

Horseshoe Crab Action Month: Sample Op-Ed

The American Horseshoe Crab: Staring Down Twin Threats to its Future

A species older than the dinosaurs is under attack – the iconic American horseshoe crab.

These ancient animals once thrived up and down the Atlantic Coast, but their numbers tumbled in the 1990s due to unregulated killing of horseshoe crabs for use as bait, and the species has never recovered. Compounding the challenge is the growing harvest of horseshoe crabs for their prized blood, used in safety tests for vaccines and other medicines. The American Horseshoe Crab is now listed as a Vulnerable Species by the International Union for Conservation of Nature, and further declines would constitute an ecological disaster.

Why? Because an entire marine ecosystem depends on horseshoe crab eggs for their own survival.

For example, the *rufa* red knot, now listed as threatened under the Endangered Species Act, depends on abundant horseshoe crab eggs as a critical food source during its epic 18,000-mile round-trip migration. Red knot populations counted along Delaware Bay in 2021 were at their lowest recorded level. Other species that are in decline, like weakfish and striped bass, also rely on horseshoe crab eggs and larvae as a food source. Forage fish, like the striped killifish, flourish by feeding on hatched larvae, providing more prey for sportfish enjoyed by anglers along the Atlantic coast.

In response to the dramatic decline in horseshoe crab populations, the Atlantic States Marine Fisheries Commission prohibited the bait harvest of female crabs. But now it is proposing to reverse course with a new policy that would weaken their protection. This cannot be allowed to happen.

Similarly, the companies that harvest the blood of horseshoe crabs say they need to take more of them to face increased demand from the pharmaceutical industry. In a technologically advanced society, a test that uses the blood of a living animal is painfully outdated. A synthetic alternative is now being recognized as equivalent by authorities around the world, but in the United States, a powerful organization known as the US Pharmacopeia (USP) stands in its way, seemingly aligned with interests that favor the status quo. Thus far, only one company, Eli Lilly, is using the synthetic, known as recombinant Factor C (rFC), in marketed products. We call on all pharmaceutical companies to follow Lilly's lead, and we call on the USP to update its quality standards and recognize that rFC is equivalent to the test derived from horseshoe crab blood.



We are in a biodiversity crisis, largely from man-made consequences. North America has seen a 33 percent loss in biodiversity since 1970, including a 29 percent decline in bird populations. Shorebirds like the red knot have been especially hard hit: they have declined by 70 percent during this time.

Along the Atlantic Coast, restoring horseshoe crab populations would help reinvigorate an entire ecosystem. The stakes are high, but solutions are in sight. We call on our elected officials and policymakers to make the preservation of the American Horseshoe Crab a priority, and to hold accountable those who would stand idle until it is too late.