


# INFLATABLE DREAMS

BY PAUL GROSS

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One tangible benefit of mat surfing is portability. Deflated and rolled tightly, they take up about the same amount of space as a can of tennis balls. Stashed in a day pack with fins and a wetsuit, they allow the surfer to be essentially invisible on the approach. The stealth effect is just as apparent in the lineup, where mat surfers aren't seen as anything viable, allowing them to pillage more waves than they could otherwise. This photo of George Greenough at Rincon (and the others in the piece) date from the mid-'80s, the "Golden Age" of mat riding.



EVERYBODY IS ACQUAINTED with some form of real-world magic. It's usually something that breaks every time-honored rule, does its job without expending an ounce of effort, and manages to do so without revealing itself to anyone who isn't already cognizant. And you can't make a practice of broadcasting this information, because even if you provide people with irrefutable proof, they'll sneer in your face then make it a point to tell everyone they encounter for the rest of their lives that you're completely crazy. As a result of this social constraint, the bond you feel with the handful of people who do understand you and your magic transcends every conceivable personal difference. "So what if 'Joe' is a coked-out ax murderer?" you say to your wife, calmly defending Joe's latest social faux pax. "He understands (whatever)."

The obvious course of action would be to call each citizen of the world in for an anonymous interview, determine the nature of his or her singular, profound insight, then catalog all that knowledge and make it available on the internet. No one with a web browser would ever be sick, go hungry, or dread the day their in-laws were due to arrive. Everyone would carry a stone-cold .295 league average, and death itself would become the laughing stock of the online community.

The catch, of course, is that our personal brush with enchantment is rarely applicable to those who are not of like mind, body, and spirit. When someone tries to "spread the gospel," their knowledge decays into crackpot nonsense. Which should stop me dead in my tracks right here and now, because on the few occasions when I've lost perspective and publicly stated that an air mattress is capable of leaving the cleanest, straightest, fastest vapor trail across the face of a wave—well, how are you feeling about my capacity to function in society right about now?

**B**ECAUSE WE HAVE so many kinds of breaks up here in the Northwest—jetty peaks, sandbar beach breaks, reefs, and even some point surf—I've had the opportunity to ride mats in all different sizes and shapes of waves. I can't count the number of different designs that I've built and ridden—often with great success in one type of surf while a definite failure in others. I've gone through phases of having something vaguely dissimilar for every potential wave shape and surface texture. It sort of seems foolish to me now as I look back on it, but I can't begin to

place a value on the things I've experienced and learned. My only real regret is the lack of photographs taken during the years I surfed and experimented on a daily basis. I would love to have documentation of the evolution of my mats.

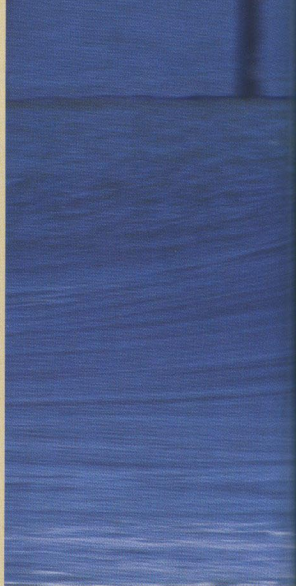
One of the most profound characteristics of the mats—and it's accentuated in the better ones—is the surprising tendency to drive into steep sections and accelerate through them. Most mats behave this way,

the lightest and most flexible being the most likely to react as if they had a life of their own. Another great feature of the mat is its ability to ride over white water sections. All of this makes the overall speed potential tremendous—a fact that's sometimes hard for stand-up surfers to swallow. I've seen guys come ashore just to watch a mat being surfed, because they were so surprised and impressed with the performance. I can remember answering questions like "Why is the wake so low in the water?" or, "How can that thing go so fast? There's nothing to it!" or, "How did you go around that section? You didn't do anything!" Mat surfing is a lot like glider flying. There's a grace and subtlety to it that's hard to see.

