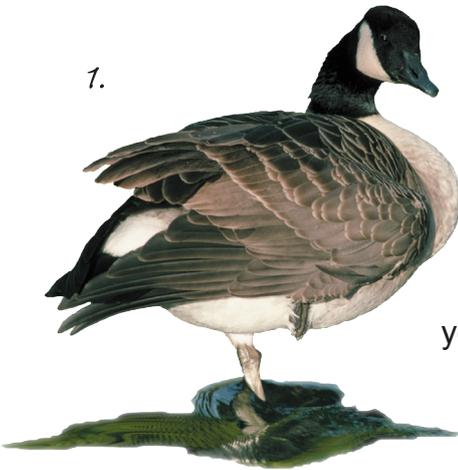


# Managing Geese

## ON AGRICULTURAL LAND

Geese come into conflict with agricultural interests primarily during winter and spring, when large numbers arrive to over-winter in the UK from more northerly countries. Scotland also supports a number of permanently resident, breeding populations of geese, such as greylag geese in the Hebrides, NW and SW Scotland, and Canada geese elsewhere.

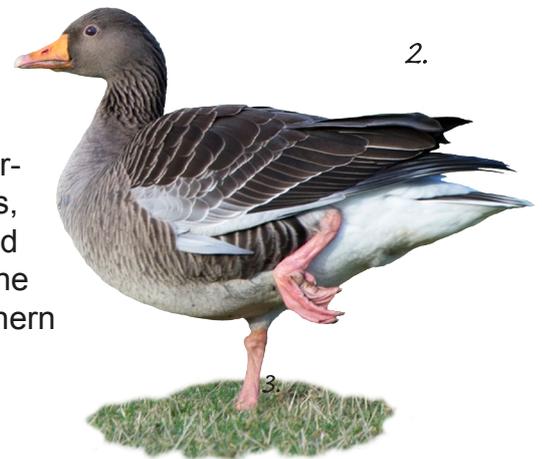
**Over-wintering geese** arrive in Scotland in September/October, reaching peak numbers in late November. During the autumn period, the geese often feed around estuaries and lochs, on crop residues or grass. It is during winter and spring, when these food supplies can be exhausted, that geese can cause damage to winter and spring cereals, winter vegetable crops, feedcrops, and the 'spring bite' of grass crops.



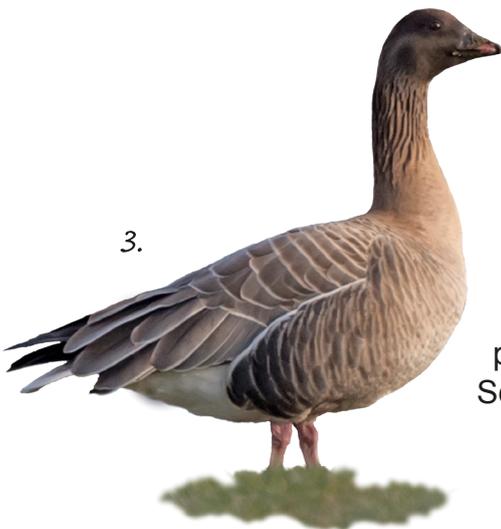
**Canada geese (1)** are resident in southern Scotland and around Moray in summer. They have a distinctive white chin strap.

Canada geese are listed in [General Licence 02/: To kill or take certain birds for the prevention of serious damage to livestock, foodstuffs for livestock, crops, vegetables and fruit.](#) This permits you to shoot or take eggs and nests at any time of the year.

**Greylag geese (2)** are widely distributed. Their key over-wintering sites are in Orkney. Also northern coastal regions, eastern and southern Scotland including Argyll, parts of the Hebrides and the Northern Isles.



**Pink-footed geese (3)** are found largely in eastern regions of Scotland, but also around the Solway. A proportion of the population will spend mid-winter in England, but pass through Scotland during autumn and spring.



Greylag and pink-footed geese are **quarry species**, and can be shot during the open season (between 1 September and 31 January inland and above the high water mark of ordinary spring tides. The open season extends to 20 February below the high water mark). During the open season, Sunday and Christmas Day shooting of geese is not permitted in Scotland.

