



**PROTECTING WATERFOWL FROM LEAD IN
WETLANDS**
**A Practical Guide to the Lead Shot
Regulations in
Northern Ireland**



PURPOSE

The Environmental Protection (Restriction on Use of Lead Shot) (Northern Ireland) Regulations 2009 (S.R.2009/168) comes into effect on 1st September 2009. The purpose of this Guidance Note is to help the shooting community to understand the regulations, and where and how they apply.

INTRODUCTION

Waterfowl can be poisoned after ingesting spent lead shot which has fallen onto wetland. Lead shot is ingested either when birds are feeding or gritting and can be ground down in the gizzard or dissolved by acids. The lead then enters the bird's bloodstream. It replaces calcium and leads to damage to the nervous system, liver and kidneys. It also damages the gizzard preventing, the bird from feeding. Many birds will die after such ingestion.

A sustainable harvest of waterfowl is perfectly acceptable. The loss of ducks, geese and swans due to lead poisoning is not – particularly when some species are under increasing pressure from other factors. It therefore makes sense to ban the use of lead shot on and over wetlands, as it causes unnecessary losses.

Indeed, under the terms of an international agreement called the African-Eurasian Waterbird Agreement¹, the United Kingdom must end the use of lead shot over wetlands. The need to do this is also recognised in an agreement between the Federation of Associations for Hunting and Conservation of the EU (which represents the interests of hunters throughout Europe) and Birdlife International². England, Scotland and Wales have already introduced laws to honour this agreement.

THE LEAD SHOT REGULATIONS

The Regulations follow a habitat-based approach by prohibiting the use of lead shot to shoot any species of bird or animal on or over 'wetlands'. Shooting ducks, geese, game, pests or clays away from wetlands is not affected by the legislation. So for example ducks flying over, or geese coming into, a dry stubble field, can still be shot with lead.

ENFORCEMENT

Anyone shooting with lead shot on or over wetlands on or after 1st September 2009 will be committing an offence and liable to prosecution; conviction can result in a fine of up to £1000.

If you are a shoot owner, shoot captain, a club official or a sporting agent and you knowingly allow the use of lead shot on or over wetland you may also be liable to a similar level of fine if convicted. Enforcement of the restrictions in Northern Ireland is the responsibility of the police.

PROTECTING WATERFOWL FROM LEAD IN WETLANDS - A Practical Guide to the Lead Shot Regulations in Northern Ireland

¹ **AEWA** – for information about the Agreement go to <http://www.unep-aewa.org/>

² For more information go to: http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/charter_en.htm

DEFINITION OF 'WETLANDS'

For the purpose of the Regulations, Northern Ireland has adopted an internationally recognised definition of "wetlands", contained in Article 1(1) of the Ramsar Convention³. The definition is:

"wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres."

Within the Regulations 'temporary' in relation to wetlands means wetlands which are covered with water on a seasonal or frequent basis, and "peatlands" means only peatlands with visible standing water.

Listed below are particular circumstances where it is considered that the Regulations apply. If you are in any doubt at all about whether or not you are shooting on or over a wetland, do not use lead shot.

Inland wetlands



Flowing water such as rivers and streams, whether permanent or temporary. Standing waters; such as permanent or seasonal lakes, ponds and pools. Northern Ireland has many well known 'inland wetlands', including Lough Neagh, and Upper and Lower Lough Erne, as well as numerous drumlin lakes, particularly throughout Fermanagh, Armagh and Down.

Fens, marshes and swamps, if water is permanent or if they are flooded seasonally; these habitats can be recognised by the presence of vegetation like reed beds, sedge meadows or rushes.

Peatlands, such as bogs and mires, with visible standing water, such as bog pools. However the Regulations do not cover all peatland; shrub or heath peatland or moorland, where standing open water only occurs on irregular occasions due to excessive hill run-off, is not covered by the Regulations and lead shot may continue to be used.

Artificial Wetlands

Waterbodies such as canals, reservoirs, gravel pits, flight ponds and fishponds are all covered by the Regulations.

