

Hunting and Wildlife Conservation Council  
via Douglas Hobbs, Designated Federal Officer  
United States Fish and Wildlife Service

12 December 2022

RE: HWCC Virtual Meeting Written Comment

ABC and NWRA implore the Hunting and Wildlife Conservation Council to recommend to any and all relevant parties that lead ammunition and fishing tackle be phased out on all lands managed under the National Wildlife Refuge System.

American Bird Conservancy (ABC) and the National Wildlife Refuge Association (NWRA) support the expansion of hunting and fishing opportunities on National Wildlife Refuge (NWR) lands while phasing out the use of lead ammunition and fishing tackle used in the aforementioned activities.

As organizations committed to the protection of public lands for wildlife conservation and recreation, NWRA and ABC fully support the decision of several National Wildlife Refuges to propose phasing-out lead by fall of 2026. This decision was recently upheld in a court settlement whereby the US Fish and Wildlife Service (USFWS) is required to include lead phase-outs in hunting and fishing rules introduced next year.<sup>1</sup>

NWRA and ABC led a coalition which has also supported the phase out of all lead used for hunting on Patuxent Research, Rachel Carson, Great Thicket, Wallops Island, Erie, Chincoteague, and Canaan Valley Refuges, and the phase out of all lead used for hunting and fishing on Eastern Neck, Blackwater, and Patoka River NWRs.

### **Lead Poses Threats to Bald and Golden Eagles**

Lead toxicity has recently been shown to have population-level impacts on Bald and Golden Eagles. Bald Eagle population growth is estimated to experience 4.8% suppression from lead toxicity alone, and Golden Eagle population growth is suppressed 0.8%.<sup>2</sup> Other studies have shown that lead reduces the overall resilience of Bald Eagle populations,<sup>3</sup> increases susceptibility of Golden Eagles to other environmental toxins like mercury and DDE,<sup>4</sup> and impairs overall function.<sup>5</sup>

Bald Eagles were only recently delisted from endangered status and many wildlife experts feel Eastern Golden Eagles warrant stronger protections due to declining populations in the United States.<sup>6</sup> Both species are protected under the Bald and Golden Eagle Protection Act which mandates Eagles not suffer take, meaning no one is permitted to:

“...pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb [Bald and Golden Eagles].<sup>7</sup>”

Despite this, Eagles are being poisoned every day by contaminated game which was killed with or ingested lead.

### **Lead Poses Threats to Avian Scavengers**

Avian scavengers such as vultures, condors, and corvids are also victims of lead poisoning. Acute and chronic exposure to lead causes lethal and sub-lethal outcomes for numerous species which are common, and ecologically necessary, on National Wildlife Refuges.<sup>8</sup> Ataxia, organ failure, immune suppression, and impaired reproduction are all potential outcomes of such lead exposure on the aforementioned species.<sup>9</sup>

## **Lead Poses Threats to Waterbirds**

Discarded lead fishing tackle is also a major threat to wildlife. Lead fishing tackle is easily mistaken for grit or stones which may be ingested by waterbirds. When the lead is exposed to the digestive acids in gizzards and stomachs, it begins to dissolve and absorbs into the bloodstream where it can cause behavioral and physiological changes.<sup>10</sup> A single lead sinker or jig is toxic enough to kill a loon when ingested.<sup>11</sup> Swans are also at risk, ingesting lead sinkers and jigs in shallow water, or ingesting lead fragments and ammunition when feeding in upland habitat.<sup>12</sup>

## **Positive Outcomes of Lead Restrictions**

In 1991, the United States banned the use of lead shot for waterfowl hunting. The ban has led to reduced rates of crippling in ducks and geese,<sup>13</sup> reduced detectable blood lead concentration in ducks,<sup>14</sup> and a decrease in non-hunting duck mortality in the years following the ban.<sup>15</sup>

After lead shot was banned in the range of the California Condor in 2008, California saw a measurable decrease in lead exposure to predatory and scavenging raptors due to hunter compliance with lead ammunition regulations.<sup>16</sup>

New Hampshire and Maine have both instituted lead fishing tackle bans and restrictions to protect wildlife, and neither state has experienced a measurable decrease in recreational fishing.

## **Addressing Concerns about Lead Restrictions**

There are arguments that lead phase-outs should be purely voluntary; however, fewer than 20 percent of individual State websites have any easily accessed information on the dangers of lead toxicity from hunting and fishing. We support the empowerment of sportspeople with more information but the purely voluntary approach of phasing-out lead ammunition has not yielded the necessary change required to keep refuge lands safe from lead toxicity.

This concern, and others, were addressed by the USFWS in the 2022-2023 Station-Specific Hunting and Sport Fishing Regulations final ruling<sup>17</sup>:

- There is not a need to demonstrate population-level effects on a species before mitigation efforts are implemented
- A switch to non-lead ammunition and fishing tackle does not present Environmental Justice or accessibility concerns
- Purely educational and voluntary approaches have not yielded significant results
- It is well within the Service's purview to phase out lead

Switching away from lead ammunition and fishing tackle has positive impacts on human health. There is no safe level of lead exposure according to the World Health Organization,<sup>18</sup> and hunters and anglers ingesting or interacting with wildlife containing or exposed to lead potentially suffer negative health outcomes.

