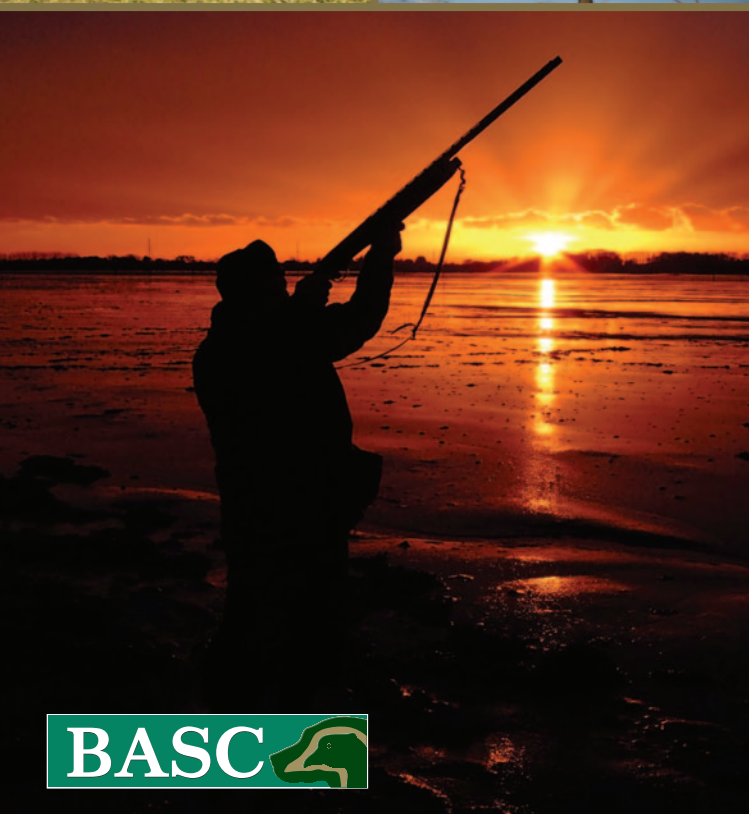
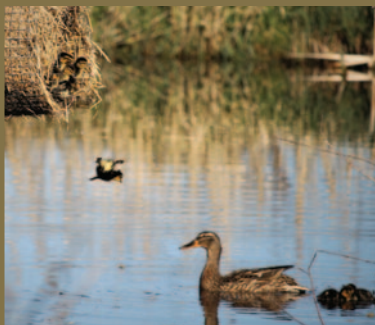


A BASC PUBLICATION – PRODUCED IN 2023



SUSTAINABLE SHOOTING

A CODE OF PRACTICE
FOR WILDFOWL QUARRY SPECIES

This code applies only in England, Wales and Scotland

1. INTRODUCTION

To ensure the long-term future of shooting in England, Wales, and Scotland, it is essential that the shooting of wildfowl is sustainable.

Within this context, sustainable shooting respects quarry species and seeks to conserve and improve the environment. It avoids excessive consumption, complies with the law, improves the health and well-being of participants, and provides food and economic benefits to the wider community.

This code relates to wildfowl, wader, and rail quarry species – particularly those where the available evidence demonstrates the need for action.

These species are listed as follows.

DUCKS	GEESE	WADERS	RAILS
Gadwall	Canada goose	Common snipe	Coot**
Goldeneye	Greylag goose	Golden plover	Moorhen**
Mallard*	Pink-footed goose	Woodcock**	
Pintail**	European white-fronted goose *England only		
Pochard**			
Shoveler			
Teal			
Tufted duck			
Wigeon			

The 'broad sustainability principles' apply to all species, with the following variations.

- a) ** This code does not apply to reared and released mallard, and the shooting thereof.*
- b) *** Bespoke actions are required for these species; see species-specific recommendations.*
- c) *This code does not apply to the use of large bore historic firearms used to maintain historic, cultural and traditional aspects of wildfowling.*
- d) *This code does not override any site-based requirements; all shooters need to abide by landowner, club, or consent restrictions.*

It is important that those who shoot recognise that unsustainable shooting can affect population size, age composition, sex ratio, behaviour, and distribution of natural populations. Understanding the potential impacts of shooting is a prerequisite to managing quarry species in a sustainable manner.

