

The Hard-Water Gang

Most sailors look forward to winter's end and wish for endless summer. Not iceboaters. Call it strange (they don't), but the hard-water brethren dream of cold, space-age boats, and—above all—speed, while standing by to drop everything in the name of black ice

Story by Josh Adams; photographs by Craig Wilson

Spend a weekend with a group of iceboaters on a lake in North America, and you might find yourself asking a series of questions: Why do it? Why put up with fickle ice conditions? Why travel across the country in search of a race that may never happen (because of snow, warming weather, or a flat tire)? Why must an iceboater be prepared to drop everything on a wintry Wednesday night because some guy a thousand miles away has reported that his lake has good ice and another guy a few hundred miles in a different direction has confirmed that the race is on? Why, after all the broken bones and spectacular crashes, do they do it?

To understand iceboating consider this important, and totally unofficial, statistic. According to Nite sailor Peter Slocum, "Iceboating is 50 percent boat maintenance, 40 percent talking about it, and 10 percent sailing." This stat, say other iceboaters, might be misleading. "Ten percent sounds like an awful lot of sailing,"

one sailor said. Using this year's International Skeeter Association's annual championship (known as the ISA), held in early March on Wisconsin's Lake Geneva, as a reference, I must say those numbers appear to be accurate. The firm-water friends worked on their iceboats—the ISA classes included the Nite, the Renegade, B and C Skeeters, and the Formula One of iceboats, the A Skeeter—talked, ribbed, and chortled about topics mostly related to iceboating, and spent about a tenth of their time racing at jaw-dropping speeds of 30 to 80 miles per hour. See them in action, and the answer to all those questions becomes very clear: Speed is why.

"The uptight guys never make it in iceboating," explains Peter Harken, who is known in these parts for the world-class sailing-hardware company he owns with his brother, Olaf, and for his truly memorable (and often unprintable) sailing yarns. Same goes for journalists trying to cover the finicky sport. We, too, have to be prepared for the unexpected—such as booking, then canceling, three flights in one winter, dropping everything in the name of good ice, and, ye gods, running a story on iceboating in the June issue.

This gang of sailors is in a class of its

Winter of content: In February and March conditions on the popular iceboating lakes, such as Wisconsin's Lake Geneva (left), were the best in years





Tom Hyslop's 12-year-old Skeeter (above) chases the magic 100-mph barrier. Local legend Buddy Melges (right) rests between races with his thoroughbred (note the forward cockpit)

own. That's not to say outsiders are not welcome. For example, when New Jersey sailor and former ISA class president Pete Rochelle asked me why I was in Fontana, Wisconsin, when I could be in Miami covering a keelboat regatta, I explained that my covering this event was by choice. To which he exclaimed to his traveling partner, Peter Block, "Hey, he could be an iceboater. He's stupid." Now that I was feeling like one of the guys, Rochelle let me in on a few secrets about the sport. When I asked about the size and scope of the iceboating world, he paused and looked around at the 90-plus partly rigged boats, the clusters of sailors tinkering, talking, and goofing while waiting for the wind to fill, and their scattered trailers and SUVs. "You're looking at it," Rochelle said.

Truth to tell, the dedicated group gathered in Fontana doesn't amount to the entire iceboating world—at least the more than 2,000 DN class members worldwide might have another opinion. But beyond the DN racers, for the unlimited A Skeeters, B Skeeters (the classic Side-by-



Side Skeeter, a one-design Bill Boemke designed and built from the 1950s to the early 1980s), C Skeeters, and the Nites and Renegades, both of which are indigenous to the inland lakes, what you see in Fontana is pretty much what you get.

A few things had to work out just right for the iceboating world to descend on this small town. The ISA championship is an annual event, held on whichever lake in North America has the best ice. It's considered by Skeeter sailors to be a world championship, but in reality it's a regional battle among sailors from the Midwest, the Northeast, and Ontario, Canada. Last year's event, which had been serially scheduled for Ontario, Vermont, and finally Marinette, Wisconsin, was scrapped when, a day before the event, a thunderstorm separated several square miles of black ice from the Green Bay shore. The ice was reportedly perfect, but you couldn't get to it. After two years of bad ice (imagine an entire summer of no wind), 2001 finally provided some decent conditions. Burly Brellenthin, a 65-year iceboating veteran from Lake Geneva, was approaching 40 days of iceboating this year, compared to no more than five days in each of the previous two years. Lake Geneva, located in southeastern Wisconsin in what Slocum calls the "melt belt"

because of the tendency for the area's lakes to thaw and refreeze, producing a favorable surface, had ideal ice in February and early March—two feet thick, flat with no soft spots (thanks to cold temperatures), and hard as a rock.

