

Briefing

Lead ammunition: the protracted story of a toxic problem with a simple solution

Summary

Ammunition users represent a small minority of European citizens yet the massive tonnage of lead they release year on year creates a [One Health](#) issue for wildlife and humans alike and leaves a toxic legacy.

Industry lobbying is preventing the transition to the available non-toxic alternatives. No one has to stop their shooting – they just need to change their ammunition. This issue is not anti-hunting – it is anti-poisoning.

The new [European Green Deal](#) wants a clean continent. The current question for our society is do we want to build back a better healthier society or do we want to keep polluting our environment for now and future generations? Do we follow the science or allow big business to ‘lock in’ risks to health?

The Issue

Of the 150,000 tonnes of lead ammunition produced in Europe each year, industry figures suggest 20,000 tonnes are released into the European environment every year affecting:

1. **Wildlife health:** poisoning to death a million waterbirds alone, every year, and killing eagles and vultures i.e. those already under great conservation threat.
2. **Human health:** As scientists recently noted in a paper about a hunter with clinical lead poisoning: “Supersonic injection of toxin-leeching frangible projectiles into food is intuitively bad.”¹ Game meat shot with lead ammunition has lead levels far in excess of those permitted in any other meats. Children in hunting families are at particular risk of neurodevelopmental impacts.
3. **Soils:** lead ammunition contamination in soils eventually degrades and is taken up into plants and animals in the environment. Annual accumulation is leaving a vast toxic legacy.

Lead is a powerful toxin affecting amongst other systems, immune capability. In a disrupted planet with frequent emerging infectious diseases for people and wildlife, now is not the time to be immunocompromised.

The Solution

Non-toxic ammunition. Effective, safe, often comparatively priced (steel shot is comparatively priced, copper bullets are more expensive). Good for reducing risks to humans and wildlife. Good for the image of hunting. The only sustainable solution.

There is clear scientific consensus on both the problem and the solution – an [Open Letter](#) from 54 European scientists, medical and veterinary health professionals illustrates this.

¹ Buenz and Parry (2018). Chronic lead intoxication from eating wild-harvested game.

The Barriers to Change

1. Tradition and misinformation among the hunters.
2. Some practicalities of change.
3. Industry lobbying and support – in particular from ammunition manufacturers and trade bodies. It is both blatant and insidious, and apparent at many levels, within the European Commission, European Parliament and beyond. It relates to European and North American gun lobbies. And there is personal cost to those involved in trying to bring about health protective measures – ‘stupid women’, ‘animal rights activists’ and it can feel like bullying.
4. Previous [control of lead in petrol took decades to implement due to industry resistance and lobbying](#). How many children had their IQ affected before regulation and the societal benefits of its removal became clear? Removing exposures to lead is a no brainer and is [economically advantageous](#).

Timeline – the protracted story

The first reports of lead ammunition poisoning of gamebirds are from the mid-19th century. The science grew in the 1950s and 60s. The beginning of the 1990s saw the science being further developed and pushes for regulation begin. Human health aspects for First Nation peoples began in the 1990s and became more fully recognised in wider society in the late 2000s.

The real push for policy for controlling lead shot began with the UN African-Eurasian Migratory Waterbird Agreement (AEWA) which obliged its Members to phase out lead shot in wetlands by 1999. Progress has been patchy and often ineffective. The Executive Secretary of AEWA, Mr Jacques Trouvilliez, has just written of this issue saying that it is time [to let go of lead](#).

AEWA is a daughter agreement of the UN Convention on Migratory Species which adopted guidance to phase out all lead ammunition in all habitats by 2017².

Many other policy instruments and food safety agencies have pushed for change or advised of risks and solutions. Lobbying blocks progress. See Figure for timeline.

ECHA and REACH: The European Commission initially requested the European Chemicals Agency (ECHA) to work up a proposal to restrict lead shot in wetlands (work began in 2016). The second phase of restricting all lead ammunition began in earnest in 2019. The science and the ECHA processes have been robust.

Additional Information :

Videos

[Otto Goes Non-Toxic](#) – simple cartoon of the issue and need for regulation

[AEWA – interview on issue](#)

[WWT/AEWA/CMS video on the issue and value of CMS](#)

[BirdLife Lead is Dead from 2020](#)

[Danish hunters from the Flight of the Swans project](#)

[PlanetPod podcast on lead poisoning and the solutions](#)

² The Secretariats of both AEWA and CMS are located in Bonn.



Websites

[WWT](#)

[BirdLife Europe and Central Asia](#)

[AEWA](#)

[European Scientists' Open Letter](#)

[Ambio Special Issue on Lead](#)

[Oxford Lead Symposium](#)

[Information from ECHA](#)

[ECHA/REACH – wetland restriction proposal](#)

[ECHA/REACH – wider restriction proposal](#)

2020



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The science and the ECHA processes have been robust. The blockages come from industry.

Topical aspects

1. The REACH Committee should be voting on the wetlands restriction soon – there have been numerous delays caused by lobbying. Most recently, a vote due by written procedure in July 2020 was postponed.

2. ECHA has begun its work on the proposal to restrict all lead ammunition. Their first workshop in February of 2020 was an insight into the myths and misinformation that the Agency will need to negotiate.

3. European Green Deal was launched in 2019.



Figure from Cromie et al (2019) to illustrate increasing focus on lead ammunition over time.

As an update to this, 2019 included:

1. the publication of a whole special issue of the journal *Ambio* on problems and solutions to lead ammunition (see final paper for a summary of the benefits of transition to non-toxic ammunition).
2. ECHA begin their call for evidence for the wider restriction proposal on all lead ammunition.
3. European Green Deal launch.

RESOURCES

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Further Information available from BirdWatch Ireland

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