The code provides advice at two levels:

- Advice that **must** be followed in order to deliver sustainable shooting – unless otherwise stated the term ‘must’ only applies to meeting the standards set by this code of practice and does not refer to a legal obligation.
- Advice that **should** be followed in order to achieve best practice, any deviation from which would need justification.

This code of practice therefore captures the following aspects of sustainable shooting:

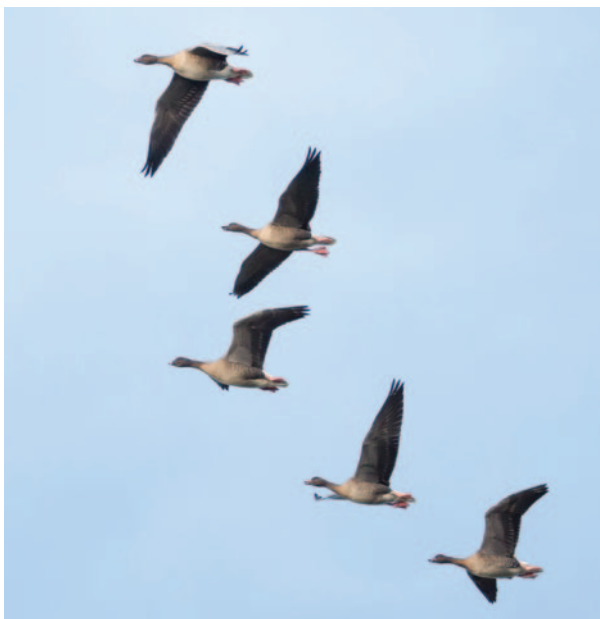
- i) Broad sustainability principles** that can be applied to the shooting of all quarry species listed within this code and should be followed by all participants.
- ii) Individual quarry species recommendations** regarding the taking of species where the evidence review highlights potential conservation impacts. The ‘shooting restrictions’ recommendations must be followed but will vary subject to available data and will be updated periodically.
- iii) Practical recommendations** whereby shooters can contribute to the conservation of individual quarry species through behaviour changes, data collection and facilitating practical conservation.

The individual species and practical recommendations are reviewed every three to five years to allow for new population trends, conservation statuses, and scientific evidence to be considered and communicated for maximum value.

THE FOLLOWING GOLDEN RULES APPLY

1. To ensure shooting is sustainable, those who shoot must adhere to the species-specific shooting recommendations.
 - a. **Pochard** - no take – targeted conservation effort required.
 - b. **Pintail** - take a maximum of two birds per day – targeted conservation effort required.
 - c. **Woodcock** - delay shooting until late November where resident woodcock are present.
2. Eat what you shoot. It is your responsibility to ensure all shot quarry is put to good use.
3. Where not already required by law, consent, or lease, shooters should collect bag data and submit information for all wildfowl species to a national monitoring scheme.
4. Shooters should contribute to habitat creation, management, and restoration initiatives.
5. Shooters should assist with citizen science initiatives including bird counts, ring recovery reporting, wing surveys, disease monitoring, etc.

2. BROAD SUSTAINABILITY PRINCIPLES FOR ALL WILDFOWL, WADER, AND RAIL QUARRY SPECIES



Shooting

Geese:

- a. Eat what you shoot. It is your responsibility to ensure all shot quarry is put to good use; remember, wild geese cannot be sold or bartered (unless localised sale has been authorised by the appropriate body).
- b. You must comply with any club or site-specific rules or regulations, sector-specific codes and best practice guidance.
- c. No more than six grey geese – to a maximum of five pinkfeet, four greylag, and two European white-fronts per person, per day – unless for conservation, health and safety, or crop protection measures (and supported by a licence agreement or management plan). At all times show restraint. Take what you need, not what you can.