Another factor in Fontana is the local legend, Buddy Melges, whose opinion on such matters as ice conditions iceboaters take more seriously than they would a NOAA report on a developing hurricane. Buddy knows. Despite his renown for a slew of big-time sailing accomplishments, such as his recent induction into the America's Cup Hall of Fame, on the ice Buddy is one of the guys. During the winter you're apt to find him tuning up his Bill Mattison-built A Skeeter on the Fontana (western) side of Lake Geneva. After some mid-fleet results early in the season, Melges won the ISA Northwestern regatta, held on Geneva. His quick turnaround from middle of the pack to his normal fast self got the Skeeter brethren thinking. Does Buddy have some tricks up his sleeve, or is the Skeeter veteran, who won his first iceboating race at age 6 and is still sailing at 71, just finding his stride in a new boat?

By the time I arrived in Fontana, rumors were flying. The juiciest buzz was that Buddy had been sail-testing all winter. While someone else—allegedly one of his two sons, Hans, also a Skeeter sailor, and sailmaker/boatbuilder Harry—sailed the boat, Buddy would follow to leeward and behind in his truck, analyzing the latest sail cut. Buddy chuckles at the rumor and explains that his setup is simple—one mast, one sail with the same original cut made by Harry, and one set of three steel runner blades—compared to others who tinker with multiple masts, runners, and sails in changing wind and ice conditions. "Less stuff to worry about," Buddy says. Plus, he explains, his speed is the result of time in the boat. The East Coasters don't buy it. Which led me to believe the rumor was planted in the East Coast camp by one of Buddy's pals (you grow loyalties when you've been iceboating with the same guys for more than 50 years). Rumor or not, it was clear that Buddy was in everybody's head, which made it no surprise that he was winning after scoring two bullets on the first day of racing.

THE 20-FOOT RENEGADE IS A HOME-built wooden iceboat that follows a strict 50-year-old one-design rule. The 17½-foot Nite, like the DN, can be built or bought; S&R Marine in Pewaukee, Wisconsin, builds them with the class's only mold. Compared to the A Skeeter (known as "the Skeeter"), explains Minnesotan



Ready, set, run. At the starting gun iceboaters dig in their spikes, push their boats to create apparent wind, and jump on board

Mike Bloom, sailing the smaller iceboats is "controlled adrenaline." When it comes to adrenaline-pumping speed, the Skeeter is on a different level. The custom-built iceboat is light (500 to 650 pounds) for its length (28 to 31 feet) and capable of sailing over 100 mph. Sailing a high-end boat has its drawbacks; the Skeeters are expensive, tricky to make (see "Building the A Skeeter," page 71), and dangerous.

Take a quick glance at the Skeeter fleet and you might think there are two different boats racing together. One has an enclosed cockpit forward, and the other has an open cockpit aft (rumble seat, or slingshot). This is because the Midwest and East Coast camps have different ideas about how to build a boat with one rule—no more than 75 square feet of sail area, 140 total square feet including mast and boom. Beyond that one specification, the sky's the limit on materials, length, width, height, and so on. In 1991, the last time the ISA was held in Fontana, young Dan Clapp showed up from New Jersey with the first forward cockpit and carbon-fiber hull—until then all Skeeters were aft-cockpit hulls made of Sitka spruce—and won every race. Although carbon fiber is now widely used in hull and mast construction, Clapp's breakthrough design, which he proved by winning five consecutive ISA championships, hardly caught on west of Jersey; only Buddy and a few

others inland have forward cockpits. Peter Block offers an explanation: "They're tougher than us," he says. "Or stupider."

Despite the marked differences in design, the Skeeter gang is content with their wild boats. The East Coast guys seem to do well in light air; a forward cockpit evenly distributes the skipper's weight on the three blades and helps you "get on a hike," or lift the windward runner, sooner than with an aft cockpit. The Midwestern sailors prefer heavy winds, in which aft-cockpit boats perform well. Having such an open design rule gives the class an arms-race element, but terminal velocity may have been reached by the Skeeter innovators, and as a result the boat is nearly a one-design. Sort of. Madison, Wisconsin's Bill Mattison, who has been building competitive iceboats for 55 years and is the winner of a dozen ISA championships, says the optimum lengths for a Skeeter hull, forward springboard, aft runner plank, and mast vary within a few feet. And that might be as close as you can get to one-design for a Skeeter.

Regardless of how the boats continue to evolve, the two camps will always have their differences. One such difference is the travel. Lately the East Coasters have been logging the most road miles to race. The Wisconsin lakes, especially those in the melt belt, have better ice on average than Vermont and other eastern states. "On their trailers it says 'Goin' to Wisconsin,'" Peter Harken jokes. Nonetheless, the guys in Canada and Vermont and New Jersey are optimistic their year will come, and then the Wisconsin sailors will be on the road. Last year optimism kept the Skeeter class in it until the very end, through a winter of bad news (bad ice) reported every Wednesday on the hotwire. Rochelle and Block felt so good about the forecast when the ISA was scheduled for Green Bay, they left New Jersey early hoping to get in some practice time. After spending \$250 in gas and getting as far as Ohio, they were told to turn back—the ice blew out.

