



BirdLife Position on Preventing the poisoning of birds in the European Union

Adopted by the Birds and Habitats Directive Task Force on 13 May 2014

Executive Summary

Poisoning is a significant global problem affecting a wide range of species across almost all habitats, and has led to the decline of populations of several endangered bird species. Birds of prey are one of the most vulnerable groups of species to poisoning due to their position at the top of the food chain and their long-life span and slow reproduction, but other species such as waterbirds are also affected.

Birds are at risk from various forms of poisoning during their life cycles. This paper covers three exposure routes with a great risk for birds: poison baits, carcasses of animals treated with veterinary pharmaceuticals and lead ammunition and fishing weights. Agricultural pesticides are also a risk for bird poisoning, but these will be covered separately by the Agricultural Task Force.

BirdLife is concerned about the effect poisoning has on bird populations and asks for the introduction of the following legislative and non-legislative measures:

- 1. Drivers of the use of poison baits should be addressed. Enforcement of legislation on poison baits should be improved, through deterrent mechanisms and infringement penalties, and access to highly toxic substances should be restricted;
- 2. The use of veterinary pharmaceuticals with a clear risk for scavengers, such as diclofenac, should be prohibited. All veterinary pharmaceuticals should be subject to a mandatory safety-testing for risks to scavengers before market authorization is granted; and
- 3. The use of lead ammunition and fishing weights should be prohibited, and leadership promoted from ammunition users on safe alternatives. Lead polluted sites should be remediated.

Contact: Symone Krimowa (<u>Symone.Krimowa@rspb.org.uk</u>) and Wouter Langhout (<u>Wouter.Langhout@birdlife.org</u>).







Introduction and context

- 1. **Poisoning** is a significant global problem affecting a wide range of species across almost all habitats, with the potential to contribute to population declines of birds. Birds of prey are one of the most vulnerable groups of species to poisoning due to their position at the top of the food chain and as long-lived, slow reproducing species. These impacts include poisoning by:
 - poison baits;
 - carcasses of animals treated with veterinary pharmaceuticals; and
 - lead ammunition and fishing weights.
- 2. The use of **poison-baits** for predator control is the main threat to several species of raptors in Europe (BirdLife International 2012). Poison baiting in southern Spain has been linked with severe raptor declines, such as the declines of Black Vulture, Egyptian Vulture, Bearded Vulture, and Spanish Imperial Eagle (Margalida et al. 2008 Márquez et al. 2012). Predator control using poison-baits occurs particularly in areas with livestock farming and game management (Graham, Beckerman and Thirgood 2005; Sotherton, Tapper and Smith 2009).
- 3. Carcasses of animals treated with **veterinary pharmaceuticals** are a major risk to scavengers, especially vultures. The veterinary drug diclofenac is highly toxic to vultures, as it causes kidney failure (Oaks et al. 2004). The drug has been responsible for a 99 per cent decline of vultures in India and Pakistan within a decade (Green et al. 2004). Other drugs, such as aceclofenac may be toxic as well (Sharma 2012).
- 4. The direct ingestion of **leadshot** (lead ammunition from shotguns) is a major source of mortality in **waterbirds** in Europe. It has been estimated that approximately a million waterbirds of 17 species or 8.7% of the total population, may die every winter from lead poisoning caused by ingestion of lead gunshot (Mateo 2009).
- 5. The indirect ingestion of **leadshot and fragments of lead bullets** (lead ammunition from rifles) by **predators and scavengers** that consume the tissues of animals is also a major conservation concern. Scavengers are at risk when feeding on unretrieved game carcasses or gut piles abandoned on the field by hunters (Nadjafzadeh, Hofer and Krone 2013), and predators are exposed to lead ammunition embedded in the tissues of live mammals and birds that had been previously wounded by hunters, which is relatively common in populations of some species (e.g. Falk et al. 2006; Elmeros et al. 2012).
- 6. The direct ingestion of **fishing weights** is less documented than the ingestion of leadshot, but evidence indicates impacts on Mute Swans in the UK (AEWA 2012). In the USA, fishing weights are the main cause of mortality of Great Northern Divers (Scheuhammer et al. 2003). Moreover, ingestion of fishing weights has been documented in 12 species (AEWA 2012).





