions and the seasons.

In creating a canoe, a builder constantly battles limitations imposed by his materials. The fragility of birch bark and the need for cedar sheathing and ribs to hold a shape set a minimum weight for a practical canoe. Ribs could be bent only so sharply to form the narrowing hull toward bow and stern. Early builders must have anguished over these compromises. The strongest canoe is not the lightest canoe. The fastest canoe does not turn most easily. The most stable canoe at rest is not seaworthy in the standing waves of rushing rapids or the wind-driven swells of open water. Facing these conflicting demands, the tribes of the northern birch country, from the Malecites of the Eastern Seaboard to the Ojibwe of the Quetico-Superior and the Gwich'in of the Yukon and Alaska, produced

canoes that were light, strong, and fast. Their shapes demonstrated great sophistication of design. Distinctive bow and stern profiles suggest tribal styles developed over generations or centuries.

The bark canoe had evolved to such a high achievement that European explorers and traders immediately recognized its superiority to their own carvel-planked bateaux, made with longitudinal boards. Canoes were faster and more maneuverable. A paddler, unlike a rower, faced forward and could easily see where he was going. He could carry his boat as he needed.

Early Europeans in the Boundary Waters region used the innovation just as they found it, except they built them bigger for carrying heavy fur-trade cargo. Canoes were "a rare example of an indigenous technology that completely replaced the imported technology," said Jeremy Ward, curator of the Canadian Canoe Museum. "To get into the interior, for a couple of hundred years anyway, the best way to do it was bark canoes."

Present-day *coureur de bois* Erik Simula lives at the end of a road, off the grid, near the eastern Boundary Waters. He likes "the old ways." Among other things, he builds birch-bark canoes, which he admires for their beauty and utility. Over the years he has studied their construction in "every way possible": extensive reading, trial and error, and dropping in on two masters of the trade. One was Henri Vaillancourt, the New Hampshire master that John McPhee profiled in *Survival of the Bark Canoe.* The other was Ray Boessel, Jr., the northern Minnesota canoe builder who learned the trade from the legendary Bill Hafeman. Hafeman built his first canoe because, as he once explained to me, he needed a boat for trapping and paddling nine miles on the Big Fork River to buy groceries.

Recently Simula built himself a "hunting canoe." Only thirteen feet long, with the upturned ends of ancient Ojibwe design, it is made for the solo paddler, traveling light, presumably to find game. Despite his canoe's diminutive dimensions, Simula loaded in his dog and an ungodly amount of gear until the boat settled nearly to the gunwales. Setting out in April, he paddled south from Grand Portage at the northeastern tip of Minnesota down the ice-strewn shore of Lake Superior before heading up the St. Louis River at Duluth. He retraced several historic Indian and fur-trade routes through northeastern Minnesota, finally heading east along the international

DUGOUT CANOES, *like these on the Amazon River in Peru, once provided water transport throughout the north woods.*

BIRCH-BARK CANOES, *such as one under construction by Ojibwe Indians about a century ago, were superior to dugouts because of their light weight. A contemporary bark canoe (right) scribed with the image of a moose.*

border—the famous voyageurs' highway that connects the Boundary Waters interior to Lake Superior. Simula arrived back at Grand Portage in August for the annual powwow and rendezvous held at the reconstructed North West Company fort. By that time, he had paddled 1,000 miles, toted his canoe down hundreds of portages, and dragged it over deadfalls and beaver dams. The little craft, forty-five pounds dry and ten pounds heavier when waterlogged from use, performed admirably. Along the way he had to re-gum the seams and repair sections of bark innumerable times. But that revealed the genius of the Indian inventors. They traded the weight and indestructibility of the dugout for a vessel they could carry. If a bit fragile, it could be completely rebuilt within a day with materials found in the forest.

Sometime in the days of the fur trade, enterprising fix-it-uppers realized a scrap of canvas could patch a birch-bark canoe if bark itself weren't handy. Soon, native craftsmen, who were hired to build many of the canoes used in the trade, were constructing canoes with

canvas skins in the old birch-bark fashion—right-side up, laying in the hull first and inserting sheathing and ribs afterward. Later, others began building them the European way—on a form, the hull upside down.

Never before had the canoe looked so sharp and trim, with ribs and planking of northern white cedar varnished honey gold and a smooth skin of oil-painted canvas. Their lines were as fine and graceful as those of any canoes that ever floated. Legendary are nineteenth-century models such as Chestnut's Prospector or E. M. White's Guide. This tradition of beauty with functionality is carried on by builders today on both sides of the border.

Joe Seliga, a legendary builder in Ely, constructed wood-and-canvas canoes for, among others, the Boy Scouts and YMCA camps around the Boundary Waters. He patterned his boats after the distinctive Ojibwe "long-nose" canoes. Like all fine wood and canvas boats, they had a character, a spirit. When I think of them, I think also of the painterly covers of outdoor magazines from the early to mid-1900s, with paddlers in wool shirts and fedoras. The canoes themselves were quiet, not loud, solid but not brittle. I took two trips as a Boy Scout from the Charles L. Sommers Wilderness Canoe Base near Ely. The guides, most of them young men on summer break from college, paddled wood-and-canvas canoes. The most desired were Seliga's. With an experienced guide in the stern, they cut through the water like stately cruisers. The guides pampered and prized them, though by the end of the summer they had soaked up enough water to weigh twenty or even thirty pounds more than the aluminum canoes left to the tenderfeet.

