



Horseshoe Crab Monitoring Shows Positive Trends in Massachusetts

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Earlier this spring, the Massachusetts Division of Marine Fisheries (DMF) convened a Horseshoe Crab Science Meeting to share new data on population trends, monitoring efforts, and ecological connections across the region. The discussion provided an encouraging, data-driven look at how horseshoe crabs are doing in Massachusetts waters—and why continued monitoring matters.

The DMF trawl survey, conducted since 1978 and used in coast-wide stock assessments through the Atlantic States Marine Fisheries Commission, shows strong gains south of Cape Cod. Spring surveys have documented a sustained increase in abundance for more than a decade, with 2025 recording the highest density of female crabs on record. Fall trends in this region remain stable. North of Cape Cod, trends are more variable but generally increasing over the past 15 years. Notably, all 2025 survey results exceeded long-term median values.

Nearshore monitoring tells a similar story. The seine survey, which samples shallow embayments, has shown a consistent upward trend over the past 20 years, with all recent data points above historical averages.

On spawning beaches, results from the volunteer-driven survey (est. 2008) indicate strong reproductive activity. In 2025, 71% of sites recorded above-average numbers of spawning females, and long-term analyses show increasing trends at most locations over the past 10–15 years. These data are especially notable in areas with active harvest, suggesting current management is supporting population stability.

Research from Manomet Conservation Sciences also emphasized the ecological importance of horseshoe crabs. Their eggs are a critical food source for migratory shorebirds at sites like Monomoy Island, linking crab population health directly to broader coastal ecosystem function.

Importantly, Massachusetts continues to manage both the commercial and biomedical use of horseshoe crabs with increasing care. State regulations and industry practices have evolved to limit impacts from biomedical bleeding, including tighter controls on collection, handling, and mortality. These protections—combined with long-term monitoring—are helping ensure that horseshoe crabs remain both an ecological cornerstone and a sustainably managed resource.

Taken together, the data point to a positive trajectory, evidence that sustained monitoring, thoughtful regulation, and regional collaboration are making a real difference. Protecting the coastal habitats these animals depend on, including clean water and healthy shorelines, will be essential to maintaining these gains and supporting the broader ecosystem from horseshoe crabs to the migratory birds that rely on them. The DMF has more information on their website: <https://www.mass.gov/info-details/horseshoe-crab-monitoring>