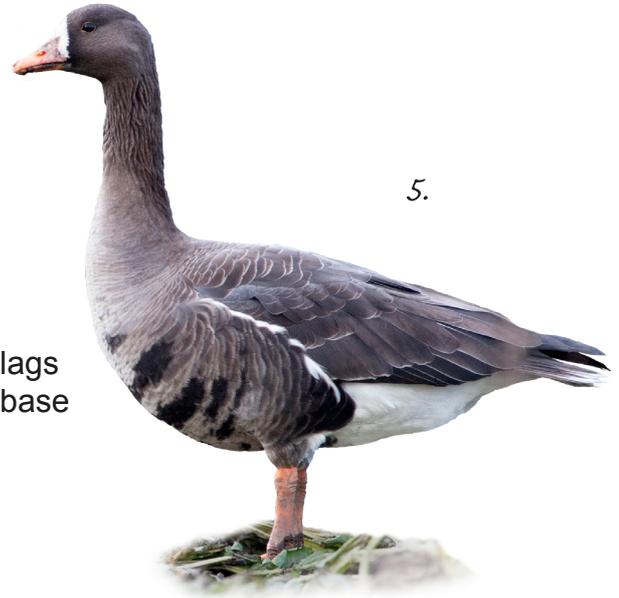
During the close season, a licence must be sought from SNH (see section 3).

4.



**Barnacle geese (4)** are black and white geese that can be distinguished from Canada geese by their white faces, and black, white and grey (not brown) bodies.

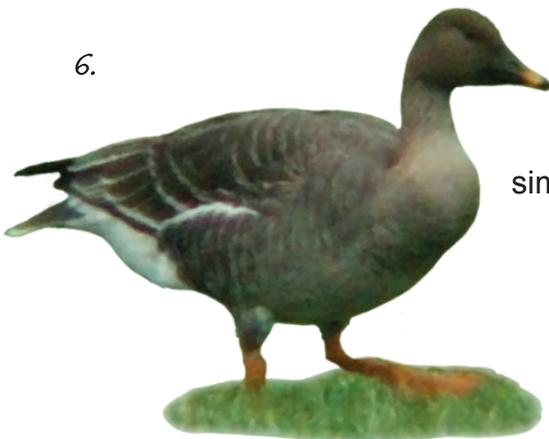
5.



**White-fronted geese (5)** can be distinguished from greylags and pink-footed geese by their distinctive white band at the base of their bill.

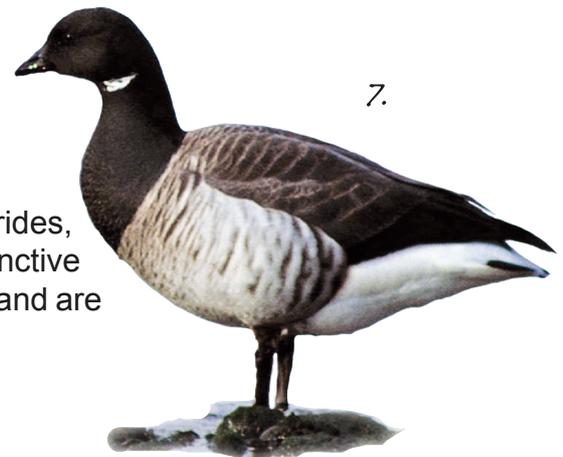
Barnacle geese and white-fronted geese are **fully protected at all times**, and can only be shot under licence (see section 3).

6.



**Bean geese (6)** are found in small numbers at Slamannan in Lanarkshire and occasionally elsewhere. They look very similar to pink-footed geese.

7.



**Brent geese (7)** may be found in small numbers in the Hebrides, Galloway, Eden Estuary, Moray and Cromarty. They have distinctive black heads and necks with a small white flash on their necks, and are a similar size to mallard ducks.

Bean and Brent geese are **fully protected at all times**.

It is very important that you kill only those species that you are legally entitled to do so. If in doubt about the species of geese on your land consult your local SNH office (<http://www.snh.gov.uk/contact-us/offices/>). The RSPB web-site provides recordings of the calls of the key goose species, which can be useful for identifying them: <http://www.rspb.org.uk/discoverandenjoynature/discoverandlearn/birdguide/> Go to 'Browse by family' and click on 'Swans, ducks and geese'.

# *To minimise goose grazing on crops, practice integrated goose management:*



## *1. Avoid Planting Susceptible Crops in Vulnerable Locations*

It may be possible to reduce damage by planting the most vulnerable crops in fields least attractive to geese. Geese are cautious birds and prefer to graze in large, open fields where they are undisturbed, and can easily see any approaching threat, such as people or dogs. Least favoured fields are ones next to roads, close to buildings, small and/or uneven fields, or fields with stone walls, hedges and trees that restrict visibility. The presence of livestock in fields can also deter geese, since the animals will obscure their view, and dung may reduce grazing efficiency. Vulnerable crops should be planted as far away as possible from bodies of open water, which are preferred goose roosting sites.