Aluminum canoes symbolized the decline in the craft of canoe building. The gorgeous lines of the wood-and-canvas version just didn't translate into metal, and the mass-produced boats lacked diversity. They seemed all of a kind, lowest common denominators—and not very good ones at that. They were a bit short, wide, very stable but slow, and abruptly broad in the bow and stern. Graced with keels that caught rocks and dragged through the water, they rang out loudly with each scuff of the foot or scrape on an unseen hazard. The soft metal stuck to every rock it touched and left a bright warning behind. I keep one at my cabin, though, because I can leave it on a pair of sawhorses outdoors all year long, through sun, rain, and snow.

WHEN I CHOOSE A CANOE, I weigh the same compromises that early canoeists did. Slow and maneuverable? Light and fast? If I paddle a rocky stream, my choice is a beamy canoe of Royalex, with a bit of rocker. It turns and leans and absorbs the abuse of rocks. I can run white water. I can even stand and fly-cast for smallmouth bass as I bob down a riffle.

But if I'm traveling canoe country, I take my eighteen-foot canoe made of another synthetic, Kevlar. It's not a perfect wilderness craft. Its sides are too low, and the bow isn't buoyant enough to take big waves, especially when loaded. But it weighs less than forty pounds, an easy carry on a portage, and when the wind is light it is the fastest thing on the water. When I first tried it, I was startled that it seemed to leap through the water with every bite of the paddle. Even now, with each stroke I feel there are no bounds to how far I can travel. This is all that I dreamed a canoe would be more than forty years ago, a bridge between land and water, a link between past and present, a means to move with the silence of a feather on the current, possessed of graceful lines honed by time and experience.

None of this, of course, comes to mind the first time you clamber into a canoe. To a beginner, a canoe is anything but liberating. It is willful, threatening to flip you out at any moment, wandering off in a direction of its own choosing. It is an impediment to travel, never going where you want, blown this way and that by the wind.

When our daughter and son-in-law first launched their canoe in the Boundary Waters, neither had paddled much. Straight away, they crashed into the grassy banks of a narrow stream. But, within an hour, they managed to guide the canoe more or less where they wanted. After a few days, they paddled confidently, even joyously, despite a headwind. Addie, weighing barely a hundred pounds, hoisted the food pack and set off down the portage. Her husband, Marc, strapped on another pack and shouldered one of the canoes. With a bit of practice, we were single-tripping the portages, wasting no time coming back for a second load. They were eager to explore, to follow the water and trails wherever they led. In no time at all, they had discovered the possibilities of a canoe and the true spirit of canoe country.

MODERN BARK BUILDER *Erik Simula at Grand Portage National Monument and portaging with his dog, Kitigan. The Indian tumpline, a sling fitted across the forehead (lower right), makes carrying heavy loads possible.*

SAVING TRADITION. *The late Bill Hafeman built bark canoes in his Big Fork, Minnesota, workshop when few others possessed or practiced the skill.*

ALUMINUM CANOES, *on a car in Grand Marais and stacked at Gunflint Northwoods Outfitters, make up in maintenance-free durability what they lack in grace.*

KEVLAR CANOES, *like birch-bark canoes, are lightweight and make portaging easy, extending the range of paddlers along north country waterways.*

WENONAH CANOE *founder Mike Cichanowski displays molds for fiberglass and Kevlar canoes, which may weigh as little as 30 pounds.*

DURABLE WORKHORSES *of outfitters and youth camps, aluminum canoes carried into the wilderness countless tenderfeet, including these campers at YMCA Camp Widjiwagan, along the Echo Trail near Ely, 1948.*

WOOD CANOES *covered with fabric, such as this one on a portage near Lac la Croix (top) or two craft on display at the North House Folk School annual boat show, bring a high level of beauty to building.*

the genuis of a canoe

Indian birch-bark canoes impressed Europeans with their speed and light weight. French explorer Samuel de Champlain reported seeing a bark canoe more than twenty feet long that could be carried by a single man. Paddled by two, it could overtake a fully manned longboat.

Bark canoes achieved their greatest art in the Great Lakes and St. Lawrence region, but they are not unique to North America. Siberian Yakuts and the Ainu of Japan were known to have built birch-bark craft. Canoes were also made of other materials—spruce bark by the Abenaki, moose hide by the Malecite, and elm and hickory bark by the Iroquois.

Settlement patterns among ancient Indians in border lake country changed from clusters on major lakes and rivers to wide distribution on small lakes and streams. Undoubtedly, the birch-bark canoe played a crucial role in making these areas more accessible.

The Montreal canoe, paddled by voyageurs on the Great Lakes, measured thirty-six feet long and six feet across. It carried up to four tons. The north canoe, used inland from Grand Portage, measured twenty-five feet, with a capacity of less than two tons.

Edwin Tappan Adney built his first bark canoe with Malecite Indian Peter Joe in 1889 and later wrote *The Bark Canoes and Skin Boats of North America*, still the most authoritative source on building these boats.