PROTECTING WATERFOWL FROM LEAD IN WETLANDS - A Practical Guide to the Lead Shot Regulations in Northern Ireland

³ The Convention on Wetlands of International Importance especially as Waterfowl Habitat signed at Ramsar on 2nd February 1971. More information about the Ramsar Convention can be found at <http://www.ramsar.org>

So are pools and ponds created as a result of farm works, irrigation, excavations, water supply or wastewater treatment.

Temporary and Seasonal Wetlands



'Temporary' is defined in the Regulations as seasonal or frequent. 'Seasonal' are areas flooded on a regular basis normally during the same period annually, for example, flood meadows. You will need to use discretion and judgement in deciding if an area is 'frequently' covered with water.

Examples could include areas surrounding our large inland lakes, for example, Lough Neagh. You should not shoot in these areas at any time during the year, even when the ground is dry.

Marine and Coastal Wetlands

Marine waters less than six metres deep at low tide, the foreshore and all areas between the mean upper and lower spring tide marks. This includes beaches, salt marshes, estuarine intertidal areas and lagoons. Strangford Lough, Carlingford Lough and Lough Foyle are among Northern Ireland's important marine and coastal wetlands.

Coastal areas above the high water mark, such as sand dunes where there is standing water (in dune slacks for example) are also included. Dune slacks can be found at Magilligan Point, for example.

WHAT DOES IT MEAN TO YOU?

From 1st September this legislation applies to all shotgun shooters in Northern Ireland and to all bores of shotgun, without exception. It does not apply to air weapons or rifles.

The purpose of the legislation is to stop lead shot falling into wetlands where waterfowl may feed.

If you shoot on or over wetland areas you must use non-lead shot from 1st September 2009.

By changing your shooting style or behaviour, for example by shooting from a different position or in a different direction, you may be able to avoid lead shot going on or over a wetland area.

Please bear in mind, however, that a 12-bore shotgun shooting a 'normal' lead cartridge (e.g. pellet no. 3) has a potential fall-out range of some 340m, while a wildfowling cartridge with large shot (BB) can travel more than 400m.

INLAND SHOOTING

If you are shooting over farmland, woodland or moorland with no wetland features, the legislation will not affect you, even if the intended quarry is waterfowl.

Tiny areas of water such as puddles or pools in corners of fields or on farm tracks, which appear only after heavy rain, do not fall within the scope of the Regulations.

Inland flight ponds, no matter how small, are wetland features as are fields which frequently flood or which include streams, ponds or other wetland features. Lead shot must not be used on or over these areas.

For game shooting or rough shooting you must ensure that you do not shoot on or over wetland features with lead shot. This won't affect shooting on peatland areas without standing water, so most grouse and open hill shooting will not be affected.

Pheasants are often found in and around areas of marsh adjacent to streams. Given the unpredictability of their flight it would be best always to use non-lead cartridges when shooting pheasants to ensure that every sporting opportunity can be enjoyed.

On organised shoots it may also be necessary to alter the position or orientation of pheasant, partridge/grouse pegs, butts and even drives to ensure that anyone wishing to use lead shot can legally do so. When drives are arranged near to or over wetland features then non-lead cartridges must be used by all guns.

SHORE SHOOTING



The legislation applies to all foreshore areas in Northern Ireland.

Therefore all coastal wildfowling, including punt gunning, will have to be undertaken with non-lead shot.

CLAY PIGEON SHOOTING

Clay shoots and less formal, occasional shoots will all have to ensure that they are not shooting on or over wetland areas, or will have to use appropriate non-lead shot.

If there is a wetland feature on the site over which you shoot you may be able to re-arrange your traps and cages to ensure that shooting takes place away from this feature.

Remember that the lead pellets typically used in clay shooting are capable of travelling up to 320m.

SHOOTING PEST SPECIES

Any land owner or occupier shooting pest species under the authority of the general licences issued by the Northern Ireland Environment Agency must not use lead shot if such shooting takes place on or over wetlands.