- 7. **Agricultural pesticides**, such as insecticides and rodenticides, are also a great risk for birds. However, since the positioning of BirdLife on agricultural pesticides in the European Union should be coherent with its wider positioning on agriculture, the Agricultural Task Force will develop a position on Agricultural pesticides.
- 8. There has been much policy progress in the prevention of poisoning of birds over the last decades. The **Convention on Migratory Species** has in 2013 produced global Guidelines to Prevent the Risk of Poisoning of Migratory Birds, through a Working Group coordinated by BirdLife (RSPB). These address five priority poisoning areas: insecticides, rodenticides, poisonbaits, veterinary pharmaceuticals, lead ammunition and fishing weights. The adoption of these guidelines will be an important opportunity to address the issue of poisoning at the level of EU Member States.
- 9. The Birds and Habitats Directives prohibit the use of poison baits, and the African Eurasian Waterbird Agreement (AEWA) range states have agreed to ban the use of leadshot in wetland. Other legislation, such as the Directive on Veterinary Medicinal Products (2001/82/EC) and the Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH, EC 1907/2006) offer a legal framework to address the effect of certain chemicals on the environment, including through poisoning.

Policy Asks

- The current EU policies are not sufficient to effectively prevent the poisoning of birds (see Annex
 The introduction of new legislative measures, and new non-legislative measures is therefore needed to prevent the poisoning of birds.
- 11. BirdLife asks for the introduction of the following legislative and non-legislative measures:

Actions required to prevent poisoning related to predator control using poison-baits

- 12. There is no single best practice that can address all the conservation challenges of poison-baiting; instead, effective action requires multiple combinations of several practices. These include the articulation of damage and conflict prevention actions, loss compensation measures, targeted awareness campaigns and stakeholder involvement.
- 13. Identify drivers of the problem and publish regular reports on poisoning incidents: in problem areas, understanding of the drivers can be obtained by consulting with local communities, especially those likely to encounter conflicts with predators, such as the game management and agricultural sectors. Schemes to encourage public reporting of incidents and compilation of information on poisoning incidents are needed to understand the extent and trends in occurrence of the problem. The results should be reported regularly and made publicly available.
- 14. Resolve human-wildlife conflict using multi-stakeholder forums: working with communities, farmers, game managers, chemical companies, government, and enforcement agencies is





necessary to resolve the conflict of poison-bait use. Often the focus of the conflict is related to effective predation management and many resources are available on wildlife conflict resolution. To resolve the conflict, it is critical that game managers, farmers and pastoralists deploy alternative, practical, non-poison methods for livestock protection, such as livestock guarding dogs and predator-proof enclosures or habitat management to reduce predation levels.

- 15. *Education*: education of local communities and sectors where poison-baits are used, including the dissemination of good practice on predator control, can make the use of poison-baits culturally and socially unacceptable.
- 16. Enact and implement enforcement legislation with effective deterrent mechanisms and infringement penalties: a national strategy building on the recommendations herein should be developed in each relevant country. Central governments should coordinate the development of the national strategy with all relevant stakeholders, and ensure it is reviewed regularly.
 - a. Strengthen infringement penalties to effective rates, including the potential to withdraw access to government subsidies for landowners where poisoning occurs;
 - b. Suspend/withdraw hunting licenses for persons and areas where illegal poison-baits are used;
 - c. Establish sentencing guidelines to ensure consistent and effective outcomes;
 - d. Increase capacity and capability for enforcement with focused resourcing; and
 - e. Introduce vicarious liability for landowners.
- 17. Restrict access to highly toxic substances through stronger enforcement of supply chain: often illegal substances are stockpiled by poison-bait users and farmers who originally had legal use of these substances, eg, carbofuran. To limit accessibility to these substances, there are a number of steps to take, including removal of grace periods, alignment of removal policies between countries, and user/buyer restriction to certified professionals only (eg, through implementation of the Sustainable Use of Pesticides Directive (2009/128/EC)).

Actions required to prevent poisoning related to veterinary pharmaceuticals for livestock

18. Prohibit the veterinary use of drugs, such as diclofenac, for treatment of livestock risk poisoning scavengers: Diclofenac, a previously popular non-steroidal anti-inflammatory drug (NSAID) in India, Pakistan, Bangladesh and Nepal, used to treat domestic livestock for inflammation and pain relief, is toxic to a number of vulture species. Prior to the ban of diclofenac in these countries, the drug was prevalent in livestock carcasses and caused catastrophic population declines of three Gyps vulture species. Due to the single market in the EU, veterinary drugs which are authorized in one EU Member State can easily be transported to another EU Member State, which means that an EU ban on toxic veterinary drugs is needed.





