

# New Entrants to Farming Alternative Livestock Factsheet



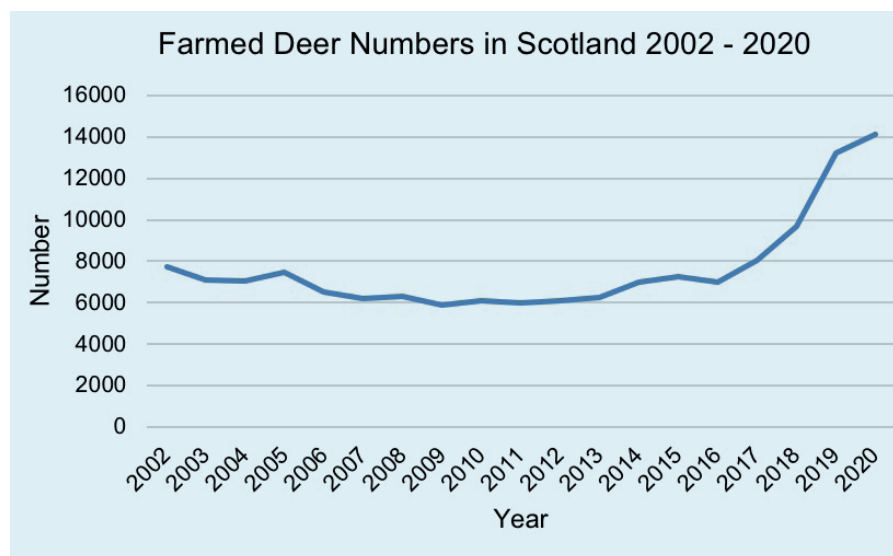
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Adding alternative livestock enterprises such as deer or pigs to existing sheep and/or cattle farm businesses will spread the financial risk and provide an alternative income stream. Pigs are also a useful addition to arable farm businesses due to the ready supply of grain and straw and the potential for FYM to aid soil fertility.

## Deer

### Background

Deer have been farmed in the UK since the 1970s, but farmed deer numbers in Scotland remained relatively stable between 2002 and 2017, but since then numbers have doubled. This has been in response to a decreasing volume of venison from wild culls and an increase in the UK venison retail market. It is estimated an additional 1200 tonnes of venison per annum from 300 farms would be required to supply UK demand. In 2020, there were 13,102 farmed deer on 118 Scottish holdings, with most being found in the South East where average herd size was also highest. On average, each Scottish deer farm was home to 120 deer.



Adapted from ScotGov Agricultural Censuses 2012 - 2020

### Infrastructure

Deer require 1.9 – 2.0 m high fences with 150 mm or 300 mm mesh. This type of fencing costs £8 - £10.50 per metre which is a significant investment. In addition, deer gates cost £270 each but cattle and sheep gates can be modified. It is also possible to use electric fencing, which is useful for rotational grazing or feeding forage crops, but the deer need to be trained first. Good handling facilities including a crush and weigh scales, which can cost £10,000 to £20,000 are also a requirement for safety of the deer and handlers. In comparison to sheep and cattle, deer have a low labour demand.



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## Systems

Most new entrants to deer farming start with a breeding herd. Red deer breeding hinds fetch £350 - £600, while stags fetch £1,000 - £2,000. Therefore, set-up costs for a 100 hind breeding herd is in the region of £100,000. With increasing numbers of deer farmers, breeding stock are becoming more available. It is also possible to sell 6-month-old calves weighing 40 kg (hinds) – 50kg (stags) to deer finishing farms, but there are only a few finishing units currently, due to limited stock availability. Regardless of the system chosen, it is vital that a market is identified.

## Markets

Deer are commonly sold finished at 15 – 18 months of age, with hinds weighing 85kg and stags 108 kg (liveweight). A 54% killing out percentage is often achieved, and deadweight prices are in the region of 500 p/kg. Cull hinds receive 305p/kg dead weight so can realise approximately £180 (110kg liveweight).

Currently almost half of the venison market share (49%) is held by retailers such as Waitrose, Sainsbury's, and Morrison's; with the remainder being made up by direct marketing via butchers (26%), farm shops (14%) or mail order (9%).

Deer are unique in that they can be killed on farm (provided they are inspected by a veterinary surgeon within 72 hours of death) or in an abattoir. There is one deer abattoir in Scotland at Downfield Farm, in Cupar which produces the Stagison Venison brand and operates on an appointment only basis with lead times of 1 – 2 weeks or longer in the autumn and Christmas run up. Other abattoirs are available in Yorkshire and Cornwall.