## *2. Move Scarers and Change Scaring Techniques Frequently*

**Bird scaring devices** work by creating visual and/or auditory signals that the birds associate with danger. Unfortunately, continual use of any scaring device, without reinforcement by an actual threat, will eventually result in the birds ignoring or habituating to it, sometimes in less than 2 weeks.

***Therefore, for any scaring activity to remain effective, it is essential that the guidance below is followed wherever possible.***

Where geese are present for short periods of time, e.g. during spring or autumn migrations, use scarers only at the most vulnerable times, or on the most vulnerable crops. Where geese are present throughout the winter, they may learn to use particular fields and it may be difficult to deter them from those fields later in the season. In these cases, it may be necessary to use scarers as soon as the birds arrive, making sure the most effective scarers are used during the most vulnerable times.

- ◇ Use a variety of scarers, and swap them around and change their positions at regular intervals. Avoid leaving any scarer in one place for more than 2 weeks. Five days is the recommended time interval before moving or changing a scarer.
- ◇ Immediately remove any scarer that has lost its effectiveness.
- ◇ Position auditory scarers to produce the maximum noise, e.g. along walls which will reflect the sound across the field. Corrugated iron sheets, or similar, can also be positioned around a scarer to reflect noise into the field.
- ◇ Control the operating rate of auditory scarers to minimise habituation; the faster the firing rate, the more quickly birds will learn to ignore it
- ◇ Reinforce the deterrent effect of scarers by occasionally shooting in their vicinity. Only shoot to kill if you are legally entitled to do so (see pages 1 and 2).

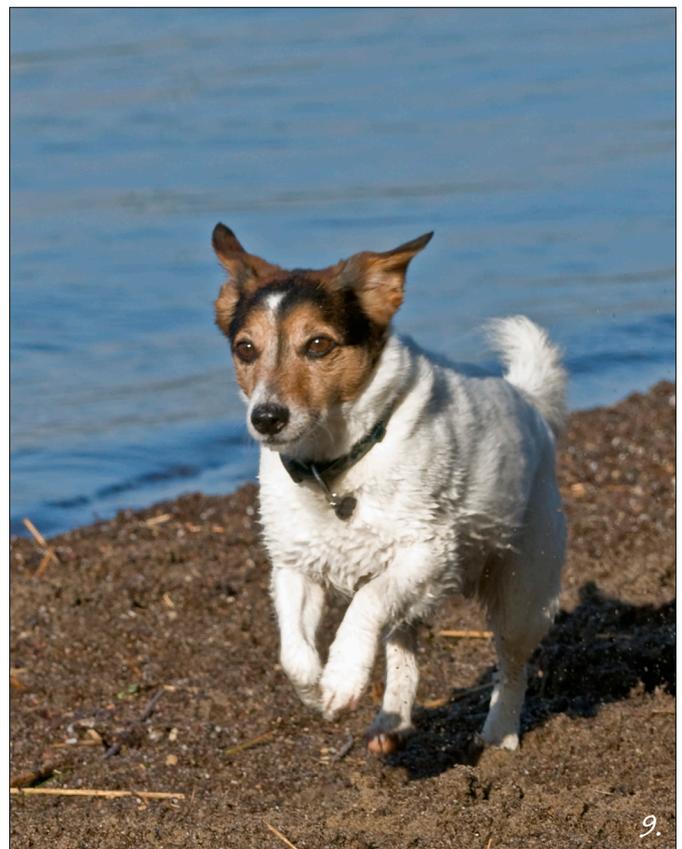
Geese feed throughout the day, and occasionally at night, so there is little benefit in targeting scaring to specific times of day. Non-lethal scaring can be practised at any time by any farmer to defend crops against any species of goose causing damage (farmers in goose schemes may have restrictions imposed upon scaring activities). Please be aware of the NFU Code of Practice on the use of bird scarers <http://www.nfuonline.com/about-us/our-offices/east-midlands/latest-news/advice-for-farmers-on-bird-scarer-use/>

### 3. Reinforce Scaring with Human presence

**People and dogs** are seen by geese as a threat, and can be highly effective at deterring them. Consider providing paths as a means of encouraging the public, including dogwalkers, to use particular routes. Access rights and responsibilities are detailed in [the Scottish Outdoor Access Code](#). If very serious damage is taking place to valuable crops, it may be worth calculating the cost-benefit of employing a person, with transport, to undertake scaring activities over one, two or more farms.

