

## ***This Week's Take:*** **Rifle-toting crab scrapers, dying grass don't dash hopes for bay**

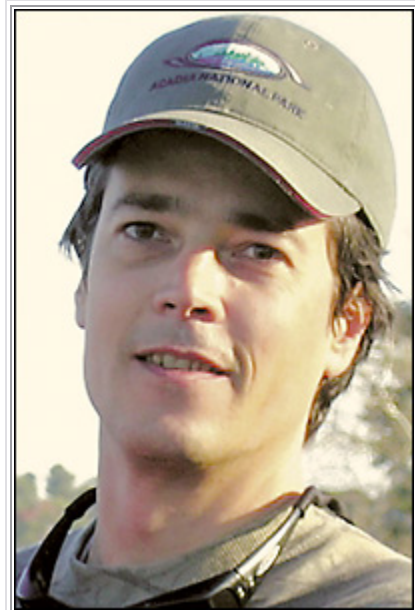
By MICHAEL D. NAYLOR, For The Capital

I don't remember bay grasses growing thick and lush throughout Tangier Sound, stretching nearly from one island to the next.

I have no recollection of miles of eelgrass all along Eastern Bay, full of big fat perch easily caught by casting to holes within the grass beds.

As a young man I never pulled a bushel basket full of fat crabs wedged in an inner tube behind me as I walked through thick redhead grass beds in the lower Patuxent.

These fine memories are second-hand, borrowed from friends who spent time on the bay before I was born. For by the time I came along on a freezing January morning in 1969 it was already too late. The grasses were dying, the victims of the changes that accompanied the population surge in the Chesapeake watershed after World War II.



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Three and a half decades - and tens of millions of water quality improvement dollars later - the bay's water quality has improved in many measurable ways. In some areas, most noticeably above the Bay Bridge, bay grasses have rebounded, and in some areas are doing better than before the die-off. In other areas, there seems little reason to be hopeful.

Of all the setbacks faced by bay grasses, the eelgrass population has lost the most ground. Formerly extending from Eastern Bay on the Eastern Shore and the Patuxent River on the Western Shore, all the way south to the mouth of the bay, eelgrass now exists in Maryland only from the Big Annemessex River southward. Eelgrass can no longer be found anywhere on Maryland's Western Shore. As the only true sea grass found in Chesapeake Bay, this 40-mile retreat is a terrible loss with profound implications for the entire Chesapeake ecosystem.

But we hold out hope. In some rivers that formerly supported eelgrass, water quality is close to the water clarity and nutrient levels that should allow these formerly abundant bay grasses to thrive. In 2003, a tiny group of colleagues in Maryland teamed up with a

group of researchers led by Dr. Bob Orth at the Virginia Institute of Marine Science to begin what would become the largest bay grass restoration project ever undertaken.

From 2003 through 2006, we collected and sowed tens of millions of eelgrass seeds in more than 100 acres of five major river systems in Maryland and Virginia.

We have learned a lot in these few years.

We learned quickly that funding for restoration is terribly difficult to come by in these tight budget times.

Initially, funds were solicited through federal agencies including the National Oceanic and Atmospheric Administration and the Army Corps of Engineers; in the past six months we began to receive support from the Maryland legislature as federal funding disappeared.

We learned that it is the Chesapeake's summers that are killing the eelgrass. In every area we work, grasses thrive from late fall through early summer, and by June the beds are always lush. But as the water temperatures climb, the eelgrass suffers. Our bi-weekly plant counts show fewer and sicker plants with each summer visit. The leaves become encrusted with organisms that thrive in the warm, nutrient rich water. They struggle for light, their growth slows to nothing, and little by little they fall to the sediment and die. Most sites - and the entire Patuxent River - have nothing left alive by the end of August.

Since 2003, the restoration program has seen bad times and good. To me, the low point is a close tie between the sad, dead plant roots seen this August when the last of the Patuxent eelgrass disappeared, and the surreal experience in Tangier Sound when crab scrapers - concerned that we may damage the grass beds they rely upon - threatened over the VHF radio to carry rifles into the marsh, hide and shoot at us as we collected seeds.

The high point came just a few weeks ago, when we dove again on the St. Georges Island site on the Potomac and found thousands of brilliant green eelgrass shoots, the fruits of our labor in 2004 and 2005. When we dove on these grass beds this summer, we saw seahorses, pipefish, schools of minnows, big crabs - all the reasons we do restoration.

Our experience to date has demonstrated that these plants will do fine through next spring, and they should produce, entirely on their own, millions of eelgrass seeds. For the first time in my lifetime, I may see the natural reproduction of eelgrass on Maryland's Western Shore.

With any luck, at this time next year I will have my own first-hand memories of a healthy, natural eelgrass bed in the Potomac River.

For more information on this program, visit [www.dnr.state.md.us/bay/sav/](http://www.dnr.state.md.us/bay/sav/).

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