



Had any shad lately?

It's time to rediscover Connecticut's state fish

Story and photos by Judy Benson

Last August a very important meeting happened in our fair state, right here in my office at UConn's Avery Point campus.

Never mind that I was the only one attending, and appointed myself Empress for Life of this new group I'm calling SECT. Once word gets out about Shad Enthusiasts of Connecticut, I'm sure the organization will be pulling in members more numerous than the American shad that school by the thousands in the Connecticut River each spring.

OK, perhaps that's an exaggeration. And I really didn't start SECT (though I do like the title of "Empress for Life"). But maybe a group like it should be created to spread the word about shad. For now, let's just pretend SECT exists, and this article is the first step in carrying out its mission.

After all, American shad are the official State Fish, and Connecticut has the last commercial shad fishery among the six New England states and New York. Until the first half of the 20th century, this species supported hundreds of commercial fishermen all along the East Coast and into Maritime Canada, yet today only remnant fisheries remain in a few mid-Atlantic and Southern states. In Connecticut, some people term its commercial shad fishery a "relic,"

hanging on with just six or seven active fishermen.

"The resource itself is in good shape. It's the tradition of shad eating that's dying," said Stephen Gephard, supervising fisheries biologist at the state Department of Energy and Environmental Protection.

The shad population in the Connecticut River, where the commercial fishery lingers, is healthy enough to support many more fishermen than the few who currently set their nets there, he said. Whenever he gets a chance, Gephard likes to encourage people to partake of local shad, calling it "guilt-free eating" that helps maintain the state's cultural heritage with responsibly harvested, fresh, nutritious seafood. In 2017, Connecticut's commercial shad harvest totaled just below 50,000 pounds. Compare that to Connecticut Sea Grant's inaugural year in 1988, when the harvest was 400,000 pounds, and to 1952, when it was 475,000 pounds.

"The only reason our shad numbers are low is because there are so few people fishing," Gephard said. But with growing interest in local food, the time is ripe to educate potential customers about this short-season fish, found in markets and on



John Smoloski steers his skiff on the Connecticut River near Portland on a May night during shad fishing season.

restaurant menus only from the end of April through early June.

"There are those who claim the Connecticut River shad tastes better because it has the coolest water" compared to shad from the other remaining commercial fisheries, Gephard said.

Shad, he noted, are an anadromous species, spending winters in the salty Atlantic until their primal clocks trigger them to swim into Long Island Sound, then upriver into fresh water to spawn. In the Connecticut River, a main thoroughfare for this member of the herring family, they historically would travel as far upstream as Vermont and New Hampshire, turning the waters into a fertile soup as they expelled eggs and sperm along the way.

Alicea Charamut, river steward for the Connecticut River Conservancy, sides with Gephard when it comes to shad and shad eating. Her group's

advocacy for New England's major river has included support for removal of the dams that blocked shad migration and truncated their spawning habitat.

"The population really started dropping off in the late 1800s when the Holyoke [Massachusetts] dam was built," she said. "They came in by the millions, until the rivers were dammed up."

With dam removals and new fish ladders built over remaining dams in recent decades, shad numbers have climbed back. Fluctuating with yearly conditions, recent numbers are hovering between 270,000 and 536,000 fish counted yearly at the Holyoke Dam fishlift. Though the numbers are moving in the right direction, they're still a ways from the 1.5 million to 2 million fish that is the long-term goal for restoration of the species – a key component of the food web on which ospreys, eagles, otters and other wildlife depend.

If humans become a greater part of this food web, so much the better, Charamut said. More people eating Connecticut River shad means more people caring about the health of the river.

"It's part of our culture. It's a good thing," she said. "It's something that our ecosystem can provide that's an important part of our maritime and ecological history."

Shad fishermen couldn't agree more. With locally produced fruits and vegetables, cheeses and craft beers winning all the popularity contests, they want Connecticut-caught shad to retake its rightful place, as sought-after as fresh-picked corn on the cob from the neighborhood farm stand in the summer.

"We need more people eating shad," said longtime shad fisherman Dan Russell of East Haddam, who's witnessed the shad fishery go from 100 boats or more in the river to its current handful. Among his main customers these days, he said, are the annual shad bake in Essex sponsored by the Rotary Club and the Connecticut River Museum, and families of Indian and Pakistani descent who appreciate it as a similar substitute for a fish native to those countries. But too many other Connecticut residents have never tried it.

