

the lead story

It is estimated that one in 12 wildfowl in Europe may die from eating lead gunshot, which poisons them. WWT is helping find solutions

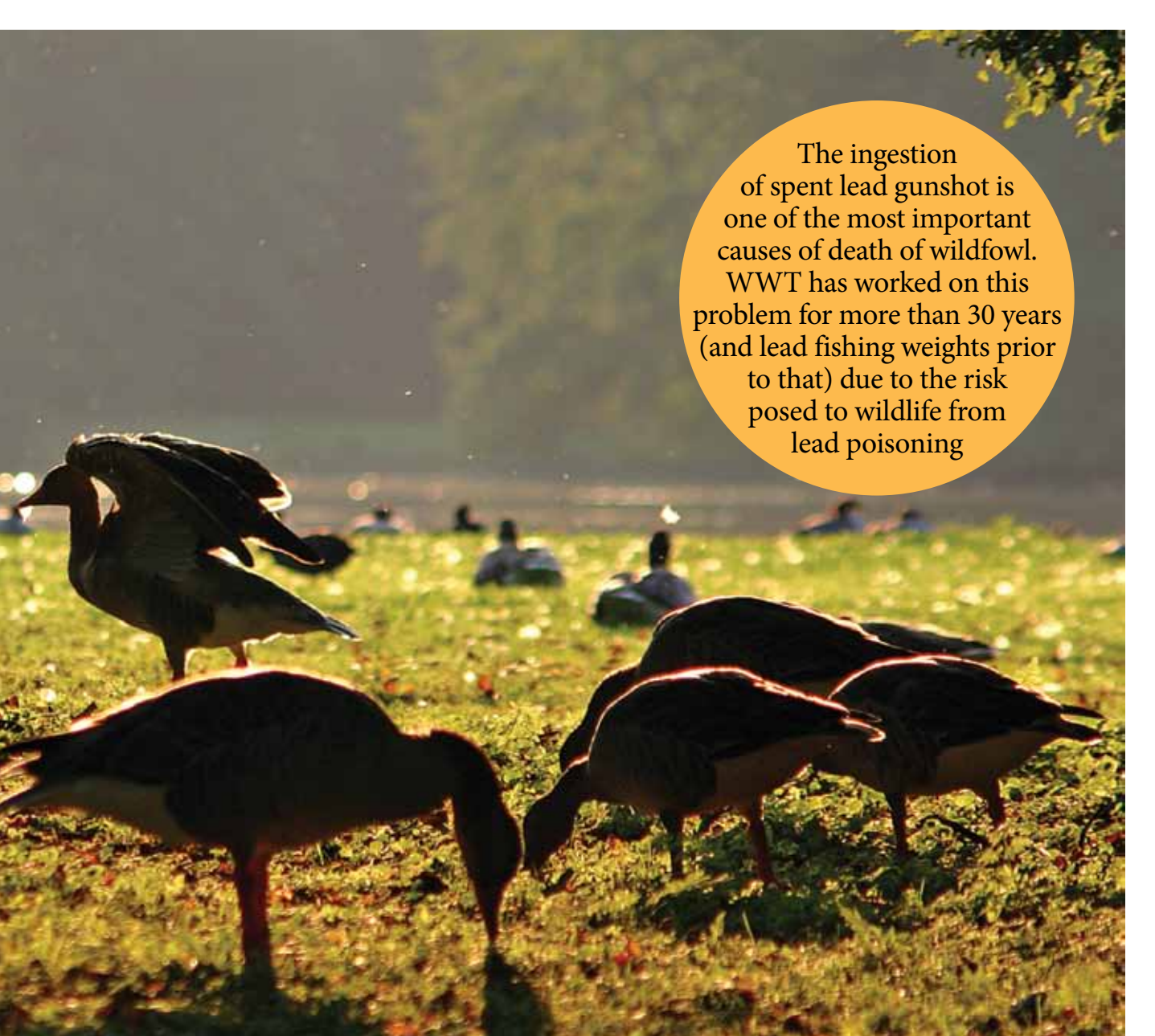


THE ISSUE OF LEAD GUNSHOT HAS BEEN DIFFICULT TO miss in recent months. Ever since the Department for Environment, Food and Rural Affairs (Defra) and the Food Standards Agency (FSA) announced that they had created an independent group – the Lead Ammunition Group – to examine the effects of lead ammunition on wildlife and human health, the topic has been hitting the headlines.

First, let's take a look at the actual topic that's at issue here. This is not about the act of shooting. It's about one of the types of ammunition that is used in the process of shooting: lead gunshot. Where shooting with lead gunshot takes place, spent lead pellets litter the ground, and there they would stay, except for one major problem. Wildfowl eat grit as part of their regular diet to help digestion. Lead gunshot, to the eye of a duck or goose, look just the job, and are eaten mistakenly for grit or for food items, such as seeds. Once the lead is in their system, it can poison and kill them.

Lead, as we all know, is poisonous, and over the years we've steadily removed it from many aspects of our lives. We now fill our cars with lead-free petrol, and paint our bedrooms with lead-free paint. We've taken lead out of pencils and new water pipes and even toy soldiers, while lead batteries are no longer dumped in landfill, but recycled. We know that lead poisons, and yet we still leave it lying around the countryside in the form of lead gunshot.

'There are many, many sorts of diseases that affect birds, and some are extremely complicated to unravel and manage against,' says Debbie Pain, WWT's Director of Conservation. 'Their roots can lie in any number of interconnected environmental hazards, from climate change to habitat degradation. Lead poisoning, however, is not one of these complex diseases. A bird that eats lead gunshot can become poisoned and die – simply avoiding putting lead into the environment would solve this problem.'



