MARYLAND ORNITHOLOGICAL SOCIETY

March 2, 2022

HB0570: Pesticides – Mosquito Control Products and PFAS Chemicals
House Health and Government Operations Committee
Position: <u>Support</u>

The Maryland Ornithological Society (MOS) asks that the House Health and Government Operations Committee give a favorable report HB0570 and move it to the full House.

This bill would require testing of mosquito control products for per- and polyfluoroalkyl substances (PFAS) and ban the use of PFAS in mosquito control products used by both the Maryland Department of Agriculture and private vendors.

Because of the strong fluorine-carbon bonds, many of these substances are recalcitrant in the environment and persist for years. Additionally, many (e.g., PFOA and PFOS) bioaccumulate in the tissues of wildlife, some to levels that could cause overt toxicity. In fact, levels of these substances have been found in the tissues of marine mammals in the Arctic and in many species of birds. These substances have been in the eggs, blood, and livers of birds across the globe, with concentrations especially pronounced in industrial areas in North America, Europe, and east Asia.[1] PFAS have been shown to reduce hatching success in species of birds such as Double-crested Cormorant[2], and Little Ringed Plover[3]. PFAS has been found in blood of Northern Cardinal in Hawaii, [4] Snow Buntings in Svalbard[5], and American

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[1] Bonisoli-Alquati, Andrea, PFAS concentrations in birds. https://www.bonisolialquatilab.com/pfas-concentrations-in-birds.html

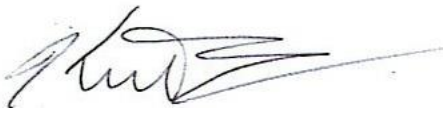
[2] Sedlak, Meg, et al, Per and Polyfluoroalkyl Substances (PFASs) in San Francisco Bay: Synthesis and Strategy, June 2018, https://www.sfei.org/sites/default/files/biblio_files/PFAS%20Synthesis%20and%20Strategy.pdf

[3] Yoo, Hoon, et al Perfluoroalkyl acids in the egg yolk of birds from Lake Shihwa, Korea. August 2008, https://pubmed.ncbi.nlm.nih.gov/18754515/

[4] Russell, Marie C. et al, Per- and polyfluoroalkyl substances in two different populations of northern cardinals, May 2019, https://pubmed.ncbi.nlm.nih.gov/30710759/

[5] Warner, Nicolas, et al, Snow Buntings (Plectrophenax nivealis) as bioindicators for exposure difference in legacy and emerging persistent organic pollutants from the Arctic terrestrial environment on Svalvard, February 2019, https://pubmed.ncbi.nlm.nih.gov/30833262/

Flamingos on the island of Bonaire in the Caribbean[6], showing how pervasive PFAS is in our environment. That these substances are found in wildlife they are also found in seafood and livestock. PFAS have also been found in the tissues of over 96% of humans[7]. Named "forever chemicals" for their persistence and ability to bioaccumulate, we strongly urge legislators act to protect our health and that of the environment by supporting HB0570.



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https://www.audubon.org/magazine/summer-2019/birds-are-living-proof-forever-chemicals-pollute

[6] de Vries, Pepijn, et al, The toxic exposure of flamingos to per- and polyfluoroalkyl substances (PFAS) from firefighting foam applications in Bonaire, November 2017, https://www.sciencedirect.com/science/article/abs/pii/S0025326X17305982

[7] NHANES (on-line), National Health and Nutrition Examination Survey, Center for Disease Control, Atlanta, GA. https://www.cdc.gov/nchs/nhanes/index.htm