Unlike some of the great challenges facing wildlife, there is a solution to wildlife lead toxicity from ammunition and fishing tackle. Viable lead alternatives are already available to sportspeople, which means no interruption in recreation. The North American Non-lead Partnership has made many non-lead options available to people across the country.

## Conclusion

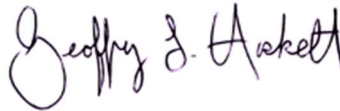
In summary, a national rulemaking requiring the swift phase-out of lead ammunition and fishing tackle on National Wildlife Refuge lands is necessary. We support the provision of information about the dangerous effects of lead ammunition and fishing tackle, as well as wider availability of ammunition and tackle exchange programs. **We strongly request that the Hunting and Wildlife Conservation Council recommend that the National Wildlife Refuge system phase out lead ammunition and fishing tackle on all of its lands in a swift manner.**

We thank you for the opportunity to submit this comment to the Hunting and Wildlife Conservation Council Virtual Meeting.

Sincerely,



E. Hardy Kern  
Director of Government Relations,  
Pesticides and Birds Campaign  
American Bird Conservancy  
[ehardykern@abcbirds.org](mailto:ehardykern@abcbirds.org)



Geoff Haskett  
President  
National Wildlife Refuge Association

---

<sup>1</sup>Case 9:21-cv-00144-DWM Document 29. [https://www.biologicaldiversity.org/campaigns/get\\_the\\_lead\\_out/pdfs/Settlement-Agreement-Hunting-Fishing-Regulations-2022-11-23.pdf](https://www.biologicaldiversity.org/campaigns/get_the_lead_out/pdfs/Settlement-Agreement-Hunting-Fishing-Regulations-2022-11-23.pdf)

<sup>2</sup> Slabe et al. (2022). Demographic implications of lead poisoning for eagles across North America. *Science*, 375. Pp. 779-782.

<sup>3</sup> Hanley, B. J. et al. (2021). Environmental lead reduces the resilience of bald eagle populations. *The Journal of Wildlife Management*, 86(22177).

<sup>4</sup> Watson, J.W., and Davies, R.W. (2015). Lead, Mercury, and DDE in the Blood of Nesting Golden Eagles in the Columbia Basin, Washington. *The Journal of Raptor Research*, 49(2). Pp.217-221.

<sup>5</sup> Golden, N.H., Warner, S.E., and Coffey, M.J. (2016). A Review and Assessment of Spent Lead Ammunition and Its Exposure and Effects to Scavenging Birds in the United States. *Reviews of Environmental Contamination and Toxicology*, 237. Pp. 123-191.

<sup>6</sup> Hunt, W. G et al. (2017). Quantifying the demographic cost of human-related mortality to a raptor population. *PLoS One* 12:e0172232.

<sup>7</sup> <https://www.govinfo.gov/content/pkg/USCODE-2010-title16/pdf/USCODE-2010-title16-chap5A-subchapII.pdf>

<sup>8</sup> Palmer, A.G. et al. (2022). Blood Lead Concentrations of Free-ranging North Florida Raptors: 2008-2017. *Journal of Wildlife Diseases*, 58(2).

<sup>9</sup> See citation number 4.

<sup>10</sup> Michael, P. (2006). Fish and Wildlife Issues Related to the Use of Lead Fishing Gear. Washington Department of Fish and Wildlife: Fish Program.

<sup>11</sup> Grade, T.G., Pokras, M., et al. (2019). Lead poisoning from ingestion of fishing gear: A review. *Ambio*, 48(0). Pp. 1023-1038.

<sup>12</sup> The Trumpeter Swan Society (October 21, 2021). Position Statement: Lead in the Environment is a Significant Threat to Trumpeter Swans and Other Wildlife.

<sup>13</sup> Ellis, M.B., and Miller, C.A. (2021). The effect of a ban on the use of lead ammunition for waterfowl hunting on duck and goose crippling rates in Illinois. *Wildlife Biology*, e01001.

<sup>14</sup> Lewis, N.L., et al. (2021). Blood lead declines in wintering American black ducks in New Jersey following the Lead Shot ban. *Journal of Fish and Wildlife Management*, 12(1).

<sup>15</sup> Havera, A.W., and Zercher, B. (2000) Ingestion of lead and nontoxic shotgun pellets by ducks in the Mississippi flyway. *Journal of Wildlife Management* 64. Pp. 848–857.

<sup>16</sup> Kelly, R.T. et al. (2011). Impact of the California Lead Ammunition Ban on Reducing Lead Exposure in Golden Eagles and Turkey Vultures. *PLoS One*, 6(4).

<sup>17</sup> US Fish and Wildlife Service. 2022-2023 Station-Specific Hunting and Sport Fishing Regulations. Docket No. FWS-HQ-NWRS-2022-0055.

<sup>18</sup> <https://www.who.int/news-room/fact-sheets/detail/lead-poisoning-and-health#:~:text=There%20is%20no%20known%20safe,symptoms%20and%20effects%20also%20increase.>