- 19. Introduce mandatory safety-testing of drugs that pose a risk to scavenging birds, including multi-species testing using in-vitro and read-across methods, with burden of proof on applicant: Safety-testing of all veterinary drugs that could be used to treat animals that may become food for scavenger bird species should be introduced as mandatory. This includes safety testing of substances that are currently on the market as well as new substances. Mandatory safety-testing of risks to these species will reduce the likelihood of exposure to substances that are highly toxic to birds.
- 20. Raise stakeholder awareness on alternatives to diclofenac; promote product stewardship and voluntary withdrawal of drugs toxic to scavenging birds.

Actions required to prevent poisoning related to hunting and fishing using lead

- 21. Prohibit lead ammunition and fishing weights: given the rapid progression and advanced development of non-toxic alternatives to lead ammunition (non-toxic alternatives are readily available for shot and most caliber bullets (Thomas 2013)) and fishing weights (AEWA 2012), legislation should be adopted to immediately substitute lead ammunition and fishing weights for non-toxic alternatives. To reduce problems with monitoring, compliance and enforcement, such legislation should not be partially restrictive, and should prevent both sale and possession of lead ammunition.
- 22. Create legislative processes to require and facilitate remediation of lead ammunition-contaminated environments: national regulators should introduce requirements for remediation activities to reduce lead contamination from ammunition in both wetland and terrestrial environments.
- 23. Raise awareness of lead poisoning; promote leadership from ammunition and fishing weight manufacturers and users on non-toxic alternatives and best practice: raise awareness and create supporting resources to encourage immediate substitution of lead ammunition and fishing weights with non-toxic alternatives, including a collaborative multi-lateral environmental agreements, shooter/hunter/fisher, land managers, and wildlife and conservation organisations website with information on best practice for hunting and angling.
- 24. Shooting and angling organisations and associations including tourism operators, military, sports shooters, hunters and fishers and manufacturers and traders of non-toxic ammunition and fishing weights should be encouraged to provide leadership on the issue; raise awareness of the problem; promote the non-toxic alternatives; and support immediate substitution of lead ammunition and fishing weights. Manufacturers and traders of non-toxic ammunition and fishing weights should be encouraged to actively promote these products.





Annex 1: Comparison of recommendations with status quo

	Recommendation	Status quo in European Union	Change necessary			
Preda	Predator control using poison-baits					
8	Identify drivers of the problem and publish regular reports on poisoning incidents	Varies by country	Regulatory and non-regulatory			
9	Resolve human-wildlife conflict using multi- stakeholder forums	Limited use	Non-regulatory			
10	Develop and disseminate good practice for predator control and enforcement	Varies by country	Non-regulatory			
11	Create and implement enforcement legislation with effective deterrent mechanisms and infringement penalties • Strengthen infringement penalties to effective rates and withdraw government subsidies for landowners where poisoning occurs • Suspend/withdraw hunting licenses for persons and areas where illegal poison-bait activity occurs • Establish sentencing guidelines to ensure consistent and effective outcomes • Increase capacity and capability for enforcement with focused resourcing • Introduce vicarious liability for landowners	Varies by country	Regulatory			
12	Restrict access to highly toxic substances through stronger enforcement of supply chain • Remove grace periods for banned products	Varies by country, allowing access to stockpiles of outdated toxic pesticides for use in poison-baits	Regulatory			





	Recommendation	Status quo in European Union	Change necessary			
	Establish consistent product removal policies between countries					
Veter	Veterinary pharmaceuticals for livestock					
13	Prohibit the use of veterinary drugs that are toxic to scavenging birds, such as diclofenac, for treatment of livestock	Diclofenac is registered for domestic ungulate use in Spain and Italy; illegal in South Asia.	Regulatory			
14	Introduce mandatory safety-testing of veterinary drugs that pose a risk to scavenging birds, including multi-species testing using in-vitro and read-across methods, with burden of proof on applicant	Single species testing of veterinary drugs, eg, on chickens: effects on scavenging birds may be different, which occurred for the veterinary approval of diclofenac use for livestock in South Asia, causing 99 per cent declines in three vulture species.	Regulatory			
15	Raise stakeholder awareness on safe alternatives to diclofenac; promote product stewardship and voluntary withdrawal of drugs toxic to scavenging birds	Awareness varies by country	Non-regulatory			
Hunti	Hunting and fishing using lead					
16	Prohibit lead ammunition and fishing weights (includes lead for hunting, sports and clay pigeon shootings)	Significant variation between countries: some have complete ban, others cover wetlands only, and some have no restrictions on lead. The International Olympic Committee should support	Regulatory			
17	Remediate lead ammunition-contaminated	lead-free sports.	Pogulatory/pop rogulatory			
1/	environments	Limited remediation	Regulatory/non-regulatory			
18	Raise awareness of lead poisoning; promote leadership from ammunition users on non-toxic alternatives and best practice	Limited leadership, when used it is effective in implementing non-toxic alternatives, eg, in Denmark.	Non-regulatory			