I've constructed rafts out of almost every airtight material that could be bonded. Mats made of naugahyde were really interesting. They were supple and flexed nicely when they were new, but as the vinyl resins I used to assemble them hardened over time, they became stiffer and less responsive. They were also fairly heavy, which was a disadvantage in small waves, but gave them a solid feel in big waves. In a lot of ways the nylon mats that Paul, George, and I developed were the end of the road for my mat surfing. They worked so well that the "journey" aspect of designing and riding mats came to an end.

I can't say enough about mats. I marvel at their lowly appearance, and yet I'm struck by the sophistication of their construction and their incredible performance. It's an enigma that's challenging to try to share with other surfers.

**Dale's portable mat factory.**



**M**OST SURFERS OVER 40 have ridden surf mats, but the experience was usually limited to riding rental barges or dime-store cheapies with no swim fins. The first mat to cross over into the arena of hard-core surfing was the Converse Hodgeman. These sturdy, red, white, and blue mats featured a coarse canvas exterior backed by a thin rubber interior lining. Because there were no stiff, heavy end caps, the front end of the Converse was easy to grab hold of and control. This unique feature led to the Greenough style of mat riding, one he often described as "two fistfuls of canvas." With one hand riding along each rail, George was able to carve and bank the Converse like a surfboard—rather than pivot back and forth while hanging on to a nose rope, which was the style encouraged by rental mats.

Conventional wisdom dictates that the harder a mat is inflated, the better it works. Since that was absolutely true for rental mats, it became the commonly accepted dogma. For





PHOTO: DAN GROSS

Converses, however, another set of physical properties came in to play. Because Greenough spent so much time on his mats (and because he's inclined to use his belongings to their last dying day) every one of his Converse's were as limp as dish rags before he retired them. And he found that when he christened a new mat, the performance would pale in comparison to his old one. For George, breaking in a new mat became a task to endure, like breaking in a new pair of jeans. He reasoned that the older, softer mats were faster because they conformed to the shape of the wave, and he pushed this concept a step further by deliberately riding them at a lower inflation level. Once he learned to control the softer mats' tendency to slide out in critical situations (by squeezing the front end to firm up the rail shape) he could adjust a mat's handling characteristics as he rode, skimming or holding in at will.

This revelation was the key to the future of mat surfing, because in the late-'70s—when Boogies displaced mat riding and the Converse Hodgeman went out of production—the

**George, near the end of a several-hundred-yard-long ride in Ventura, enters the final shore break zone in fourth gear with his track describing the speed.**

**Fourth Gear Flyer in production; sun drying after glue up and test inflation.**



**M**Y FIRST EXPERIENCE with surf mats is similar to everyone else's. I rented a big, rock-hard blue and yellow one at Ocean Beach in San Diego and bounced in to shore all day long going straight off in the soup. My friends and I got our first glimpse of high-performance mat riding at a surf movie in high school. They showed Greenough's mat riding short, *Rubber Duck Riders*, with some Australian surf film. Greenough and Michael Cundith were ripping this blown-out day at Rincon, and we just looked at each other when it was over and said, "That's it, that's what we should be doing when it's big and bumpy!" George always seems to have that effect on you. Most of what he does is really complex and sophisticated, but some of it is so simple you just go, "Why didn't I think of that?" We went out and got Converse mats like George used and rode them for years in San Diego when the conditions were right. When they stopped making Converse in the mid-'70s, we just sort of lost interest. We tried the cheap drug store mats, but they just

didn't ride like the Converse, and they didn't hold up at all.

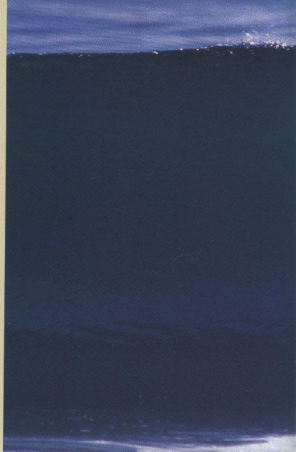
About ten years after I gave up on mat riding, I got this weird nylon mat in the mail from Toby Sullaway. It was dark blue, made of a really thin, flexible nylon material and it weighed about 12 ounces. Toby sort of owed me a board, but asked me to try this mat instead. I figured I'd give it a try. I was living in Santa Barbara, so I waited for a good-sized day and took it out at Hendry's Beach. On the very first wave I straightened out as it closed out, and the mat skimmed so far out into the flat water that the lip landed completely behind me! It just blew my mind! From that moment on, I took it as kind of a challenge to keep riding these things and see where the speed could take me. Eventually, it became the only thing I ever rode, and that was 15 years ago! In some ways, it's like having an adjustable board. There's no need for a quiver. (My old quiver—kneeboards and longboards—sits in the garage collecting dust.)

