



*Bringing back the birds*

**SB 158: Pesticide Registration – PFAS Testing – Requirements**

**Submitted to:** The Senate Committee on Education, Energy, and the Environment (EEE)

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**Position: FAVORABLE**

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American Bird Conservancy, which works to conserve birds throughout the Americas, strongly supports SB 158, the Pesticide Registration – PFAS Testing – Requirements Bill. To protect wildlife, ecosystems, and human health, we urge its swift passage through the Maryland legislature.

Per- and polyfluoroalkyl substances (“PFAS”) are a class of forever chemicals which have, disconcertingly, achieved ubiquity. Maine was the first state to implement a PFAS ban of any kind, which was promulgated in 2021.<sup>1</sup> Since then, multiple states and the United States Environmental Protection Agency (“EPA”) have taken major steps in banning the use of PFAS and, in the case of EPA, have removed PFAS chemicals from lists of active and inert ingredients.

In addition to previously addressed human impacts, environmental risks include potential kills of invertebrates, organ failure in vertebrates, and impaired immune function in non-human animals.<sup>2</sup>

**American Bird Conservancy is particularly concerned with potential effects on shorebirds and waterfowl which call Maryland home.** The Plovers, Willets, and Gulls which frequent the coast may be at risk from loss of prey species. Ruddy Ducks, Hooded Mergansers, and the omnipresent Mallard may all be at risk from organ failure after ingesting invertebrates or fish which are contaminated. PFAS bioaccumulate in aquatic organisms and are both acutely and chronically toxic.<sup>3</sup>

A study of juvenile seabirds in Massachusetts found that **100% of individuals surveyed (36 total) had elevated levels of PFAS in their liver.**<sup>4</sup> This paper, from 2020, was the first to look at concentrations of PFAS in seabirds and was sparked by a desire to investigate predators of marine invertebrates, which past research has confirmed are biological reservoirs for PFAS. Undoubtedly, the dearth of scientific literature on the subject is not from a lack of effect, but rather a lack of investigation.

The Red Knot, a shoreline wading bird, migrates through Maryland every year on their way to their nesting grounds. The horseshoe crab eggs they eat off the Maryland coast sustain them on their long journey and provide ample opportunities for birders and other tourists to view them.<sup>5</sup> **Horseshoe crabs are extremely susceptible to PFAS, experiencing mortality and**



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decreased fecundity from even trace amounts of PFAS in marine environments.<sup>6</sup> Furthermore, the levels of PFAS in marine environments are poorly understood; the effects and devastation are likely more widespread than currently accounted for.

**PFAS threats transcend environmental risks and can endanger economic wellbeing; the Maryland Ornithological Society estimates that birdwatching *alone* brings in almost \$350 million annually.**<sup>7</sup> These estimates were made in 2011, well before the increased domestic ecotourism boom of the late 2020s.

Most concerning, though, is the new finding that PFAS are found in many common agricultural pesticides including the neonicotinoid imidacloprid and the organophosphate malathion, both of which contain their own haunting and devastating legacies.<sup>8</sup>

**The Pesticide Registration – PFAS Testing – Requirements Bill is a commonsense approach to keeping Marylanders and wildlife safe from these harmful chemicals.** The first step would be a **phase-out on mosquito-targeting pesticides containing PFAS, which are typically applied as aerial sprays over large aquatic areas,** making exposure particularly likely.

Beginning in 2026, all pesticides must prove that they are free of PFAS before use, giving manufacturers and applicators more than ample time to adjust their pesticide regimens.

**This bill has the potential to save the lives of birds and people alike.** The legislators of Maryland have the impetus and opportunity to continue leading the country in pesticide regulation.

American Bird Conservancy strongly urges the passage of SB 158 Pesticide Registration – PFAS Testing – Requirements Bill.

For more information, please feel free to contact me at [eharydkern@abcbirds.org](mailto:eharydkern@abcbirds.org)

Sincerely,

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<sup>1</sup> <https://cen.acs.org/environment/persistent-pollutants/Worlds-first-ban-products-PFAS/99/web/2021/07>

<sup>2</sup> <https://www.atsdr.cdc.gov/pfas/health-effects/index.html>

<sup>3</sup> <https://www.epa.gov/water-research/water-research-webinar-assessing-toxicity-pfas-chemicals-aquatic-organisms>

<sup>4</sup> Robuck, A. et al. 2020. Legacy and Novel Per- and Polyfluoroalkyl Substances in Juvenile Seabirds from the U.S. Atlantic Coast. *Environmental Science and Technology* (50) 20. <https://doi.org/10.1021/acs.est.0c01951>

<sup>5</sup> <https://www.mdbirds.org>

<sup>6</sup> Ali, A. et al. 2021. The fate of poly- and perfluoroalkyl substances in a marine food web influenced by land-based sources in the Norwegian Arctic.

<sup>7</sup> <https://birdersguidemddc.org/about-us/birding-economics/>

<sup>8</sup> Lasee, S. et al. 2022. Targeted analysis and total oxidizable precursor assay of several insecticides for PFAS. *Journal of Hazardous Materials Letters* (3). <https://doi.org/10.1016/j.hazl.2022.100067>