References

AEWA. 2012. Literature review: effects of the use of lead fishing weights on waterbirds and wetlands. AEWA/MOP Inf. 5.2. http://www.unep-aewa.org/en/document/literature-review-effects-use-lead-fishing-weights-waterbirds-and-wetlands

BirdLife International 2012. *Neophron percnopterus, Aegypius monachus, Gypaetus barbastus, Aquila adalberti*. In: IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2. www.iucnredlist.org. Downloaded on 23 April 2014.

Elmeros, M., T.E. Holm, L. Haugaard and A.B. Madsen. 2012. Prevalence of embedded shotgun pellets in protected and in legally hunted medium-sized carnivores in Denmark. European Journal of Wildlife Research 58: 715-719.

Graham, Kate, Andrew P. Beckerman, and Simon Thirgood. "Human—predator—prey conflicts: ecological correlates, prey losses and patterns of management." Biological Conservation 122, no. 2 (2005): 159 – 171.

Green, R. E., et al. "Diclofenac poisoning as a cause of vulture population declines across the Indian subcontinent." Journal of Applied Ecology 41, no. 5 (2004): 793-800.

Falk, K., F. Merkel, K. Kampp, and S.E. Jamieson. 2006. Embedded lead shot and infliction rates in common eiders Somateria mollissima and king eiders S. spectabilis wintering in southwest Greenland. Wildlife Biology 12(3): 313-321.

Margalida, A, R Heredia, M Razin, and M Hernández. "Sources of variation in mortality of the bearded vulture Gypaetus barbatus in Europe." Bird Conservation International 18, no. 1 (2008): 1-10.

Márquez, C. J. M., R. Villafuerte Vargas, and J. E. Fa. "Understanding the propensity of wild predators to illegal poison baiting." Animal Conservation, 2012: 118-129.

Mateo, R. 2009. Lead poisoning in wild birds in Europe and the regulations adopted by different countries. In Ingestion of lead from spent ammunition: implications for wildlife and humans, edited by R. T. Watson, M. Fuller, M. Pokras and W. G. Hunt: The Peregrine Fund, Boise, Idaho, USA.

Nadjafzadeh, M, H Hofer, and O Krone."The link between feeding ecology and lead poisoning in white –tailed eagles." Journal of Wildlife Management 77, no. 1 (2013): 48-57.

Oaks, J. Lindsay, et al. "Diclofenac residues as the cause of vulture population decline in Pakistan." Nature 427, no. 6975 (2004): 630-633.

Pokras, M.A., and R. Chafel. 1992. Lead toxicosis from ingested fishing sinkers in adult common loons (Gavia immer) in New England. Journal of Zoo and Wildlife Medicine 23 (1): 92-97

Scheuhammer, A.M., S.L. Money, D.A. Kirk, and G. Donaldson. 2003. Lead fishing sinkers and jigs in Canada: Review of their use patterns and toxic impacts on wildlife. Vol.108: Canadian Wildlife





Service Ottawa, Canada

Sharma, P. "Aceclofenac as a Potential Threat to Critically Endangered Vultures in India: A Review" Journal of Raptor Research 46 no.3 (2012):314-318.

Sotherton, N, S Tapper, and A and Smith. "Hen harriers and red grouse: economic aspects of red grouse shooting and the implications for moorland management." Journal of Applied Ecology 46, no. 5 (2009): 955-960.

Thomas, V.G. 2013. Lead-free hunting rifle ammunition: product availability, price, effectiveness, and role in global wildlife conservation. Ambio 42 (6): 737-45.