"People need to be made aware of it," said Russell's wife, Sue. "It's our Connecticut fish that comes up our rivers to spawn. But this generation is hardly even aware of it."

Now, enter SECT to help educate people about this native delicacy, especially delicious grilled in foil or in the traditional way, on an oak or cedar plank. It can also be baked, smoked, pickled or fried. Last spring the Empress for Life-to-be traveled around the lower Connecticut River learning about shad and the people who want to see the shad tradition in this state not just barely alive, but revived. Interspersed with these visits were stops at local fish markets to buy shad, to then cook and enjoy it with family and friends – several of whom

were tasting it for the first time. Everyone was a convert, especially after learning it's higher in healthy omega-3 fatty acids than wild salmon.

The first stop on my shad tour was a visit to the Haddam Shad Museum, housed in a former "shad shack" market, with a weathered Brockway skiff that was once the standard vessel for the fishery parked outside.

There, I met one active commercial shad fisherman, Jeremiah Lundgren, four former commercial shad fishermen, and one who still fishes for shad with a pole and shad darts (recreational shad fishing is allowed on the Connecticut River from April 1 to June 15). Inside are displayed maps showing the section of the river with the prime fishing grounds, from Middletown to Higganum Reach, boat lanterns and sets of boning knives – shad are notoriously boney – alongside yellowed newspaper articles and a video about shad fishing. The men reminisced about the heyday of the fishery in the 1950s when trucks from New York City would gather in the village center to buy the catch – whole fish, boned fillets and the rich-tasting dark orange roe sacks, the most valued part. Because it's a short-season fishery, none counted on shad for their entire livelihoods. They talked about the boom after World War II, when Connecticut River shad were being exported to Europe to feed populations short on food as they tried to rebuild.

"I worked in construction, and a lot of times I'd get laid off, and my brother would go out with me and fish," said Robert Nettleton of Higganum. "I did it for 18 years altogether, after I was out of the service. I'd be out there when it was windy and raining and bring in 1,400 pounds of fish in one night."

At one time, huge nets hauled in with a capstan (a motorized cylinder) were set across entire sections of the river, but eventually these were banned because they were capturing virtually all the shad trying to reach spawning grounds.

Today, Lundgren and other shad fishermen use an 800-foot monofilament net cast from their boats, signaled by the April full moon and water above 50 degrees to start the yearly ritual.

"It's all temperature dependent," Lundgren said.

Now in his 50s, he started fishing for shad as a teenager, learning from his uncle, and has been doing it ever since.

"I do everything, from start to finish," he said. "I fish, I bone, I fillet, I sell the roe, I smoke it. It's backbreaking work, hauling in the net full of fish. But it's something that gets ingrained in you."

“Backbreaking” is no understatement. It also demands upending your entire life for a five- to six-week stretch. After talking with Lundgren and the others at the Shad Museum, I met John Smoloski and his deckhand at a marina in Portland, and learned more about what it takes to be a commercial shad fisherman.

I arrived at the marina around 9:30 on an early May night, when the boatyard was dark and quiet and many of the boats were still shrink-wrapped for the winter season. Commercial shad fishing, Smoloski explained, is done at night on the incoming tide, the best time because of their schooling habits and extreme sensitivity to light. By the time I met up with him, it was his 14th night out for the season, starting each time well past dark, fishing until dawn. Then he’d spend the early morning hours at the dock boning and filleting the fish and getting them to the wholesaler before going home to bed for a few hours – and then start the routine over again. For the five- or six-week shad season, he puts his home renovation business on hold.

“Shad fishing is a substantial part of my income,” he said.

Now 57, Smoloski is a fourth-generation shad fisherman, starting when he was 16 years old. He remembers his biggest hauls in the 1980s.

“One night I had 1,000 pounds in one set,” he said. “I was about 25 years old. I was there for over an hour hauling the net in, but I was really motivated.”

On this night, he and his crewman set the net by lantern light, then drift for about 45 minutes before pulling it in. The size of the spaces between the nylon mesh, he said, ensures that only fish of marketable size get caught in the net. The fish average about four and a half pounds each.