**Shooting** can be used either to scare or to kill geese, and is particularly effective at reinforcing regular scaring techniques.

Section 1 of the Wildlife and Countryside Act (1981) prohibits the intentional killing, injuring or taking of any wild bird. Exceptions to this include the killing and taking (or injuring in the course of attempting to kill) of **Canada geese under the General Licence**, and quarry species (**greylag and pink-footed**) during the open season (see bottom of page 1 for open season details).



**Commercial or sport-shooting** of geese over farmland, organised by the farmer or landowner as part of a sporting let, or by an experienced Guide or Shooting Agent, could provide a means of deterring geese from vulnerable crops, as well as providing a source of income.

The British Association for Shooting and Conservation (BASC) issues a [Code of Practice for Sporting Agents and Guides](#) offering inland goose shooting, which provides some information on this activity.

It is illegal to sell, or offer for sale, any wild goose. However, wild goose meat is available to sell locally in areas currently running Goose Adaptive Management Schemes, such as on Orkney, Uist, Harris and Lewis. See <http://www.snh.gov.uk/protecting-scotlands-nature/species-licensing/bird-licensing/general/> for licensing information.

Under Section 16 of the Wildlife and Countryside Act, **licences may be issued to shoot geese to prevent serious damage to crops**, where there is no other satisfactory solution. **Licences can be issued to shoot quarry species during the close season, and to shoot fully-protected species (such as barnacle geese)**. SNH licensing team issue licences to individual applicants (owner or occupier of land), to shoot a specified number of geese. They can permit other people to shoot geese on the licence holder's behalf. Licences are issued as a means of reinforcing and enhancing other scaring techniques. Application forms and guidance can be found at <http://www.snh.gov.uk/protecting-scotlands-nature/species-licensing/bird-licensing/preventing-damage/> or you can contact the licensing team at [licensing@snh.gov.uk](mailto:licensing@snh.gov.uk)

Under the Scottish Outdoor Access Code, you are advised to erect temporary notices of any shooting activities that may be taking place if they can affect those accessing that land. Sign templates can be downloaded at <http://www.outdooraccess-scotland.com/Access-management-guidance/signs>



#### *4. Where Possible, Ensure Alternative Feeding Areas are Available, Either Locally or on Farm*

Alternative feeding areas (AFAs) or sacrificial crops are a very effective means of keeping geese off vulnerable crops where food resources in the local area are limited, e.g. during spring. AFAs should ideally be attractive to geese, but less vulnerable than valuable crops. Maximise attractiveness to geese on these fields (see 1.), and avoid using *auditory* scarers in adjacent fields, although visual scarers in adjacent fields are less likely to impact upon goose grazing.

# Scaring Devices

**Visual scarers.** Geese habituate quickly to traditional **scarecrows**. However, if the effigies are lifelike, move or rotate, create noise (e.g. transistor radio), are regularly moved, and occasionally reinforced by human presence, then habituation is delayed. Anything that increases movement and sound associated with the scarecrow will aid effectiveness. Inflatable, battery-operated effigies, that wail and can light up, have been used effectively against geese in eastern Scotland, but have had less effect in the Hebrides, where strong winds can flatten them. This is one of the few visual scaring devices that can operate at night.

Large raptors can take geese, but birds quickly distinguish **raptor models** from live raptors, and can learn to ignore them. **Kite-hawks, kites, gas-filled balloons and balloon-kites** are relatively inexpensive, but effectiveness is variable. At high enough densities, these devices may deter geese from landing in a field. Eye-spots on balloons may make them more effective. All can be damaged in strong winds; balloon fabric will deteriorate in UV light



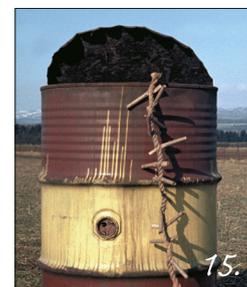
and frost, and kites require a certain amount of wind to lift them. Optimum heights for gas-filled balloons are 20-30 m, below which ground turbulence will buffet them. Without written permission from the Civil Aviation Authority, tethered balloons or kites cannot be flown above 60 m in height or within 5 Km of any aerodrome.