Ducks, waders, and rails:

- a. Eat what you shoot. It is your responsibility to ensure all shot quarry is put to good use; remember, gadwall cannot be sold or bartered.
- b. You must comply with any club or site-specific rules or regulations, sector-specific codes and best practice guidance.
- c. No more than ten ducks per person, per day. At all times show restraint, Take what you need, not what you can.

Evidence and research

Data will provide a more accurate assessment of local and national distribution and abundance. This will ultimately help ensure decisions are made on the best available science and evidence. Shooters can help by contributing towards the following initiatives:

- a. Bird counts** – these enable better understanding of species distribution and population sizes.
- b. Bag data submission** – this provides a better understanding of harvest and strengthens species population estimates.
- c. Marking of birds** – ring recovery and reporting enables better understanding of species movement and survival rates.
- d. Disease reporting** – enables better understanding of threats to species and potential drivers of population trends.

Conservation

Sustainable shooting is supported by practical conservation action that targets the habitats of quarry and non-quarry species alike. Shooters should, where possible, create management plans to highlight and capture conservation work and their approach to managing harvest. Below are several areas where shooters can take action to support species recovery or maintain species presence during the breeding and/or overwintering season:

- a.** Undertake targeted habitat creation, restoration and maintenance work.
- b.** Pest and predator control.
- c.** Nesting support (for example: fencing, duck nest tubes, provision of maintained islands).
- d.** Refuge provision, either for set periods of time (temporal), or over dedicated areas of land (spatial), dependent on site requirements.

Managing disturbance

It is important that shooting does not cause disturbance that impacts on waterbirds to an extent that there is a:

- a.** change in local distribution on a continuing basis; and/or
- b.** change in local abundance on a sustained basis; and/or
- c.** reduced ability of any significant group of birds to survive, breed, or rear their young.

Disturbance during periods of prolonged cold weather can have significant impacts; shooters must comply with the Joint Nature Conservation Committee (JNCC) and BASC 'severe weather' protocols.

See the BASC website for further details on all of the above broad sustainability principles

3. SPECIES-SPECIFIC RECOMMENDATIONS

The actions required for each species have been detailed below.



COMMON POCHARD

Aythya ferina

Recommendation: no take – targeted conservation effort required.

Species trend

The UK hosts a very small number of breeding pochard; however, many over-winter in the UK.

The pochard population shows a ten-year wintering population decline in the UK of >25 per cent between 2008-2018. This decline has been seen on a UK, European and global level and is predicted to continue; as such, the species has been listed as 'vulnerable' on the European International Union for the Conservation of Nature (IUCN) Red List.

Action to prevent further continued population declines is required across the flyway (north-east to north-west Europe).

Within the UK, it is vital that we better understand the species distribution, abundance, and historic harvest of pochard in order to encourage the small breeding population to thrive. As a result, BASC has provided the following recommendations:



Research required

- Breeding and wintering surveys to better understand local and national distribution and abundance.
- Historic bag returns and the submission of current bag data to better inform harvest estimates (data can be submitted to the Game & Wildlife Conservation Trust (GWCT) National Gamebag Census or BASC Green Shoots Bagged It).

Shooting restrictions

- Voluntary moratorium, i.e. shooters should voluntarily refrain from shooting common pochard.

Habitat management

- Maintenance or restoration of freshwater floodplains to provide optimum feeding and roosting environments comprising of deep water (up to 2.5m).
- Maintenance or creation of abundant aquatic plant areas which provide roots, shoots, and seeds for food.
- Targeted predator control in areas where known breeding populations exist.



NORTHERN PINTAIL

Anas acuta

Recommendation: take a maximum of two birds per day – targeted conservation effort required.

Species trend

The northern pintail population shows a ten-year wintering population decline in the UK of >25 per cent between 2008-2018.

This decline is reflected on the European continent within breeding populations in European Russia, Finland and Sweden, and is anticipated to continue. However, due to their large range and relatively high abundance, pintail are not yet considered ‘vulnerable’ to extinction at a global level but are listed as ‘vulnerable’ on the European IUCN Red List.

