

# Bill H. 898: AN ACT TO END THE TAKING OF HORSESHOE CRABS FOR BAIT

General Court 194<sup>th</sup>, 2025

**Sponsor:** Michelle L. Badger, 1st Plymouth

**Co-sponsors:** Senator Patrick M. O'Connor; Representative Jay D. Livingstone; Representative David T. Vieira

**Purpose of Bill H. 898:** This bill seeks to prohibit taking horseshoe crabs for use as bait in commercial fishing, thereby protecting declining horseshoe crab populations and restoring the ecological balance of coastal ecosystems.

## Background & Need for Legislation

### Ecological Importance:

- Horseshoe crabs play a critical role in the coastal food web, their eggs are a primary food source for shorebirds, including the federally threatened Red Knot and several commercially valuable fish.

### Medical Significance: Too valuable to kill for bait:

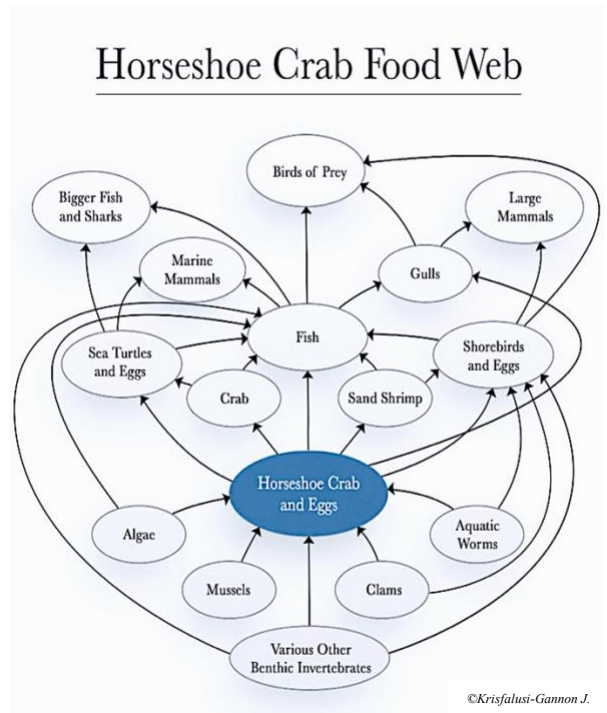
- Horseshoe crab blood is used to produce Limulus Amebocyte Lysate (LAL), a critical and widely adopted method for **endotoxin testing** in both vaccines and medical devices.
- During the transition to synthetic LAL, when horseshoe crab blood is still critical for ensuring the safety of our vaccines and injected medicines, every horseshoe crab must be kept alive. **They are too important to be killed for bait.**

### Horseshoe Crab Devastation:

- Indifference:** Bait fishermen pull apart spawning groups, in many cases, fatally damaging the claspers of unwanted males. ([https://bit.ly/hsc\\_capture](https://bit.ly/hsc_capture))
- Habitat:** Extreme weather, sea level rise, and coastal development all contribute to the **loss of nursery and spawning areas.**
- Historic mismanagement:** In the 1940s, Massachusetts launched a horseshoe crab eradication program offering 3-cent bounties per crab. The Division of Marine Fisheries (DMF) estimates up to **500,000 were killed annually** from 1960–1970, excluding additional town-led efforts.

### Biomedical Use:

- Massachusetts allows horseshoe crab takes for both bait and biomedical use. In 2024, Cape Cod companies bled 200,000 crabs from Massachusetts—plus an unknown number from other states—and returned them to their original capture sites. Under the "Rent-a-Crab" program, live crabs are leased for bleeding and then sold as bait, blurring the line between biomedical use and bait fishing. **These crabs should be kept alive, not killed for bait.**
- The table below provides a state-by-state comparison of bait and biomedical quotas, as well as fishery closures.**



2023-2024 (Proposed)*	MD	DE	NY	MA	VA	RI	SC <sup>o</sup>	NJ	GA <sup>o</sup>	NC	FL <sup>o</sup>	ME <sup>o</sup>	NH <sup>o</sup>	PA <sup>o</sup>	CT**
Biomedical	Y	Y	Y	Y	Y	Y	Y	Y	—	—	—	—	—	—	—
Bait State Quotas	186,466 (male only)	173,014 (male only)	150,000	140,000	81,331 (male-only East of COLREGS)	8,398	0	0	29,312	24,036	9,455	0	0	0	0

\*Atlantic States Marine Fisheries Commission Fishery Management Plan Horseshoe Crab 2023 Fishing Year, 2024 proposed quotas.