**Flashing, rotating or strobe lights**, sometimes used in conjunction with mirrors and reflectors, can be effective. The more movement associated with the lights or mirrors, the more dazzling the effect and the greater the deterrent. Mirrors and reflectors alone (e.g. CDs strung on lines) are more effective in sunlight than when overcast. Flashing lights, with or without reflectors, can be used to help deter birds from roosting and/or grazing in fields overnight, although the impact on neighbouring houses needs to be considered.



**Tapes** can act as visual and auditory scarers, as well as exclusion devices. Long strips of bright, fluorescent or reflective tapes can be secured to posts and left to move in the wind, or they can be strung between posts, where they may twist and vibrate in the wind. If placed at a sufficient density, they may also act as a physical deterrent. For instance, tapes erected in a herring-bone layout between tramlines on fields of oilseed rape have shown to be cost-effective at reducing swan grazing damage if the density exceeds 6 swans per ha (<http://publications.naturalengland.org.uk/publication/33011>). Tapes need to be durable, or they will break in strong winds.

**Flags and sacks** attached to posts have been shown to be effective at deterring geese from grazing crops, particularly if black or white in colour. Flag density needs to be between 1 and 4 per ha.



**Auditory scarers. Gas guns** can be used against geese at one gun per 20 ha of open farmland. Different types are available, with variable firing intervals, multiple reports, electronic timers, and/or rotating mechanisms. Often most effective when used in conjunction with other scaring devices. A wide range of **pyrotechnics** are available including rockets, rope-bangers, and specialised cartridges fired from modified pistols or shotguns. Most produce sounds up to 160 dB and emit flares which travel between 25 and 90 metres. There is a very wide range of sounds and flare patterns available, which provides considerable variation in the scaring effect, and minimises habituation. Cartridges and guns require either a Shot Gun Certificate or a Firearms Certificate. Rope-bangers can be placed in empty oil drums to enhance the noise.

Geese do not produce easily identifiable alarm or distress calls, so systems employing these are less effective at deterring geese than other species. However, **sonic devices** produce a variety of electronically-produced sounds, and these have been shown to be effective against geese. Birds do not hear in the ultrasonic sound range, so ultrasonic devices are ineffective.

High intensity sounds (**sonic booms, air-horns and sirens**) can cause distress or pain at close range, causing birds to leave, although geese have been shown to habituate to air-horns.

Manufacturers and approximate costs of commercially available scaring devices can be found on: <http://www.sasa.gov.uk/wildlife-environment/wildlife-management>.



**Auditory scarers can cause considerable disturbance to people living close to fields** where they are in use. NFU guidelines on the use of auditory scarers in these situations state:-

- ❖ Place scarers as far away as possible from any occupied building, and at least 200 metres from sensitive buildings (hospitals, schools and houses).
- ❖ Align scarers away from buildings, and deflect noise away using straw bales, or other absorbent material as baffles.
- ❖ Do not fire them more than once every 15 minutes. Reports from a multiple chamber gun should count as one report if heard within 30 seconds.
- ❖ Point scarers downwind, since noise will carry considerable distances, even in light winds.
- ❖ Never use auditory scarers before sunrise or after sunset, and continually adjust automatic timers to take account of changes in daylight patterns. Keep photoelectric timers clean, and preferably back them up with a mechanic timer. Under no circumstances activate scarers before 6 a.m or after 10 p.m. Do not activate before 7 a.m. where they could affect occupants of sensitive buildings.
- ❖ Do not place scarers next to bridleways and footpaths. If this is unavoidable, erect temporary warning notices, and consider recommending alternative routes.

Local Authorities are empowered under the Environmental Protection Act 1990 to order the abatement or restriction of the use of such devices if they consider the noise they cause to be a 'statutory nuisance'.

Compliance with the above guidance may help you to reduce the risk of infringing those rules.

© Crown Copyright 2015.

Produced by SASA Photographic Services Unit for SGRPID in collaboration with SNH, RSPB, BASC, NFUS and NFU.

The images used to illustrate this leaflet were provided courtesy of the above organisations and are copyrighted as follows: 1 (Richard Brooks); 2, 3, 4, 5, 8, 9, 10, 12, 14, 15 16 & 16 (SASA); 6 (Eugene Archer, Irish Birding Services); 7 (Robert Smith); 11 and 13 (SNH).



This document is also available on the Scottish Government website:

[www.gov.scot](http://www.gov.scot)