## Breeding

Deer mate during a 3 – 4-week period between October and late November, called the rut. During this period stags can lose up to 30% of their body weight. Stag: hind ratios depend on stag age, but 1:30 – 1:50 are acceptable for mature stags, while 1:8 – 1:12 are more realistic for yearling stags. AI can also be done in deer.

Hinds reach puberty at 16 months old, but this can be delayed by poor pre-weaning growth. They produce a single calf and can reproduce annually until 15 – 17 years old. The gestation length of deer ranges from 218 – 248 days (8 months) but averages 233 – 234 days in red deer. This is heavily influenced by nutrition in the last third of pregnancy. Deer calves typically weigh 8 – 10 kg at birth and calving difficulties are rare.

A sheltered spot is important for deer and during the calving period they prefer elevated positions with low ground cover, which can be provided by the presence of shrubs or tussocks within rough grazing or leaving unmown or un-grazed areas in the middle of fields. It is recommended to reduce stocking density to under 8 hinds per hectare during the calving period to avoid competition for suitable calving sites. Typical calving rates of 90% and weaning rates of 85% are achieved.

## Weaning

Deer calves are totally dependent on the hind until they are 3 – 4 months old and weaning is influenced by hind condition and calf weight in late summer and feed availability and quality. Calves may be weaned pre-rut (in August – September aged 3 – 4 months), post-rut (aged 6 – 7 months in November – December) or naturally (aged 9 – 10 months in January – February). Many deer farmers house calves in straw bedded courts after weaning.

## Feeding

Farmed deer are predominantly grass fed on permanent pasture (ryegrass/white clover) and can consume 6 – 8 kg DM/hd/day, necessitating a grass cover of 1500 – 1600 kg DM/ha or 8 cm sward height. Contrary to popular belief, farmed deer perform best on improved grassland and are highly responsive to pasture quality. They can also be fed swedes, rape, turnips, fodder beet, carrots, potatoes, lucerne, silage, and grain too, but like cattle and sheep, they require a 2 – 3-week transition period before changing feeds. Finishing stags can achieve an average 0.15 kg DWLG but 40% of the annual weight gain occurs in spring from late March.

## Health

Deer are relatively healthy and free from disease. They can be affected by TB, Johnes, cryptosporidium, yersiniosis, malignant catarrhal fever (MCF), copper deficiency and lungworm.

## Record keeping

Unlike other farmed livestock, deer are not subject to statutory standstill restrictions and they only need to be individually identified if moving or having a TB test. Deer can be tagged using sheep or goat tags or tattooed, with a herd mark which is 1 or 2 letters followed by 4 digits and a unique ID e.g. UK AB 1234 00001. Deer movements are covered by Animal Transport Certificates in Scotland and can be recorded at the batch level, rather than individually. All records should be retained on farm for at least 3 years.