On this night’s first haul, he pulls in 30 or 40 shad, along with a few catfish



Former shad fishermen Bob Nettleton, left, and Richard Watral, center, both of Higganum, and current shad fisherman Jeremiah Lundgren help preserve the history of shad fishing at the Haddam Shad Museum with exhibits including the Brockway skiff parked outside.



Boning knives are among the items displayed at the Haddam Shad Museum.

and a striped bass that get thrown back. Before morning, he would set the net three or four more times.

A few weeks later, he tallied up his catch for the year: 1,300 roe (female) shad; 60 buck (male) shad, for a total of 4,500 pounds of fish.

“It was nothing like it was in the eighties, when we were catching three times that much,” he said. “But it was an OK year. Pricewise it was decent, but the market seems to be shrinking a bit every year. Maybe this local food thing is an opportunity for us.”

Next I caught up with fisherman Dan Russell at Hale’s Shad, a small market he owns in Rocky Hill that still bears the name of its former owner. With an upstairs apartment where Russell stays during shad season, the market is within sight of where he docks his custom-made 23-foot fishing skiff. It was early morning after he had been fishing through the night, and he and five workers were practicing the increasingly arcane and unique skill involved in boning and filleting shad to prepare the catch for sale. Now 66, he’s hauled shad nets nearly every year since 1967, taking time off from



his work as a relief captain on an offshore commercial fishing boat.

“One day I went fishing with my father and his dad, and I fell in love with it immediately,” he said. “I just saw all these fish coming over the side of the boat and that was it.”

He worries that no one new is coming into the fishery, and that if the shad fishery disappears, an important connection to our country’s history will be lost.

“It’s the founding fish,” said Russell, referencing the title of a book by the beloved nonfiction writer John McPhee. “People fed their slaves and servants with it.”

In *The Founding Fish*, published in 2002, McPhee tells how George Washington fished for shad in the Potomac River at Mount Vernon, and how the spring shad run helped save the troops at Valley Forge from starvation. He recounts tales of shad from the Bay of Fundy to Florida to the Pacific Northwest – where a population was established after it was transplanted from the East Coast in the 1800s – along with his own shad-fishing adventures and misadventures on the Delaware River and elsewhere. The last chapter is recipes.

“What’s dying,” said Russell, “is the fishermen. They stopped making us, people who like to work a million hours a week.” Contacted a few weeks later, he said the 2018 catch was below his average. A cool spring and late April full moon meant a shortened season.



A member of the Essex Rotary Club prepares shad fillets for the annual shad bake it runs with the Connecticut River Museum in June.



Shad fisherman Dan Russell fillets a freshly caught shad at the market he owns in Rocky Hill, Hale’s Shad.

Oven-Broiled Butter-Enhanced Shad Fillets Serves 2

Aluminum foil, crumpled

- 1 large or 2 medium shad fillets (about ½ to 1 pound each)
- Salt, pepper and garlic salt to taste (optional)
- ½ stick of butter

1. Remove the shad and butter from the refrigerator one-half hour before cooking.
2. When you are ready to cook, preheat the broiler. Spread the crumpled foil to cover the broiler rack or pan.
3. Place the shad on the foil. Sprinkle with salt, pepper and garlic salt, if desired.
4. After 4 to 5 minutes, check to see if the surface of the fish is drying. When dry, coat the entire surface with some of the softened butter. Broil for 10 minutes, or until golden brown.
5. Remove the shad from the oven, and using a fresh butter knife or spreader, coat with the remaining softened butter. Serve immediately.

Recipe courtesy of the Haddam Shad Museum

Whole Baked Shad Serves 2-3

- 1 whole shad (about 4.5 pounds, scales, head and organs removed, but not boned)

Milk to cover (up to 2 cups, depending on the size of the pan)

Accompaniment: toasts or crackers

1. Preheat the oven to 275° F.
2. Place the shad into a baking dish.
3. Cover the shad with milk (the milk will make the bones edible).
4. Bake for 4 hours. Serve hot with toasts or crackers.