So that's how it started. I love the challenge of making these things go in really good waves, and I enjoy the crummy days as well. Actually, I am taking a bit of undue credit here, because you don't make the mats go—they go on their own, and that's sort of the secret of riding them. They're inherently very frictionless and fast. My first day I was wearing a shorty wetsuit and the non-skid canvas on the deck was starting to irritate my arms. So I flipped it over and tried to lay on the bottom, and I couldn't even hold on. A bar of soap is far less elusive.

Oddly enough, the more deflated a mat is (to a point) the faster it goes. Paul and George both told me that partially deflated is faster, while fully inflated holds in better. I didn't believe them until I tried it myself. When you're sailing down the line you can feel the rear third of the mat collapsing into a perfect foil, seeking the optimal shape to fit the wave, while the front two-thirds stays firm and easy to control. The great thing about mats is that they skim so well and your center of gravity is so low, they carry their momentum through huge flat spots. There's nothing like that feeling. If the swell has a little bit of power behind it, you can string together one distant section after another and make a sloppy wave into an all-time ride. You're going faster than you would on a surfboard, and your face is only a few inches above the water, so the sensation of speed is unbelievable. For some reason, bumpy, crinkly waves really make the mats fly. They seem to work best in point surf. I don't know about these things in coral reef setups. You end up straightening off at the end of rides a lot, and in coral that could be pretty gnarly. Nias looks incredible. That's one place I'd like to unwind one of these things.

A lot of people paddle up to me and say, "I used to ride one of those things." And I always reply, "Yeah? Well, it wasn't quite like this one!" If I win the Lotto, I'm going to invest in nylon air mats and turn everybody else on!

## KENNY HUGHES



search for a new, high-performance mat was oriented toward pliability rather than durability. Cheap Taiwan rafts, which had been dismissed as junk in the '60s, were seen through fresh eyes. Rip Curl began to import a mat from Asia in the early '80s—one that was manufactured with crude handles and fins "for surfing." George and his disciples gleefully tore off these encumbrances before any new mat even got wet.

The Rip Curls were shorter and narrower than the Converse design, and they moved through the water with less effort: a definite improvement. A second, more subtle design factor was also exploited. While the Converse was made of thick canvas with a thin rubber lining, the Rip Curl was made of a thin layer of canvas backed by a much thicker rubber lining. After riding the Rip Curl mat for about a year, George carried out one of his classic, improvised design experiments. We were out at Rincon one rainy afternoon, and for no apparent reason he started tearing the threadbare canvas off the bottom of his mat, leaving only the thick rubber inner lining. He rode a few waves without saying anything, then paddled up to me, slid off his mat, shoved it in my direction and said, "Try this."

The hastily modified Rip Curl felt like it was on ball bearings. George started calling them Peellers, and they opened up the next phase of mat riding. Brand new Rip Curls now had to endure two indignities before they were ridden: first the fins and handles were removed, then the bottom canvas was torn off. The down side of this second modification was that



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For Kenny Hughes, mats aren't just for junk conditions.

what the Peelers gained in performance, they lost in durability. The slightest contact between the all-rubber bottom and a rock or a barnacle was terminal. George became saddled with the task of transporting stacks of Rip Curl's from Australia to California to keep our stash fresh, and the process began to resemble a smuggling operation. If he was due to return to the States, phone calls would begin to fire back and forth, prices, quantities, and delivery times being the topic of conversation.

Unbeknownst to us, a surfer up in Oregon named Dale Solomonson had been following a more sophisticated path. He had been making his own mats from scratch for years, utilizing materials like vinyl, sheet rubber, and naugahyde. His results were mixed, but in the process he had developed into the most knowledgeable mat builder in the world. Occasionally he would make calls down to either George or I to talk shop, as if we knew anything about making mats. At one point, I made the comment to him that since pliable mats seemed to work the best, maybe we should find some kind of thin, heat-sealable nylon and make mats out of that. About a month later, the UPS man arrived at my front door with a package that changed our lives.