Population trends appear to be driven by pressures at breeding grounds and poor breeding success, as opposed to over-harvesting of adult birds.

Due to already low bag numbers in the UK and the limited impact of wintering adult mortality on population demographics, a full moratorium on the species will have limited effect. A moratorium could have a negative impact by disincentivising conservation effort, so continued but controlled harvest is recommended.

The UK supports a very small number of breeding individuals; therefore, conservation focus should be on breeding populations abroad and over-wintering pintail populations in the UK. Pintail pair up during the winter and undertake the return migration as a pair, known as a ‘winter pair bond’.



Improved understanding of optimal wintering habitat requirements within and outside wetland reserves in the UK, particularly on neighbouring agricultural land, is vital. Based on the species trends and information, BASC has provided the following recommendations.

Research required

- International flyway-level collaboration with relevant stakeholders.
- Wintering surveys to better understand local and national distribution and abundance.
- Submission of bag data to better inform harvest estimates (data can be submitted to the GWCT National Gamebag Census or BASC Green Shoots Bagged It).
- Shooters should support the BASC wing survey to enable better understanding of adult:juvenile and male:female harvest ratios.

Shooting restrictions

- Two pintail per person, per day, bag limit recommended.
- Should target males where possible.
- No sale of shot pintail.

Habitat management

- Pintail prefer habitats with low vegetation and shallow water; they will also frequent large inland lakes, ponds, marshes, and coastal lagoons.
- In order to provide an abundant supply of high-energy and nutritional foods for pintail, wetland water depths should be <45cm but preferably <15cm for an abundant food source.
- Weed management can improve habitat for pintail when benefiting native plant species.



EURASIAN WOODCOCK

Scolopax rusticola

Recommendation: delay shooting until late November where resident woodcock are present.

Species trend

The UK hosts a breeding population of woodcock which remains resident all year round, as well as hosting a large migrant over-wintering population. The breeding population has shown substantial declines in its range and size over the last 20+ years. The migrant wintering population has, in contrast, increased over the last 25 years; this is reflected in the European IUCN listing of 'least concern'.

Changes in climate, predation and habitat availability in the UK are likely driving the decline in the resident UK population and a number of conservation recommendations have been made by the GWCT to reduce negative impacts on the declining UK breeding population. Taking these into consideration, BASC has provided the following recommendations.

Research required

- Breeding and wintering surveys to better understand local and national distribution and abundance.
- Submission of bag data to better inform harvest estimates (data can be submitted to the GWCT National Gamebag Census or BASC Green Shoots Bagged It).
- Hunters should support the BASC wing survey to enable better understanding of adult:juvenile and male:female harvest ratios.



Shooting restrictions

- Should avoid shooting woodcock in areas where resident woodcock are present until the major fall of migrant woodcock in late November.
- Show restraint, even when resident birds are absent. Shoot what you need, not what you can.
- Shoot flightlines with caution.
- Curb shooting in severe weather.

Habitat management

- Targeted habitat creation and management for both breeding and wintering populations is required.
 - Create or widen woodland rides to provide breaks in the tree canopy. Ideally, rides should be at least eight metres wide.
 - Mow rides and clearings to produce accessible grassy feeding and breeding display sites.
 - Create and reinstate clearings and young woodland using a little-but-often policy. Over time this creates a mosaic of woodland types and ages.
 - Periodically remove marginal vegetation along sections of ditch or pond edges where these features occur within or close to woodlands.
 - Create wet features that retain ground moisture into late summer.
- Pest and predator control.
- Refuge provision, either for set periods of time (temporal) or over dedicated areas of land (spatial), dependent on site requirements.



EURASIAN COOT

Fulica atra

Recommendation: research required

Species trend

The UK breeding population of coots shows a substantial ten-year decline of 24-44 per cent between 2010-2020.

This is mirrored in a wintering population decline of 24 per cent; as a result they are listed as 'near threatened' on the European IUCN Red List.

Although widespread, coots, like moorhens, remain relatively under-studied, particularly in relation to their movement and population demographics. Ringing studies show that coots do migrate within the UK as well as between the UK and central Europe/Russia.