Recipe courtesy of Hale’s Shad



More shad recipes can be found at:
<https://seagrant.uconn.edu/?p=4282>

About our Contributors



A.J. Hand is a retired editor/writer/photographer for *Popular Science* magazine. He has spent many hours exploring Long Island Sound, first as a fisherman, and now as a birder and photographer. His area of focus is the Norwalk Islands, especially Cockenoe, where he has become involved with the protection of nesting terns, American oystercatchers, piping plovers and other shorebirds.



Before retiring in 2014, **Robert Miller** worked as a newspaper reporter for 36 years. Of that, he worked for 22 years at *The News Times* in Danbury. He spent most of his time there covering health, science and the environment. In 2006, he began writing "Earth Matters," a weekly column about the environment. He has continued to write the column after retiring, typing away for 12 years and counting.



John Pirro is a Connecticut native who worked for 37 years as a newspaper reporter and photographer. Now retired, he lives in Litchfield with his wife and two cats.



Christine Woodside is a writer and editor who writes about the environment and the history of ordinary Americans and their clashes with nature. Her most recent book, *Libertarians on the Prairie*, was published in 2016. She worked for newspapers for 18 years, and since 2005 has been the editor of *Appalachia*, a journal published by the Appalachian Mountain Club. She writes for the Connecticut Health Investigative Team and is the former longtime editor of *Connecticut Woodlands*. She is earning a master's in history from Arizona State University.



Judy Preston conducts public engagement and education for the Long Island Sound Study at Connecticut Sea Grant. In partnership with the UConn Master Gardener program, she runs the Coastal Certificate program that teaches sustainable gardening practices. She lives, plays and volunteers in conservation efforts at the mouth of the Connecticut River. She has an undergraduate degree in geology from Skidmore College, a Master of Science in botany from the University of Vermont and Master of Environmental Management from Yale University.



Judy Benson has been the communications coordinator of Connecticut Sea Grant and editor of *Wrack Lines* since 2017. Prior to that, she was a reporter and editor at *The Day* of New London for many years, including more than a dozen covering health and the environment. Exploring the tidal marshes, islands and natural beaches of Long Island Sound by kayak and on foot is one of her favorite pursuits. She earned both her undergraduate degree in journalism and her Master of Science in natural resources from UConn.

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Still, by summer he was already looking forward to shad season the following spring.



Dan Russell's custom-built aluminum skiff is docked next to his market, Hale's Shad, on the Connecticut River in Rocky Hill.

"This is what I do," he said. "Next year will be better, because the full moon will be on April 22, instead of on April 29. They start the run on the April moon."

The Empress for Life of SECT is looking forward to it, too.

To learn more about that status of Connecticut River shad, visit:

https://seagrant.uconn.edu/wp-content/uploads/sites/1985/2018/11/shad_DEEPReport.2017.pdf

WINNERS OF PHOTO CONTEST

1st place photo (back cover): Sailboats and kayaks are blanketed in snow after a storm in February 2017 at Jennings Beach in Fairfield.

2nd place photo: A lobster boat and traps are reflected in the water off the docks at the Guilford Lobster Pound at the Guilford Town Marina on an early morning in April 2017.

3rd place photo: Recreational clammers gather just offshore from the Surf Club in Madison during the Madison Shellfish Commission's spring clam dig in June 2018, as town Shellfish Commission Chairman Stephen Nikituk, left, looks on.

Honorable mention: Barn Island Wildlife Management Area in Stonington is the site of a research project set up in May 2018 by UConn students testing the effects of sea level rise and plant species on salt marsh carbon and nitrogen cycling.



Illuminated sculptures of right whales will be created by Kristian Brevik, recipient of a 2018 arts grant.

Connecticut Sea Grant Arts Support Awards Program

The Connecticut Sea Grant Arts Support Awards Program awards up to \$1000 to an artist or group of artists through this competitive funding program. The winning submission will be selected on the basis of its aesthetic quality, relevance to coastal and marine environments and Connecticut Sea Grant themes, as well as its potential impact on non-traditional audiences.

ELIGIBILITY: Artists who live in Connecticut, or whose work relates to the Connecticut coast or is Long Island Sound-based. **DEADLINE** for applications: **May 13, 2019.**

FOR MORE INFORMATION, visit: <https://seagrant.uconn.edu/?p=1108> or email Dr. **Syma A. Ebbin**, research coordinator, at: syma.ebbin@uconn.edu