Convention on Migratory Species (UNEP/CMS)

Preventing Poisoning of Migratory Birds

CMS Resolution 11.15 and Guidelines













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Resolution 11.15 on Preventing Poisoning of Migratory Birds

At CMS COP 11 in Quito (Ecuador), Resolution 11.15 was adopted including:

- Taking note of the "Review of the ecological effects of poisoning on migratory birds"
- Adopting the "Guidelines to Prevent the Risk of Poisoning to Migratory Birds
- Proposing the continuation of the open-ended Preventing Poisoning Working Group until COP12

5 Poison Categories

- I. Insecticides
- II. Rodenticides
- III. Poison-baits
- IV. Veterinary drugs
- V. Lead ammunition & Fishing weights







Structure of guidelines

- Seven key recommendations
- Introduction to each of the five toxin groups
- Non-legislative recommendations
- Legislative recommendations



I. Insecticides: Background

- Widely used in agriculture worldwide (e.g. carbofuran)
- Farmland birds (resident and migratory) are at high risk
- Waterfowl and game birds exposed through consumption of agricultural crops
- Granivorous passerines exposed through consumption of pesticide-treated seeds



I. Insecticides: Background

- Migratory birds are particularly susceptible to sub-lethal effects of insectides
- Reduced movement
- Negative effects on migration and orientation
- Negative effects on productivity eg DDT



II. Rodenticides: Background

- Protection of crops & stored grain from rodent pests
- ❖ Anticoagulant rodenticides (ARs) are the most widely used rodenticides worldwide: 1st generation less lethal and less prone to bioaccumulation than more widely used 2nd generation eg Brodifacoum (one rat can contain 30-40 times a lethal dose for a raptor)
- Exposure to raptors in agricultural areas through consumption of rodents that have taken baits treated with rodenticides eg *Milvus milvus* (Red kite)
- Sub-lethal exposure:
 - hinders recovery of birds from disease/accidents
 - impairs hunting ability through behavioral changes



II. Rodenticides Example

- In Denmark, in a total of 430 raptors of 11 species analyzed for anticoagulants, 84-100% were found to have AR residues in their livers
- In Spain, 62% of dead raptors had died from rodenticide poisoning



III. Poison-baits: Background

- Use: predator control (harvesting birds for human consumption and traditional medicine)
- Most widely used predator eradication method worldwide
- Illegal in EU/most Europe (Bern Convention/EU Birds Directive)
 - Predatory/scavenging birds at risk from poison-baits targeted intentionally and unintentionally from baits for other target species (eg Jackals, corvids)
 - Carbamate insecticides eg carbofuran and aldicarb are often used in poison-baits for predator control

III. Poison-baits

Example

Eurasian Griffon (Gyps fulvus)

- poison-baits used by farmers in Israel led to mass poisoning eg 40-50 individuals dead in 1998 and 30+ in 2007
- This was between a third and a half of the breeding population of Israel at the time



Eurasian Griffon



IV. Veterinary Pharmaceuticals: Background

- Veterinary pharmaceuticals, used to treat domestic ungulates, can contaminate food sources of scavenging bird species and lead to poisoning
- Most well studied category is the non-steroidal antiinflammatories (NSAIDs)
- Main cause of decline of many vulture species due to birds ingesting livestock carcasses treated with NSAIDs such as diclofenac



IV. Veterinary Pharmaceuticals: Background

- In 2013 diclofenac was licensed in Spain, a few years after it was licensed in Italy
- Licensing the product for commercial veterinary use in the European Union is a rising concern for European vulture populations



IV. Veterinary Pharmaceuticals

Examples

Diclofenac:

- Popularly used in South Asia
- Toxic to several vulture species and *Aquila* species
- Prior to its ban, it lead to substantial population declines of 3 species of *Gyps* vultures
 - Concerns raised with use of Diclofenac in Europe and its promotion in Africa, threatening species such as the African Whitebacked Vulture (*Gyps africanus*) and the endangered Cape Griffon Vulture (*Gyps* coprotheres)



V. Lead Ammunition & Fishing Weights: Background

- Lead is a metal that is toxic to all vertebrate taxa acting as a non-specific poison affecting all body systems
- Lead from industrial sources (i.e. mining, smelting, paint and petrol) can affect exposed migratory birds

Lead Ammunition

- Source: bullets, air rifle pellets and shot
- Raptors that feed in areas where lead ammunition is used in shooting activities are vulnerable to secondary poisoning
 - Estimated average of 2,400 3,000 tons of lead shot dispersed annually in European Wetlands

V. Lead Ammunition & Fishing Weights: Background

Fishing Weights

- Found in sinkers, equipment used for angling and commercial fishing
- Available to birds when they are lost or discarded into the aquatic environment
- Raptors affected by secondary exposure (predators/scavengers ingest lead fishing weights in prey)



Total consumption of lead for fishing weights used in non-commercial angling was 2,000 – 6,000 tons/yr in 25 EU member states

V. Lead Ammunition: Recommendations

Non-legislative:

- -Raise awareness of lead poisoning,
- -particularly at key sites for migratory water birds;
- -promote leadership from ammunition users, including wildlife managers, on non-toxic alternatives and best practices



V. Lead Ammunition: Recommendations

Legislative:

- Phase-out use of lead ammunition across all habitats (wetland and terrestrial) with non-toxic alternatives within the next three years with Parties reporting to CMS Conference of the Parties (COP12) in 2017, working with stakeholders on implementation
- Create legislative processes to facilitate remediation of lead ammunition- contaminated environments

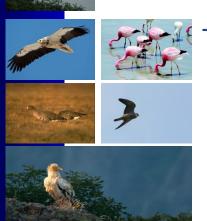


V. Lead Ammunition

Example:

Danish transition to non-toxic shot

- Denmark began regulation of lead shot in 1985, made it illegal to use for all shooting in 1996
- Successful introduction of steel shot for clay pigeon shooting, showing they were safe, cheap and suitable



 Hunting community concerned that lead phase out would end hunting, however efficacy of alternative materials are acceptable and hunting rates have not changed significantly

Resolution 11.15 on Bird Poisoning

- Calls on Parties and non-Parties, including their inter-governmental organisations and other relevant institutions to:
 - elaborate **strategies** to address poisoning or to
 - include measures contained in this Resolution and in the Guidelines in their National Biodiversity Strategies and Action Plans (NBSAPs) or
 - relevant **legislation** as appropriate



Resolution 11.15

Encourages all those concerned with preventing poisoning of migratory birds to create active partnerships – at appropriate scales – as a priority in implementing the Guidelines





The Preventing Poisoning Working Group



- ❖ The Working Group has been extended until COP12 in 2017
- ❖ It will establish task groups addressing either thematic issues (e.g., for different poison types) and/or geographical regions to progress its work
 - It will strengthen relevant regional and international networks
 - A coordinator will be appointed, located at the RSPB/BirdLife in the UK, initially using funds from the Raptors MoU

Preventing Poisoning Working Group - ToR



Facilitate implementation of Guidelines

Monitor implementation and submit reports to governing bodies



Establish task groups addressing thematic issues (e.g. for different poison types) and/or geographical regions

Organise regional workshops in trouble spot areas to assist developing appropriate local/regional solutions

