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Corridor of safety for crabs sought

Aim is to protect migrating females

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With the Chesapeake Bay's juvenile crab population dropping, several leading scientists are pushing to create a sanctuary that would make a large swath of Maryland's portion of the bay off-limits for crabbing at certain times of the year.

Proponents of the idea say female blue crabs, which mate in the shallow areas of Maryland rivers but spawn in Virginia, need to be protected as they migrate to the Lower Bay in September and October.

The sanctuary would protect that corridor - a narrow section of the bay's main stem along the Eastern Shore that is a popular fall place to crab.

"If we don't protect all of the mated females on their migratory corridor, they won't have a chance to generate the next generation," said Yonathan Zohar, a University of Maryland marine biologist who has been discussing the sanctuary concept with state regulators and other scientists, hoping to reach a consensus.

Virginia already has a sanctuary designed to protect female crabs as they spawn. Established in the 1940s, it has been expanded several times in response to crab shortages and is currently 928 square miles, extending from the Maryland line to the Atlantic Ocean.

But in Maryland, regulators and watermen have long been cool to the concept.

Unlike oysters, which are protected from harvest in many sanctuaries throughout Maryland's portion of the bay, blue crabs are frequently on the move. It's impossible to guarantee that they will go to an area the state has designated for their protection, or when they will get there or how long they will stay.

Harvest elsewhere

And, some scientists say, a sanctuary doesn't reduce the fishing pressure - it just redirects the crabbers to another spot.

"When you close an area to make a sanctuary, all those people don't just take their gear home. They go somewhere else," said Lynn Fegley, fishery operations director at the Maryland Department of Natural Resources. "I don't think a sanctuary is the answer for Maryland."

Two weeks ago, Fegley told a group of watermen that crabs were in danger of being overfished this year and were not producing enough juveniles to rebound.

Her data came from the department's annual winter dredge survey, which counts crabs during the cold months, when they are easy to see. Fegley asked the watermen to collaborate with the department to find some viable management strategies. Fegley declined to say what those might be.

The idea of a Maryland sanctuary is not new - the Chesapeake Bay Foundation proposed one 12 years ago. Then, as now, there was widespread concern about the fishery. But there wasn't much support for a sanctuary because scientists couldn't be sure it would be effective, said Bill Goldsborough, the foundation's senior scientist.

Zohar, who is director of the Center of Marine Biotechnology at the University of Maryland Biotechnology Institute, said the situation is different today. Armed with \$12 million in federal funds, he has been working with experts in the region for more than five years to study the crab's life cycle. He and the other researchers have raised hundreds of thousands of crabs in a hatchery, then put them in the bay to learn how they migrate and reproduce.

That work has helped the scientists pinpoint when the mated female crabs travel down the bay and the routes that they take.

Zohar said he has spoken to natural resources officials about the idea of protecting those migration routes, though he stressed that discussions are preliminary and he hasn't made any formal proposals yet.

Other supporters of the approach include Anson "Tuck" Hines, director of the Smithsonian Environmental Research Center in Edgewater, and Romuald Lipcius, a marine science professor at the Virginia Institute of Marine Science.

Hines' work in the Rhode River has helped establish the crabs' migration patterns. Lipcius has been a major sanctuary advocate in Virginia.

Both serve on a bistate crab committee with Zohar and are part of his research project, and both say the Virginia sanctuary has been successful in protecting spawning crabs.

Hines' study has shown that the fishing pressure in the Rhode comes equally from commercial crab potters, commercial trotliners and recreational trotliners.

Water too salty

But even with all their efforts, many crabbers in the mid- and lower bay are having a dismal season, in part because the drought has left the water too salty for crabs.

On Smith Island, at least a half-dozen watermen have quit crabbing recently to work on tugboats, according to Dwight Marshall, a longtime Smith Island crabber.

Protecting the migration corridors alone won't solve the blue crabs' problems or change the crabbers' recent hard luck, proponents say. But they believe that, if the crabs make it to Virginia, they can make it to the next generation.

"We need to go farther up in the life cycle, farther up the bay, and make sure the females make it all the way through," Lipcius said. "Every female crab that's caught in Maryland has never reproduced. How fair is that?"

Over the years, however, some Maryland scientists and watermen have questioned the value of Virginia's sanctuary, in

large part because the state lifts the restrictions in mid-September. When that happens, watermen are at an advantage - they already know where the females are, and they can go catch them.

Robert O'Reilly, deputy chief of fisheries management for the Virginia Marine Resources Commission, which regulates the Old Dominion's fishery, acknowledges that the sanctuary isn't perfect.

Often, there are crabs outside its boundaries, where they are not protected. And unlike Maryland, Virginia allows crabbing in the winter, which enables watermen to catch crabs for several months after the sanctuary opens.

But, he said, "the beauty of the sanctuary is that it's meant to increase the spawning stock. After Sept. 15th, the crabs are vulnerable to harvest, but they have already spawned."

Marshall, the Smith Island waterman, says the push for a Maryland sanctuary is another example of scientists "swinging in the wind" to solve the spawning stock shortage.

A more effective technique to increase the number of baby crabs, he said, would be to stop Virginia watermen from taking out pregnant female "sponge" crabs, so-called because of the orange egg sac protruding from the abdomen.

Those crabs often end up at the picking house, where they are worth about 20 cents each.

"What are we doing here, saving crabs for Virginia? It's the craziest mess I've ever heard in my life," Marshall said. "You can try every way in the world to get around it, but you still have to come back to it: If you don't have the mama, you won't have the children."

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