

04-11-2024

Dear Mike Hogan and Stephanie Gemski,

It was two weeks ago now that I finally found your email through Mike at the DEM. I hoped to submit public comment. I know it is after the deadline, but I worked hard on finding you and I was just wondering. Where would my submission be posted?

“Horseshoe Crabby” -Ben Shalant

I read the three articles in the Rhode Island and they didn't mention horseshoe crabs. They were once so prolific, American settlers first tried to grind them up as a means to fertilize their fields. When one population in a food web is disturbed there are downstream effects. It is likely that horseshoe crabs in their very plentiful bodies helped maintain the Narragansett Bay's health. They have copper-containing blood, which traps pathogens.

There is talk of Quahog populations needing more Nitrogen. I spoke to an architect of wastewater treatment plants who said that an experiment with altering the plant's nitrogen release should be easy to do. But, what about the potential to release pathogens into the Bay?

Horseshoe Crabs used to be prolific all the way from Maine to the Florida Keys. They are now federally threatened. They are still being caught and bled for Medical Laboratory use. They are supposedly being returned to the oceans and bays, but their chances of reproductive success are undoubtedly compromised.

Quahogs and Horseshoe Crabs both require 8 years before they are able to reproduce and lay eggs in mass. If they are gone, something will come along to replace them. In some places it already has in the form of Apple Snails. They harbor several pathogens.

I wanted to give additional ventilation to the idea that in certain oxygen concentrations, quahogs really thrive. But, this come as the cost of them getting diseases.

I like the idea of transplanting the more mature quahogs to places where they can create a plethora of offspring. That would be a first step. We here in California have had tremendous success with protected areas for Rockfish to set up camp. Called Marine Reserves, these no fish zones allow fish to reach ages of 30+ years old. This is where egg-laying capacity really revs up. If there are to be smaller fish, larger fish need to be allowed to do their thing. What you don't want to do is fish to extinction, which is what I fear would happen if the upper reaches of Narragansett Bay continue to be raked.

The Bleeding of Horseshoe Crabs is to me, particularly troubling. If that is happening in Rhode Island, I would only caution that it comes at a cost. The chemical LAL is refined from blood. It is used to test batches for contamination across the pharmaceutical industry, in drugs that must be cultured e.g. COVID-19 vaccines. This despite the fact that clean labs and a synthetic substitute could be used, instead.

I have heard talk about trying to improve the sustainability of the Horseshoe Crab “fishing” industry. There are fishermen who doubtless supplement their income by bringing in horseshoe crabs. I would

like state, and indeed all of New England to do more to not be interrupting their breeding cycles. These are creature older than these dinosaurs. They need to not be kept in tubs or bled to harshly so that they die.

These are not even crustaceans, but relatives to spiders and extinct sea scorpions. There needs to be and examination of how dead horseshoe crabs feed algae. There need to be people mobilizing after storms to turn impended Horseshoe Crabs back over so they can return to the living. What are the ideal conditions for their eggs to survive? That cannot be left out of the equation.

I'm sorry to learn that global warming could put an end to the Quahog industry entirely, and that pathogens could be transmitted by invasive species.

I wish all the luck to your State in dealing with this menace.

Benjamin Shalant
Imanastronaut@icloud.com

Typed using my thumbs, on an iPhone.