Dale had found a remnant length of a military-spec nylon fabric that was exactly what we had imagined, and he had modified a soldering iron to use as a heat welding device. He then constructed a copy of the original Converse Hodgeman mat out of the nylon. (If you think that was easy, cut open an old mat and have a look inside.) It was February and I guess

he was snowed in for the winter, so he gave us first crack at it. The day the first nylon mat arrived coincided with the first hours of the El Niño swell of 1983. The surf was 6 to 8 feet and building. I gave George news of the delivery, and he lead-footed it down to my house in Carpinteria in his old cop car and we cracked it. Dale's mat was so fast, George commented that even if we only got two or three go outs on a nylon mat before it disintegrated, the performance would be worth the trouble of constantly having to make new ones.

While it seemed like our problems were solved, they were just beginning. The heat sealable nylon material Dale had used was extremely difficult to find in production, and I spent the spring of '83 sending out query letters and material samples to hundreds of fabric manufacturers. It took four months to locate a supplier. Then the next reality hit. The material ran \$9 a yard, and the minimum quantity was a thousand yards. What had started out so many years before as a cheap, brainless way to go surfing had evolved into the polar opposite. (In the last few years of his life, Marshall McLuhan theorized that technology had a way of "flipping" an object's original intention. If I hadn't experienced the nylon mats, I would've thought he was out of his mind.)





**T**HE FUNNY THING about mats is that they're the easiest thing to surf on a basic, beginner level, but they're the hardest thing to surf on an advanced level. It takes 10 years of experience before you can drive them anywhere near their potential. I've been riding mats day-in and day-out for over 40 years, and I'm still learning things. I've never been bored riding a mat, ever. They're just too challenging and too much fun. When it's big and there's two feet of cross bump running through the swell, you can link together sections with 75 yards of dead water between them, working all the bits and pieces in between, and you're solidly into third gear by the time you make a power run into the shore pound.

## GEORGE GREENOUGH

The original Converse canvas mats we used in the '60s and early-'70s weren't cheap (they were about 40 bucks, U.S.) but they were durable and readily available. We never really had to think about them, and that's what made them attractive. If you had a shorty wetsuit, a pair of fins, and a mat, you were ready for just about anything. You could get those

things to just hurtle down-the-line at Rincon. There was another unbelievable mat made in Australia during the late '60s called The New Curve To Surf, and it had rocker running through the length of it. That thing was easy to turn and really held into square sections.

Classic mat adventures are nothing like other kinds of surf stories. I was riding Pipeline on a mat in 1967. It was about four or five feet. My Converse was going well and I was pretty stoked. Then this one wave looms up out of the northwest. It was three times bigger than anything else that had come through that day and it was thick. I scratched for the horizon, but ended up right in the impact zone. The lip landed about five feet in front of me. I tried to roll it, which works well on a mat because you can really get your arms and legs around the thing and put a death grip on it. I got tossed around pretty good, and when I finally came up, my mat was gone, both my fins were gone, and my trunks were gone. I was out in the middle of the ocean, treading water with nothing on. Then a few seconds later my mat pops up right next to me. Then one fin. Then the other. Then my trunks slowly gurgled to the surface. All the energy in the wave had gone straight down, then had rebounded straight back up. I put my trunks and fins back on, climbed on the mat and paddled back into where the other sets were breaking. There were no other waves like that all afternoon.

Another time I was out at Sunset, shooting 35mm water footage for *Big Wednesday*. Whenever I got caught inside, I always let the camera go instead of the mat because it was easy to catch the next wave and ride over to where the camera was floating, then grab it and paddle back out. I had this technique to keep from getting sucked over the falls once I let the camera go. As I was paddling up the face, I would roll off the mat, grab it by the corner, swim into the lip and give the mat a sharp tug behind me as it pitched out. That worked fine until one time I jerked on the mat and the entire corner of a new Converse just tore off in my hand like it was made of tissue paper. And those things were tough, like a pair of jeans.

