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Audubon Minnesota
2355 Highway 36 Suite 400
Roseville, MN 55113

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Chair Freiberg and members of the committee,

At the Audubon Society, our calling is to protect birds and the places they need. This lofty goal can only be achieved by using the best science to guide our ethical commitment to a thriving environment. A recent publication by Rosenberg et al. (2019) revealed that North America has lost approximately 30% of its bird population, three billion birds overall, since 1970. This shocking revelation, paired with our understanding of birds as environmental bellwethers, has highlighted the need to discern the various factors responsible for bird declines. Among these factors is lead poisoning.

There is no doubt that lead is a dangerous toxin that is not safe at any level and that lead poisoning is killing many individual birds (Tranel and Kimmel 2009, Haig et al. 2014, Grade et al. 2019, Pain et al. 2019). However, the debate about restricting the use of lead has long circled around whether a ban would save only individual birds or if it would have measurable impacts on bird populations. While we suspected that the impact could be large, we lacked sufficient science to support that conclusion. However, in the past half-decade new studies have shown that lead can have population-level effects (Pain et al. 2019). For example, a study of Common Loons (*Gavia immer*) in New Hampshire by Grande et al. (2017) found that lead fishing tackle was the leading cause of mortality for adults. The researchers estimated that lead tackle mortality reduced the statewide population by 43% during the years of the study. This pattern highlights how premature death in long-lived species (loons can live to 20 or 30 years old which is a long life span compared to most birds) can have a disproportionate impact because of the loss of future breeding potential. Birds of prey and loons are long-lived birds whose populations may be more vulnerable to population-level effects from lead exposure.

Further questions have asked if we can confidently measure the effect of restricting lead on bird blood levels. Lewis et al. (2021) compared the blood lead levels of American Black Ducks (*Anas rubripes*) in New Jersey in 1970, 20 years before the 1991 nationwide ban on the use of lead shot for waterfowl hunting, to birds caught in 2017. The percentage of individuals with a clinically evident blood lead level declined from 19% in the seventies to 1% in 2017.

Lead is causing the death and suffering of birds, and a growing body of literature points to population-level effects. Based on this evidence we support policies that would help reduce the presence of lead in the environment to improve the health of the bird community in North America.

Do not hesitate to contact me if you would like to discuss this issue further.

Sincerely,

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