

Hawk Migration Association (HMA) Position Statement on Non-Lead Ammunition & Tackle

HMA strongly supports ongoing efforts by cooperative groups of hunters, anglers, state wildlife agencies, and private conservation groups to engage and educate hunters and anglers in reducing or eliminating lead poisoning in wildlife.

Lead poisoning kills raptors- eagles, hawks, falcons, owls, vultures- and other aerial and ground scavengers. A fragment as small as a grain of rice can kill an eagle. Lead can affect every single system of an eagle's body — respiratory, digestive, reproductive, and so on. It can prevent raptors from digesting food properly, eventually leading to starvation. It can cause loss of locomotion so severe that an eagle will lose the ability not only to fly, but also to move at all. (Ramanujan, 2022).

In 2022 the journal *Science* published the results of an eight-year study that examined Bald Eagles and Golden Eagles from 38 states. The research showed that lead poisoning reduced population growth rates by about four percent per year for Bald Eagles, which number about 317,000, and one percent per year for Golden Eagles, which number about 35,000 (Slabe et al. 2022, USFWS 2020, Millsap et al. 2022). "These percentages seem small, but, over time, thousands and thousands of individual birds are being removed from the population due to a preventable threat. In the Golden Eagle population, which is currently viewed as stable, a one percent reduction could be the difference between "stable" and "declining," (Slabe, 2022). Here's a short video discussing this study: <https://www.youtube.com/watch?v=UHJ4WoTVBTs>.

Another study published by Hanley, et al in January 2022 in the *Journal of Wildlife Management* found that the Bald Eagle population in the Northeast was reduced by four to six percent annually because eagles were dying by incidentally ingesting lead ammunition fragments in carcasses and gut piles that were not buried.

Lead poisoning remains the leading cause of diagnosed death among California condors. Just under half of diagnosed fatalities are attributed to lead poisoning since releases began in California in 1992. About 90% of condors trapped and tested during 2023 had blood levels that indicated lead exposure. Since the first release in Arizona in 1996, 52 California Condors in the Arizona-Utah population have died from lead poisoning (msn.com, 2024). In August 2024, The Peregrine Fund announced that California Condor "1K", the 1000th Condor to be tagged as part of the California Condor Recovery Program, had been found dead due to lead poisoning.

There are numerous organizations working to encourage proactive and voluntary steps to reduce unintended lead poisoning. One such organization working to promote voluntary, incentive-based outreach and education programs to prevent wildlife lead poisoning from ammunition and fishing tackle and to minimize unintentional impacts on raptors is The North American Non-Lead Partnership formed in 2018 by The Oregon Zoo, The Peregrine Fund, and the Institute for Wildlife Studies.

HMA supports [The North American Non-Lead Partnership](#) and its goals:

"Design and promote voluntary measures to increase the use of non-lead ammunition.

Support the continued long-term viability of scientifically managed hunting and the associated conservation culture by providing programs encouraging sportsmen and -women's participation in conservation actions.

Support continued efforts to research the relative risk associated with specific lead exposure pathways between the use of lead ammunition and wildlife.

Use scientific evaluation to assess and improve programs.”

Some of the Partnership’s programs have had as much as 87% cooperation from hunters during deer season, yet outreach still needs to be expanded. HMA believes that urging hunters and anglers to voluntarily switch to non-lead alternatives (and using these alternatives ourselves) through education and partnerships is the best path forward.

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Compiled by members of the Conservation Committee, HMA Board; reviewed by Laurie Goodrich, Ph.D., Director of Conservation Science, Hawk Mountain Sanctuary Association, Chris Parish, Peregrine Fund, and Vincent Slabe, Ph.D., Conservation Science Global, Inc.

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