The species receives very little shooting pressure in the UK and its popularity as a quarry species is decreasing across the flyway. Therefore, shooting is unlikely to be driving declines. Coots likely suffer from multiple pressures driven by habitat and climate change, but their flexible behaviour and ability to adapt may have diluted any obvious impacts. Shooting restrictions are unlikely to have any benefit. Instead, research investment to better understand the causes of ongoing declines is necessary, alongside habitat management and conservation interventions.



Research required

- Breeding and wintering surveys to better understand local and national distribution and abundance.
- Submission of bag data to better inform harvest estimates (data can be submitted to the GWCT National Gamebag Census or BASC Green Shoots Bagged It).
- Shooters should support the BASC wing survey to enable better understanding of adult:juvenile harvest ratios.
- Increased ringing and ring resighting effort to improve understanding of migratory movement.

Shooting restrictions

- Should show restraint.
- Site-based considerations required.

Habitat management

- General wetland creation and management will benefit both breeding and wintering populations.
- A mosaic habitat of dense cover, open water and clearings is required to provide safe refuge and feeding areas.
- Ensure suitable breeding sites have ramp-like areas to enable chicks to leave the water easily.
- Pest and predator control.
- Refuge provision, either for set periods of time (temporal) or over dedicated areas of land (spatial), dependent on site requirements.
- Nesting support (for example: fencing, duck nest tubes, provision of maintained islands).



COMMON MOORHEN
Gallinula chloropus

Recommendation: research required

Species trend

The UK breeding population of moorhen shows a substantial decline in breeding territories of 23 per cent.

The wintering population, which includes migrants from much of Europe and North Africa, shows a ten-year decline of 26 per cent between 2008-2018. This is primarily driven by declines in England, as the Scottish and Welsh populations have shown slight increases over this period (four and five per cent respectively). The decline in Europe has not yet pushed the species into an 'at risk' category and the moorhen is currently listed as 'of least concern' on the European IUCN Red List.

The decline of moorhens, like that of coots, is not well understood, but given the low bag size of the species, it is highly unlikely that shooting is the cause. Habitat loss and predation are suggested to be drivers, possibly impacting breeding success more than adult survival.

Therefore, shooting restrictions are unlikely to have any benefit. Instead, research investment to better understand the causes of ongoing declines is necessary, alongside habitat management and conservation interventions.



Research required

- Breeding and wintering surveys to better understand local and national distribution and abundance.
- Submission of bag data to better inform harvest estimates (data can be submitted to the GWCT National Gamebag Census or BASC Green Shoots Bagged It).
- Shooting should support the BASC wing survey to enable better understanding of adult:juvenile harvest ratios.
- Increased ringing and ring resighting effort to improve understanding of migratory movement.

Shooting restrictions

- Should show restraint.
- Site-based considerations required.

Habitat management

- General wetland creation and management will benefit both breeding and wintering populations.
- A mosaic habitat of dense cover, open water and clearings is required to provide safe refuge and feeding areas.
- Ensure suitable breeding sites have ramp-like areas to enable chicks to leave the water easily.
- Pest and predator control.
- Refuge provision, either for set periods of time (temporal) or over dedicated areas of land (spatial), dependent on site.
- Nesting support (for example: fencing, duck nest tubes, provision of maintained islands).

4. FUNDING SUPPORT

- Financial support could be provided to fund research and practical conservation measures in the UK and abroad through an application for grant funding to the BASC Wildlife Fund.
- For details on other possible funding streams, check the BASC website.

5. INSURANCE

It is advisable to have adequate liability (third-party) insurance when shooting. Membership of BASC includes insurance for recreational sporting activities: basc.org.uk/join-basc/bascmembers-insurance

6. FURTHER INFORMATION

- The Code of Good Shooting Practice
- BASC Wildfowling Code of Practice
- BASC Flight Pond Code of Practice
- BASC Code of Practice for sporting agents and guides offering inland goose shooting in Scotland
- BASC Shotgun Safety Code of Practice

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