

## Farm diversification new business ideas – Specialist Crops and Livestock

# Game Birds

### Key points to consider

- There is an increasing demand in Northern Ireland for top quality birds for shooting.
- Pheasant are the most popular species but mallard and partridge are also released.
- Approximately 50 hours of labour should be allowed per 1000 poults produced.
- An organised day's shoot for 10 guns could realise a gross figure of £2,000.
- To humanely rear game birds requires detailed technical knowledge.



### Market overview

Each year in Northern Ireland around 35 persons rear some 250,000 – 300,000 game birds. About twelve farming estates rear large numbers of birds; surplus birds are sold to gun clubs and syndicated landowners. Many other individuals rear a small number of birds as a hobby.

There is a growing interest in the sport of shooting game in Northern Ireland. The demand for six-weekold poults has increased locally and there seems to be potential for increasing the numbers of top quality birds being produced.

### Production requirements

#### Establishment

The main ways of starting up this enterprise are:

- Purchase 6 week old poults and release;
- Purchase day-olds, rear for release or sale;
- Purchase eggs, hatch, rear for release or sale;
- Produce eggs, hatch, rear for release or sale;
- Catching some birds from the wild on estates providing permission is granted.

Small scale rearing operations are rarely viable because:

- Large game farms can make economies of scale and their incubation cost per egg is far below that of the smaller unit;
- Small numbers of day-olds which do not fill a brooder unit make the overhead costs per bird high.

#### Species of birds

The rearing of pheasant is relatively straightforward provided good husbandry techniques are used. Pheasant is the most popular species however other important species of game bird include partridge and red grouse.

The rearing of duck is relatively easy but in spite of this only small numbers are reared compared to either pheasant or partridge. Reared duck do not necessarily provide good shooting. The provision of flight ponds can provide wildfowl shooting.

#### Size of breeding flock

Assuming no limitation on incubator capacity or availability of equipment, the size of a laying flock should be based on the number of poults needed for restocking. In general 100 pheasant/partridge poults released should result in about 40 birds shot. It should be possible to rear over 90% of day-old pheasants to release age.

#### Wintering pens

It is good practice to use a different pen for over-wintering than that used for laying in the spring. Cocks should be penned separately from the hens during the winter.

#### Laying pens

Laying pens can be fixed, moveable or communal. They should be sheltered and south facing and the land should be light, well drained and reasonably level. Established grass and other herbage are ideal.

Preparing birds for laying pens:

- The sex ratio for pheasant should be one cock to seven hens.
- To prevent birds from flying out you can fit a brail or tape or clip the primary feathers of one wing.
- It is advisable to blunt the spurs on the legs of cocks.

- Preventative measures should be taken to stop pheasants pecking or eating their eggs.
- Routine worming of stock prior to the egg-laying season is advisable.

### Egg collection and storage

Eggs should be collected at least twice a day and separated into three categories, visibly clean, dirty and unsuitable for hatching. The hatchability of pheasant eggs will suffer if they are kept for over seven days. Mallard eggs should be stored in cool humid conditions for no longer than two weeks.

### Incubation

Pheasant and mallard eggs require 24 days and 28 days respectively. They should not be set in the same incubator in order to maintain high standards of hygiene and if they are set consecutively it is essential to fumigate between settings.

### Rearing

Pheasant chicks are fragile. Brooders should be kept at the correct temperature and vitamin supplements added to the drinking water at first. If special pheasant rations are unavailable turkey formulations will do.

Mallard are easy to rear. Incubator hatched birds need an artificial brooder inside a wire run. Ground temperature should be approximately 32°C for day-olds. They should be weaned off heat during daylight by three weeks old. Mallard will thrive on starter crumbs for the first couple of weeks and should be weaned onto grower pellets at 3-4 weeks. At 6-7 weeks small amounts of wheat or barley should be introduced.

### Other considerations

Game birds have a tendency to be cannibalistic so it is worthwhile taking preventative measures such as dimming the light. Young birds are vulnerable to predators such as sparrow hawks and foxes.

### Disease control

General measures to control diseases include ensuring the health of the chicks or poults; hygiene and management of the brooder hut, grass runs, release pens; proper feed, medication, veterinary involvement and site biosecurity. It is essential that prevention and disease control measures are planned and carried out before the arrival of the birds.

The Northern Ireland Poultry Health Assurance Scheme (NIPHAS) which includes a specific section on game bird management aims to establish minimum standards of husbandry, hygiene and biosecurity in the trade of live birds and hatching eggs.

### Legal requirements

Producers must conform to the Game Act 1928, the Game Amendments Act 1952 and the Game Preservation (Amendment) Act 2002.

Shooting season in Northern Ireland is as follows:

Pheasant	October 1	-	January 31
Partridge	September 1	-	January 31

Grouse	August 12	-	November 30
Duck/Goose	September 1	-	January 31

### Financial considerations

#### The cost of rearing game birds includes:

- Purchasing the chicks;
- Feed - the estimated feed required to rear 1,000 pheasants up to eight weeks will be about 1450kg;
- Labour - these costs will depend upon rearing systems and numbers involved. Approximately 50 hours of labour should be allowed per 1000 poults produced;
- Overheads - such as electricity, insurance, interest charges, repairs and renewals.

#### Receipts from shooting

Receipts from a game enterprise are derived mainly from 8-10 organised day shoots during the season. An organised day's shoot for 10 guns could realise a gross figure of £2,000. A number of beaters with dogs are required to retrieve shot birds.

#### Further contacts

Veterinary Service, Department of Agriculture and Rural Development, Animal Health and Welfare Division  
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The British Association for Shooting and Conservation Ltd (BASC)  
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This information sheet has been compiled by Rural Enterprise Advisers.

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Note: the information provided herein is for general information only. It is not necessarily complete and is not intended to address the specific circumstances of any proposed enterprise. The market and circumstances may change substantially. Further research will be required before embarking on any new enterprise.

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