\*\*CT prohibits the hand harvesting of horseshoe crabs or their eggs in state waters, effective October 1st, 2023

<sup>o</sup>De minimis status—average landings for the last three years is less than 1% of the coastwide landings.

## Biomedical Use Cont.

- Crabs are confined during their spawning season, pierced in the heart, and drained of as much as **a third of their blood**. The DMF cites a 1.3% mortality rate, yet no research has examined how bleeding impacts reproduction or egg viability in repeatedly bled females. We're flying blind while risking the **collapse of a species critical to the health of coastal ecosystems**. As long as their blood fuels testing protocols, **the bait take must end**—Massachusetts' horseshoe crabs can't survive both.

## Won't this hurt the fishing industry?

- Horseshoe crab bait value**—2024: 140,000-quota reached. **40 fishermen earn \$2/bait crab = \$280,000.**
- Eel fishery stock is depleted**—2023 assessment eel populations are at or near **historically low levels** due to overfishing and habitat loss.<sup>1</sup>
- Immature whelk harvest:** The DMF's current plan raises the minimum take size only to the point where *half* of female whelks are mature—and not until 2036. DMF will allow the take of **millions of immature whelks** for more than a decade BEFORE they can even reproduce, accelerating the collapse of yet another vulnerable fishery
- Horseshoe crab fishery in decline** – Horseshoe crabs take roughly 12 years to reach maturity and begin spawning, making them especially vulnerable to overharvesting. **Using such a slow-reproducing species for bait is not only unsustainable, but shortsighted**—particularly given their critical value to biomedical applications and human health.
- House Bill 2177** – Aims to reduce the financial impact of regulatory actions on commercial fishers. Support this bill as a vital step in **helping bait fishermen adapt** to the phase-out of horseshoe crab harvesting for bait.

## Existing Protections & Loopholes:

- Harvest restrictions:** 2024—DMF restricted all harvest April 15 to June 7. Horseshoe crabs **spawn successively** May through July. Early spawning crabs may escape only to be picked up later as spawning continues.

## Benefits of the Legislation

- Supports commercial fisheries**—At least nine valuable fish species rely on horseshoe crabs and their eggs. Restoring horseshoe crab populations could **strengthen these fisheries long term**.
- Protects ecosystems & wildlife:** Safeguards coastal habitats, supports migratory shorebirds, and **boosts marine biodiversity**.
- Encourages** biomedical labs to transition to synthetic alternatives.

## Public & Scientific Support:

- H. 898 is backed scientists, conservation groups and community members who remember when **horseshoe crabs thrived** on Massachusetts' beaches.

See the full list of supporters at [horseshoecrabs.org](https://horseshoecrabs.org).

Massachusetts Fisheries Landings and Values Horseshoe Crabs –Bait for Whelk Fisheries DMF Horseshoe Crab Science Meeting Presentations - Dealer Data					
Species	Pounds	Price/ Pound	Value	# HSC Killed for Bait	HSC Active Bait Permits
2024					
Horseshoe Crab	836,711	\$1.3	\$1,104,225	140,170	"Decreasing" N/A
Channeled Whelk	713,873	\$2.8	\$2,020,278		
Knobbed Whelk	44,305	\$1.6	\$72,732		
2022					
Horseshoe Crab	838,025	\$.97	\$811,442	134,753	~40
Channeled Whelk	895,390	\$4.2	\$3,734,328		
Knobbed Whelk	74,502	\$2.1	\$156,181		
2020					
Horseshoe Crab	602,729	\$1	\$606,695	144,534	48
Channeled Whelk	948,788	\$3.3	\$3,154,889		
Knobbed Whelk	90,087	\$1.7	\$152,768		
2018					
Horseshoe Crab	541,367	\$.82	\$448,010	159,002	57
Channeled Whelk	1,347,500	\$3.2	\$4,322,891		
Knobbed Whelk	197,389	\$1.3	\$265,770		

Commercially Valuable Fish that Rely on Horseshoe Crabs or Their Eggs		
Common Name	Landings	Commercial Value (2024)
American Lobster	16,430,116	\$114,992,323
Winter Flounder	1,857,497	\$3,632,928
Menhaden	12,346,376	\$2,933,950
Striped Bass	662,810	\$2,858,631
Black Sea Bass	945,972	\$2,401,301
Fluke (summer flounder)	640,663	\$2,138,274
Scup	797,756	\$708,664
Tautogs	68,033	\$326,573
Blue Fish	149,518	\$312,083



<sup>1</sup> McKiernan, D. Director, DMF, Memo. Commercial American Eel Management and Permitting, p2. Dec. 12, 2024.