It's this optimism, too, that keeps the class skating along after a number of scary crashes. The war stories are ugly. You can imagine what could happen when a boat sailing in the neighborhood of 100 mph, with its skipper sitting a few inches above hard ice, gets a runner stuck in a soft spot or hole—or worse, when two boats collide. Harken has a war story that tops many. That he's still sailing after breaking both knees, a collarbone, and a shoulder when his hull broke in half is remarkable. His story has a happy ending, however. While he was recuperating in the hospital, his Skeeter pals showed up with his boat's broken cockpit, in which they had



arranged a bouquet of flowers. Chilling beneath the flowers was a case of beer. Naturally, the post-race party had to be held.

AFTER A HEFTY MEAT-AND-POTATOES meal washed down by some of Wisconsin's finest brew, the volume in the room was officially loud. Melges, an excellent storyteller, had his end of the table captivated. At the other end sat some Skeeter class veterans—ISA president Tom Hyslop, Bill Dale (Hyslop's travel partner and neighbor in Pewaukee), Charlie and Carole Miller, and Jay Yeaso. The end of one story started another: the road trip to Nevada for a land-sailing regatta; the Lamah Wamah Ice Yachting Squadron from Green Bay, an accident waiting to happen; and something about Harken's old dog, Mack. Then Bill Dale blurted out, "Now we're iceboating!"

On the way back to the hotel, Hyslop informed me that he was putting me to work the next day, the final day of racing. "The forecast looks good," he said, temperatures in the teens and 10 to 20 knots of wind. "You're putting some spikes on

The Renegade fleet, half on starboard tack and half on port, awaits its start

and you're gonna hold my boat on the starting line like it's loaded dynamite. At the start let go, I'll have it." Boats have been known to run away from a skipper on a windy day, and after Friday, when Melges was getting good starts with two guys holding onto his boat, Hyslop decided he needed to play the same game.

The wind showed, but less than expected, and Hyslop didn't need my help. Instead I hooked up with the Millers. Charlie no longer iceboats, but he and Carole stay involved running races. He has a sense of humor about the twilight of his iceboating career, when, he says, he needed to paint black horizontal stripes on the ice so he could tell if the boat was moving when he pushed it at the start. And when he got to the point where the boat still wouldn't budge after he jumped into what he thought was a moving iceboat, he realized it was time to hang up the spikes. Now from the heated interior of their truck the Millers start, finish, and score races, and Charlie gives a colorful play-by-

play of the action for his guests.

In the first race on Sunday, Hyslop proved the local legend can be beat. Going fast with a heavy-air mast and sail, his race win to Melges's fourth-place finish tied them on points, with one race remaining. The East Coasters were out of it, literally, because they packed up the night before to beat a snowstorm home. Now the plot was thick, yet the scene near the starting line seemed decidedly casual. While the other classes raced, the Skeeter sailors stood around and chatted. Buddy and another sailor discussed the approaches at the top mark set close to shore. "Remember sailing scows up in that bay last summer?" he said. "It's wicky up there." Hyslop and Dale discussed their rig and sail tuning. Then it was decided in the final race. Melges, with the home-ice advantage, had a slight lead on Hyslop after three (of five) laps. Then they split. Melges was fast, and Hyslop fell for a moment into a hole. That's all it took. Melges held on.

"Second's not bad," Hyslop said, while packing up for the drive home to Pewaukee. "I'll take second to Melges."



