Winning a Shell Game

Once wiped out from the Chesapeake, bay scallops are returning to area waters—and dinner plates by JANE BLACK

ON AUGUST 23, 1933, A CATEGORY-4 hurricane swept up the Eastern Seaboard. Eighty-two-mile-per-hour winds battered Cape Henry, Virginia, and a record high tide put Norfolk’s downtown under five feet of water. The storm was so powerful that it carved out a new inlet on the Maryland coast that now anchors Ocean City.

There was no official system for naming hurricanes back then, but this one was dubbed the Storm King, and it set records that remained in place for eighty years. It also had another lasting, though less well known, impact: It washed away all the Chesapeake Bay’s eelgrass, a marine plant that thrived in salty bays and coves. And with the grass went the entire local population of wild bay scallops. In 1930, commercial fishermen plucked 1.4 million pounds of the bivalves from bay waters. “We went from supporting a thriving commercial fishery to zero,” says Mark Luckenbach, a professor at the Virginia Institute of Marine Science (VIMS). “The scallops went extinct.”

The seeds for their return were planted in 1999, when researchers at VIMS and the Nature Conservancy spearheaded an effort to restore the region’s eelgrass and at the same time improve water ecology. What started as less than an acre by this year grew to 6,200 acres of lush, swaying green ribbons in the seaside bays of Virginia’s Eastern Shore. It was by all accounts the world’s most successful sea-grass restoration. So, Luckenbach wondered, why not try to bring back the scallops too?

It was, he admits, “a fool’s errand.” Bay scallops, or Argopecten irradians, are temperamental, preferring bays where the salinity is just right, with little influx of freshwater. They don’t provide the same environmental benefits as oysters, which grow in clumps and filter water. Instead, scallops move around using a kind of primitive foot or by clapping their shells to swim, scanning for threats with eighteen pairs of bright blue eyes.

Nor was there an obvious market for them. The Chinese, who used to source their seed from a Virginia researcher in the 1960s, harvest hundreds of millions of tons of bay scallops and sell them frozen at prices that American farmers can’t compete with. Fresh scallops are trickier. Once out of the water they last no longer than four days.

In 2014, VIMS’s small-scale scallop experiment sparkled an idea for Ryan Croxton, the cofounder of Rappahannock Oyster Company based in Topping, Virginia. Bringing the bivalves back to the Chesapeake Bay piqued his interest in the same way that oyster aquaculture had in 2001. Fifteen years ago, that might have seemed quixotic too. But Rappahannock now...
Produced 200,000 oysters a week and owns restaurants in Topping; Richmond; Washington, D.C.; and, soon, Charleston, South Carolina. “Bay scallops are all up and down the East Coast, and it made perfect sense that we should have them, too,” Croxton says. “But we don’t.”

Croxton began hunting for a U.S. hatchery to provide seedstock. He found only one farmer, Karen Rivara, on New York’s Long Island. The rest were too busy with seed for oysters, which had proven profitable. The first sample, needed for testing before the scallop larvae could be put in Virginia waters, died in the mail. To ensure the second set arrived safely, Croxton dragged his family to Long Island for a handoff. “Karen came over by boat and met me in Sag Harbor and handed me the box,” he remembers. “It felt like espionage”—until, that is, he tossed it in the backseat between his two daughters’ car seats.

Though the seedstock survived the road trip to Virginia, Croxton lost 90 percent of the tiny scallops when a pump broke and the water in their tank dried up. The ones that survived had to be painstakingly shaken loose from a ball of mesh, which mimics the eelgrass that scallops love, then transplanted into the bay. “At this point, I had never even tasted one,” Croxton says. “There were moments when we asked ourselves: What if they suck?”

They do not. Served raw or lightly grilled on the half shell, they’re soft and salty one moment, sweet with the meaty chew of a clam the next. Unlike their open-ocean cousins, with bay scallops you can eat the whole animal (not just the meaty white adductor muscle), much like an oyster.

This fall, patrons of Rappahannock’s restaurants will get to sample Croxton’s first harvest. By next year, he hopes to have hundreds of thousands of scallops in the water. These scallops will feed his hungry customers. But they will also help increase a nascent wild population—escapees from those first tests that are already beginning to make homes in pockets of eelgrass. “There’s that excitement of striking on a new flavor or texture that you’ve never had before,” Croxton says. “But what really matters is that we get scallops back in the water—that they exist in the wild and one day my kids can taste them without having to resort to aquaculture.”