ALTERNATIVES TO LEAD SHOT

The use of the shotgun developed along with lead shot, as this material was widely available, cheap and effective as ammunition. Despite this and the fact that lead is both heavy and soft, shooting with alternatives where correctly used, can continue to be both successful and enjoyable.

Successful shooting is more related to hunters' shooting skills and their shooting distances than to the performance of the cartridge. Whatever substitute shot type is used each person should ensure that he or she shoots safely, responsibly and with full respect for the quarry. This means that a shot should be taken only if it is reasonably certain that the target quarry will be killed, and not wounded and lost.

Substitute non-lead cartridges currently available include steel (soft iron), bismuth, tungsten-based materials (including Hevi-Shot), tin etc. The choice is yours, and this may be determined by cost or by desired performance. It is important to know the strengths and weaknesses of each type and to shoot accordingly.

Steel is less dense than lead so, to achieve comparable ballistic performance, it is advisable to use a shot size at least two sizes larger than lead. For example, if you normally shoot duck with number 6 shot it would be best to use number 4 steel shot or larger. As steel shot does not deform to the same extent as lead shot it can hold a tighter pattern and there is not the need for tight choke.

The International Proof Commission (CIP) regulates the use of steel, and other similarly -hard shot to ensure safety of both gun and user. There are two types of such shot: Standard and High Performance which, for safety, should be matched with the proof level of your gun. HP steel or other shot should be fired only through guns which have passed Steel Shot Proof. For advice on regulations please contact your country sports organisation or the Birmingham Proof House (The Birmingham Gun Barrel Proof House, Banbury Street, Birmingham B5 5RH, England, Tel. 0121 643 3860, Fax 0121 643 7872)

It is a recommendation not to fire steel through any Damascus-barrelled gun. Older guns (typically older side-by-side shotguns) may also not be suitable for steel and advice should be sought from the manufacturer/importer of ammunition or competent gunsmith before firing. Care must always be taken to use the correct case length (e.g. 2 ¾", 3", 3 ½") in the gun's chamber.

Tungsten-based shot types (e.g. Tungsten Matrix or new Hevi-Shot) are similar to, or can be higher than, lead in density although more expensive than other substitutes. Some are hard, however, and must be contained in suitable wads to protect barrel walls. With the most dense materials you may be able to reduce shot size, since their ballistic performance seems particularly good, so increasing your chances of a successful shot.

It is fundamentally important that you choose an appropriate load for the type of shooting you intend to do and then pattern your gun before using it in the field. Each type of cartridge has its own characteristics and it is essential to know how your chosen load performs. Once the pattern plate shows you have a potential killing load, you should then practise shooting on clays before live quarry.

One lead substitute may suit one type of shooting whereas another performs better. It is vital for successful shooting to get the right balance between the number of pellets and their size for each type of quarry in order to ensure it is cleanly killed.

If you are in any doubt about the performance of lead substitutes or the impact on your shotgun, it is recommended that you consult your firearms dealer, its maker or importer.

It is important to remember that the maximum effective range of your gun/cartridge combination is the range at which you can be confident of consistently achieving a clean kill. Some people may be able to kill cleanly at 35 or 40 yards, whereas for others it may be considerably less – and it may vary from quarry to quarry. Make sure that you only shoot within your own effective range to ensure that wounding and wastage are kept to an absolute minimum. Wounding and wastage are caused by shooting at ranges beyond your own ability to hit the target or the ability of your gun/cartridge combination to deliver a killing pattern.

Advice on cartridge/choke combinations, both to maximise your enjoyment and success when shooting and to minimise unnecessary losses of your quarry, is available from your country sports organisation or your gun dealer.



COUNTRYSIDE ALLIANCE IRELAND

Love the countryside



Department of the
Environment

www.doeni.gov.uk



The British Association for Shooting and Conservation

**PROTECTING WATERFOWL FROM LEAD IN WETLANDS -
A Practical Guide to the Lead Shot Regulations in Northern
Ireland**