The ingestion of spent lead gunshot is one of the most important causes of death of wildfowl. WWT has worked on this problem for more than 30 years (and lead fishing weights prior to that) due to the risk posed to wildlife from lead poisoning

Although people don't tend to see dead birds very often, this doesn't mean the problem isn't there. When birds feel unwell, or weakened, they may try to find somewhere to hide from predators to protect themselves during this vulnerable period. Sick birds are easier for predators to catch, and those that escape may die out of sight where they're quickly gobbled up by scavengers.

SO WHAT CAN HAPPEN TO WILDFOWL THAT EAT LEAD gunshot? Exposure to it can result in muscular paralysis in the birds, as well as reduced activity of blood enzymes, anaemia, starvation and death. For those that do not die, the physiological effects can make the bird more prone to flying accidents – a particular problem for large birds such as swans.

So you might find it rather surprising that lead gunshot is still used in the UK. Well, change can't always be achieved overnight, as the Americans found when they first

Wildfowl can mistakenly eat lead gunshot as it looks like grit, which is part of their diet

examined the issue. Research into lead toxicity in wildfowl as far back as the 1960s revealed it to be a significant cause of mortality, and there were calls for shooters to change their ammunition to non-toxic gunshot. In 1972, non-toxic regulations started to be put into place, but it wasn't until 1991 – nearly 20 years later – that lead gunshot was outlawed for the hunting of waterfowl in the USA.

WATERBIRDS ARE NOT THE ONLY GROUP AFFECTED.

Predators or scavengers often eat birds that have been shot but not killed, and escape carrying lead gunshot in their flesh, or have been killed but not retrieved. Indeed, they may also eat birds that themselves have died of lead poisoning. Marsh harriers and red kites are among the scavenging birds that fall victim to lead poisoning.

When the International Council for Game and Wildlife Conservation became aware of the evidence of effects of lead gunshot ingestion in birds and possible effects on

THE NUMBERS GAME

8.7

Estimated percentage of European wildfowl that die from lead poisoning

27

Number of years since the UK's Royal Commission on Environmental Pollution first recommended that lead shot be withdrawn as soon as alternatives become available

70

Percentage of studied whooper swans that still had elevated blood lead concentrations in 2004 and 2005

130

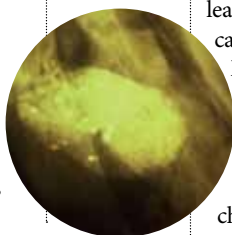
Number of bird species in which lead poisoning has been discovered, of which several are globally threatened



IMAGEBROKER/FLPA

human health it urged governments to work in close cooperation with international and national hunting organisations to solve the problem. As a result they, in conjunction with the World Forum on the Future of Sport Shooting Activities and the Federation of Associations for Hunting and Conservation of the European Union, are using a 'road-map' joint approach to tackle this issue. It has been suggested that various parts of a phase-out of lead could be carried out at different speeds, with risk assessments dictating the speeds. Lead gunshot has long been banned for wildfowling in America. To date, lead gunshot has been banned for use over wetlands in many EU countries, including Belgium, Germany and France, Cyprus over wetland areas, in certain wetland areas of Spain and Hungary, and everywhere in Norway, Denmark, Sweden and the Netherlands.

Below:
Lead shot
in a goose
gizzard



SO WHAT'S HAPPENING IN THE UK? IN 1995 A VOLUNTARY phase-out of lead gunshot was introduced in England, leading to the introduction of legal restriction in 1999 over certain wetland areas and for wildfowl hunting. Wales now has a similar restriction, while Scotland and Northern Ireland have banned the use of lead gunshot over wetlands. However, our research indicates that for England at least, a high proportion of ducks were still being shot illegally with lead several years after the ban, and we have recently carried out a study evaluating current compliance in England on behalf of Defra. We will report on the study's results in the next edition of *Waterlife*.

We at WWT are pleased to have been asked to contribute our expertise to the Lead Ammunition Group, and are actively engaged in this process. Our chief aim is to reduce the unnecessary suffering and mortality of wildfowl and other wetland birds, and support moves to achieve this aim, such as the use of non-toxic gunshot types. More recently there have been concerns about the possible impacts of lead gunshot upon human health, which is significant for our work with communities around the world, living in and around wetlands. We recently worked with a range of other agencies to investigate levels of lead found in game bought here in the UK and found that a high proportion of samples had lead concentrations above those permitted in many meats sold in EU countries. We provided the relevant government bodies with this information so that they could investigate further, and made our findings available to the various shooting and hunting professional bodies.

The toxic effects of lead are well known, and society has acted to remove it or replace it with alternatives in many forms. We hope that by working together through the Lead Ammunition Group, and sharing information, all groups involved in the use and outcome of lead gunshot can find practical and workable solutions. ♻️

LEAD AMMUNITION GROUP

This group has been appointed by Defra to investigate the potential health hazards to wildlife and humans of lead gunshot. The group comprises a wide variety of organisations, between them representing shooting, animal welfare, game management and trade, and wildlife.

- BASC (British Association for Shooting and Conservation)
- CLA (Country Land and Business Association)
- Gun Trade Association
- National Game Dealers Association
- Countryside Alliance
- UFAW (Universities Federation for Animal Welfare)
- Game and Wildlife Conservation Trust
- Institute of Environment and Health
- WWT
- RSPB