

SEAWORTHY

## JELLYBURGERS AND FRIES

BY CARL SAFINA AND MARAH J. HARDT



Photograph: Sergiy Kostenko,  
<http://sergyk.photosight.us>

Augie Brown has a problem. A former advertising model who summers in Montauk, Brown loves to be in the ocean. For decades, he avidly spearfished for 40-pound-plus stripers in the Race, that surging piston of tide between Fisher's and Little Gull Islands. Often requiring two-minute breath-hold dives to 40 feet in three-knot current with five-foot visibility, it's not for the timid or casual. Brown was obsessed with it.

Now an astonishingly fit 78, Brown's need for a pacemaker forced him to stop diving about four years ago, but that's not

his problem; he seems at peace with that. Until very recently he kept himself young with a two-mile swim in Fort Pond Bay every morning from late spring to early autumn (and in Florida the rest of the year), but he's finally been driven from the water. His problem: jellyfish.

Pacemaker aside, the square-jawed Brown is not a faint-hearted guy, but, he says, "Even with my wetsuit and hood on, I was getting stung so much around the hands and mouth and ankles—I just had to get out of the water."

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Brown’s spent more time in the water locally than anyone we know. But, he says, “I’ve *never* seen jellyfish like this year.” Normally nothing would prevent Brown from taking his daily swim—“rain, bad weather, nothing. But those jellyfish. In early July, suddenly they were *everywhere*. I must have seen 150 to 200 that first day they showed up.” Most were three or four feet down, so he just swam over them. But some were near the surface, and their trailing tentacles are so fine you can’t see them. Eventually, the whole swim became too unpleasant. “I finally got hit right across the mouth and my whole face blew up, so I quit swimming.”

Is the East End jelly invasion part of a bigger takeover? It’s hard to know for certain, but it sure seems so. The *New York Times* ran articles on jellyfish on July 22, and again on August 3. New Yorkers were phoning complaints to state officials weeks before the normal August rash, and many New York City triathlon swimmers got stung during the mid-July competition. Jellyfish were also reported farther upstream than usual in the Hudson estuary. In fact, early arrival and high numbers of jellyfish have been reported worldwide this year.

Is there any reason jellyfish might be fairing better? Unfortunately, yes—and most reasons relate to how people are changing the ocean.

The warmer waters caused by rising greenhouse gas emissions can help jellyfish grow faster and reproduce better. Overfishing can mean both fewer jellyfish predators and fewer competitors, thus more peace and more food for jellies. Fertilizer runoff from land can trigger blooms of algae in the ocean that feed tiny animals that feed jellyfish. These blooms can also reduce the amount of oxygen in the water, and jellyfish handle lower oxygen better than do fish, so jellies thrive while fish decline. A combination of these and other factors may be at work. But data are lacking, so this is mostly informed speculation.

But one thing is certain: While the annals of science have overlooked jellyfish, the pages of cookbooks have not. The Chinese have eaten jellyfish for over 1,000 years, and Japan has driven a global market since the 1970s. In the States jellyfish are more known for ruining a nice day at the beach, clogging seawater intake pipes or fouling fishing gear than for their crisp crunch and slightly salty flavor. But in Asia, these ancient mariners are delicacies that fetch \$10–\$12 a pound wholesale.

The jellyfish market is booming with fisheries popping up all over Southeast Asia to supply the demand. Not all species are edible,

but more are being tried. In 2001, the estimated annual catch of jellyfish worldwide was over 700 million pounds—40 times the 2007 cod catch from the Gulf of Maine and Grand Banks, combined.

As the market grows and environmental conditions shift to favor jellyfish, opportunity knocks. And U.S. fishermen are answering. About 10 species of edible jellyfish are commonly consumed in Japan, mostly from Southeast Asian waters. However, new species are showing up on the menu, including the cannonball jellyfish from the Gulf of Mexico; this cantaloupe-size creature is more muscular than the typical jelly and therefore more nutritious. A *Los Angeles Times* report in 2006 described how increased jellyfish numbers clogged nets and prevented shrimp fishermen from making their catch. The ever-inventive fishermen embraced opportunity; they’re finding they can make more money by exporting big jellyfish than by catching shrimp.

The most common stinging, swim-ruining local jelly is the lion’s mane (*Cyanea capillata*). Jellyfish eat by trolling their tentacles, harpooning small animals with tiny stinging cells. The jellyfish cannot control where their tentacles drift, and the sting is triggered upon contact, whether the tentacle contacts a copepod (food) or a swimmer (you). They can make children cry.

But do these local beautiful burgundy bells tempt a taste bud? So far, no. But that may be just a matter of time and effort. Once dried, how different-tasting can an animal that is 95 percent water really be?

Bigger questions are: Will jellies rally us to heal a sickened sea? To cleanse pollution? To turn our fisheries around? Or will we get used to jellies like we are getting used to the decline of most fish? Will we respond by bringing peanut butter and bread to the beach and trying a new, zesty kind of sandwich? Will surfcasters develop new techniques to coax sport from sea nettles? Will sharkers abandon their dwindling quarry for a chance to tackle the dangerous lion’s mane? Indeed, will Augie Brown resume his two-mile swim next year—or will our kids just learn to call for a side of fries to go with that jellyburger?

“I’m going in again,” Brown vows. “But I’ll tell you right now: If I see jellyfish, I’m getting out of the water.” 

*Carl Safina lives in Amagansett and directs the Blue Ocean Institute, a global ocean conservation group he founded. Marah J. Hardt is a PhD ecologist working with the Blue Ocean Institute.*