Building the A Skeeter



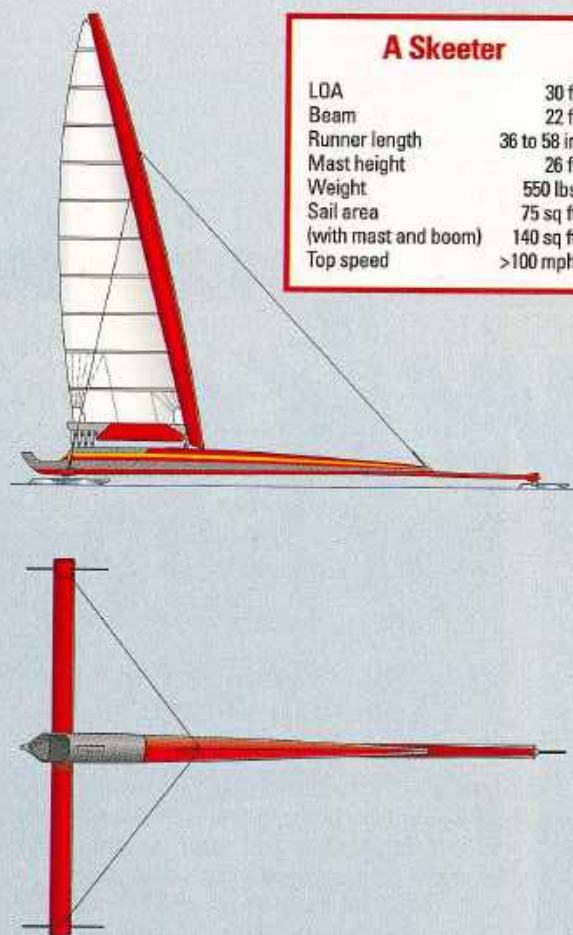
Iceboat builder Bill Mattison and his Honeybuckets in the background

Bill Mattison has a historical perspective on the designing and building of iceboats. The 72-year-old boatbuilder-by-hobby built his first iceboat out of two-by-four plywood in 1939. He converted a canvas awning into a sail and fashioned runner blades from an old pair of skates. "Spent all winter pushing that boat," Mattison reflects. "Never sailed." In 1953, after serving in the Korean War, Mattison went to work on a Renegade and named the square-sided plywood iceboat *Honeybucket*. Since then Mattison has built 17 *Honeybuckets*, each of which represents the high-tech thinking of the time; there were eight *Honeybuckets*, all with different owners, racing in Fontana. And for every *Honeybucket* there's a *Rambin'* built from the same mold, in the same shop, and at the same time as Mattison's boats by builder/iceboating friend Paul Krueger.

Honeybucket circa 1957 was Mattison's first Skeeter. "It was a scaled-up 20-foot Renegade," he says. The Skeeter has since evolved in every direction—taller mast, longer hull and springboard (which carries the steering runner blade), wider runner plank (one runner on each side), and longer runner blades. Although there is no ideal design—many say Dan Clapp's *Attitude*, which won four consecutive ISA championships in the 1990s, was the fastest Skeeter ever built—today's Skeeter is roughly 30 feet long overall and 24 feet wide, with a 27-foot mast and 7-foot springboard; there are multiple variations of these dimensions ranging 1 to 2 feet in either direction, and rarely do two boats

have identical dimensions.

Mattison's hulls are carbon-fiber laminates with a 1/8-inch foam core and a composite frame of 3/8-inch birch skins over a 1/2-inch foam core. Epoxy resin is used to cure the hull in a vacuum-bagged wet-



A Skeeter

LOA	30 ft
Beam	22 ft
Runner length	36 to 58 in
Mast height	26 ft
Weight	550 lbs
Sail area	75 sq ft
(with mast and boom)	140 sq ft
Top speed	>100 mph

layup process. Most masts are a carbon-fiber/E-glass composite, and runner planks and springboards are typically made of Sitka spruce, a choice commodity for an

iceboater. At \$15 per square foot, the clear-grain wood is lightweight, elastic, and strong for its weight. A well-crafted plank, Mattison explains, will give but never break under the high loads that accompany high speeds. Skeeter sailors want their boats to flex, though you'd be hard-pressed to get a specific measurement for such tuning matters. "Every now and then you tickle the ice with the bottom of the boat," Mattison says. The thinking, however, is a little different on the East Coast. Most of the Clapp-built boats are made completely of carbon fiber, plank and springboard included, with an enclosed cockpit in front of the mast.

In the quest for speed, Skeeter sailors have tried a number of iceboating innovations: round (as opposed to hard-chine) hull, moving the cockpit aft (and later forward) to lower the boom and induce end-plate effect, carbon fiber, heat-treated stainless-steel and titanium runner blades. Runner blades are constantly evolving. The optimum side runner is 50 to 58 inches long (a forward runner is 36 to 42 inches long), and blade thickness varies between 1/4 and 3/8 inch. Most iceboaters optimize their runners for the given ice conditions—short, thick blade on soft ice, long, thick blade on hard ice, and short, thin blade on snow cover.

Information sharing has saved the Skeeter class from a total arms race. A do-it-yourselfer like Jay Yeaso, for example, can produce a race winner in his garage. Clapp, however, admits that most builders and tweekers have a secret or two to keep, and some feel a box rule would best control the boat's development. Mattison and Krueger typically build their boats, sail them, and sell them as soon as they come up with something new.

Besides, custom-building a \$40,000 boat as a hobby is a lot of work. "We hold glue parties," Mattison says. "You have half an hour to laminate the hull and get it bagged. Seven or eight guys show up to help with the process. But they disappear real quick when it comes to sanding."