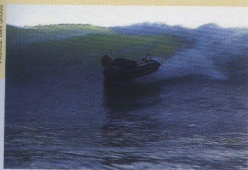
We used to get six or eight mat riders out at Rincon on windy spring afternoons, and there was no problem riding a wave with that many people on it. The knuckle of white water would catch whoever was in the back and hurtle them forward. They would bounce off everybody else like a pinball, then the next guy in the back would catapult forward. Two hundred people could easily surf Rincon without it being crowded if they were all on mats.

There aren't many hard-core mat riders left anymore. Less than a dozen in California, a few more than that in Australia. Most kids start out on Boogies, and there aren't any good mats being made. Plus it's way too crowded to learn how to ride a mat in point surf. It's sort of become a lost art. The '60s were a unique period, and we never would've learned how to ride mats so well if we hadn't had the opportunity to get them into good surf without a lot of people.



I talked the fabric company into a somewhat lesser quantity, and they piggy-backed it onto someone else's larger order. After a few crude attempts at mat making, we realized that the shape of the mat was as critical as materials. I ended up making over 50 prototypes to sort out the possibilities. This process actually moved forward at a rapid pace. A new mat could be conceived, drawn out, and welded up in about five hours. If there was any surf at all, a new mat could be ridden in the morning, and a modified version made that day and surfed in the late afternoon. Then a third mat could be made that evening and ridden the next morning. This intense frequency only took place on a handful of occasions, but when you combine a short construction turnaround with feedback from George—one of the most talented and enthusiastic surfers of the twentieth century—a lot took place in a short period of time.

What we learned was that the ideal number of pontoons for a mat was three rather than the traditional four, that a stabilizing I-beam in the center of the three main pontoons was needed to control the thickness, and that a thicker mat was faster and easier to control than a thin one. (Also, the "traditional" flat/straight/square mat configuration was by far the most successful, presumably because the shape of the wave created the right rocker and outline curves as needed.)



The key to mat surfing is that they can be tuned, compressed, and comforted as you ride. Greenough "builds" a rail suitable for off-the-top and bottom turns by squeezing air toward the inside rail. Takes a while to learn, but once you have it dialed the possibilities open up.



Once those parameters were established, I spent several months working with a machine shop developing a welding machine that bonded the seams and I-beams with more consistency. Several dozen more prototypes of varying dimensions were made, and we surfed those mats for almost a year before the ideal combination of elements began to emerge. Even after the best shape was identified, I continued to try minor variations. However, there seemed to be a synergy to that one shape that transcended the size of the wave or the rider. And George's original assumption (that the nylon mats would only last a few days) turned out to be dead wrong. Individual units have survived as many as five years of constant use.

Once the design and construction of the mats was established, I started making them for people under the name Fourth Gear Flyer. Unlike conventional hoards, mats were clean, quiet, and consistent to construct. Everything about them was "green." (Even the feeling you had after a good surf was humble and connected.) Commercializing the idea was never my original intention, but with so much invested in the material, a welding machine taking up space in our house, and people in Santa Barbara and Australia asking about them...

Unfortunately, all mats have a way of looking the same.

They reside in surfing's de-journalized zone, not given to our established appearance standards. The old reality of dirt-cheap surf rafts loomed large in people's minds, and the \$85 price tag (which amounted to \$10/hr. labor) amounted to sticker shock. Offshore mass production was the obvious solution, but I never had the capital or the confidence to go in that direction. The bottom line was that the role surf mats played in our culture was rooted in the beach rental phenomenon of the '60s, and the cost and performance of the Fourth Gear Flyer was in conflict with that heritage. A litany of other headaches ran the gamut from people who had never even ridden one clamoring for handles, leashes, and fins, to finding out that inflatable surf craft were banned along L.A. county beaches.

In the end, my once massive supply of fabric ran out and the market was too limited to justify another large investment. I even had trouble selling the last batch of Fourth Gear Flyers for material cost. Despite the commercial difficulties, the nylon mats were an unqualified success. By the time the '80s had rolled around, I was jaded, convinced that there was no magic left in surfing. The nylon mats showed me how pointless that kind of thinking could be. My only regret is that after twenty years and hundreds of hours on the phone, I've still never met Dale Solomonson face to face! ❄