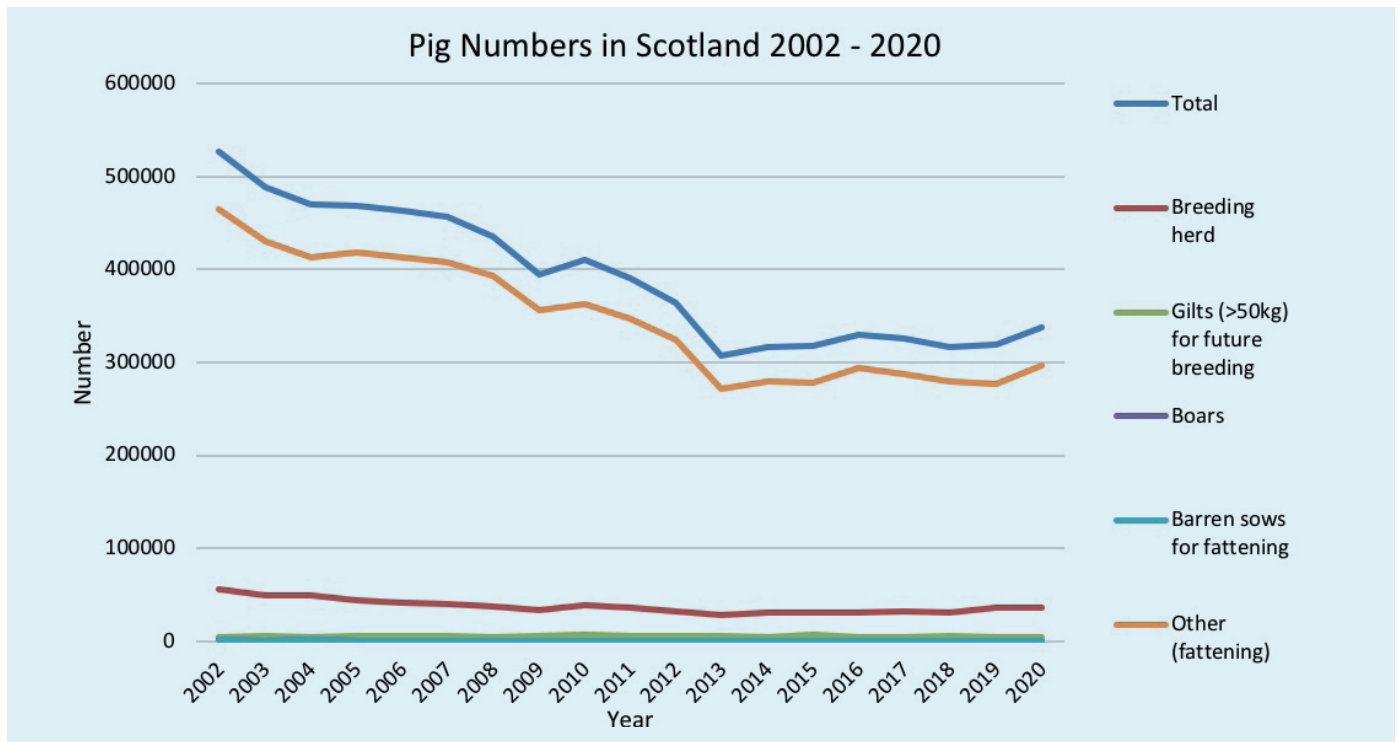
## Further information and advice

- Local deer farmers
- Scottish Venison Association <https://www.scottish-venison.info/>
- Venison Advisory Service <http://venisonadvisory.co.uk/>

# Pigs

## Background

Between 2002 and 2020 the Scottish pig population fell by 36%, with the closure of the Halls abattoir at Broxburn in late 2012 having a significant impact, although numbers are starting to increase again. Currently Scotland is only 24% self-sufficient in pork production, with only 35% of pigs born in Scotland slaughtered here, as most (>60%) are slaughtered in England either through direct movement to slaughter or having been finished on farms in the North of England. It is estimated that a minimum breeding herd size of 45,000 is required for efficiency and effectiveness of the supply chain, meaning there is scope to add around 10,000 breeding sows and gilts to the Scottish herd.



Adapted from ScotGov Agricultural Censuses 2012 – 2020

In 2020 there were 1,562 farms in Scotland with pigs present. Scottish pig farming is heavily concentrated in the North East and South East, where 58% and 30% of the national herd can be found respectively, due to the temperate climate, sandy soils, and good supply of local straw from arable farms. Both the Scottish pig breeding herd and non-breeding herds are dominated by a few very large producers with 89.5% of the total breeding herd being found on 47 holdings containing at least 250 sows and 98% of the non-breeding herd being found on 105 farms with at least 100 fattening pigs.

## Systems

The pig industry in Scotland has a vertical supply chain which is well integrated. Pedigree pigs are found in boar stations and nucleus herds which supply multipliers, where they are crossed. Multipliers then supply the breeding herds with cross-bred pigs. Progeny from these units then moves to commercial producers which encompasses farrow-to-finish, weaners and finishing units.

A range of pig systems are operated across Scotland including conventional and organic indoor and outdoor breeding, weaned piglets (7.5kg), weaners (30kg), finishers (110kg) and bed and breakfast.

Most pigs in Scotland are sourced direct from pig companies and co-operatives including Karro, Rattlerow, Scotlean and Scottish Pig Producers. Purchase costs are approximately: gilts £205, boars £800, and weaners £55.

Bed and Breakfast systems can be a good low risk introduction to the pig industry. Existing farm buildings can be easily modified to accommodate pigs and in return a regular weekly or batch income is guaranteed. Further details on Bed & breakfast pigs can be found in this FAS fact sheet <https://www.fas.scot/downloads/bed-breakfast-pigs/>.

## Breeding

Sows are nonseasonal and polyoestrous breeders, meaning they come into heat every 21 days on average (ranges from 18 – 24 days). Pig pregnancies last on average 115 days (range 111 – 120 days). In 2020 the average number of pigs weaned per sow in the UK was 27.7 for indoor breeding units and 24.5 for outdoor units, but the top third of producers achieved 33 and 28 respectively. Such differences arise as more piglets are born per litter in indoor systems, and outdoor systems have increased preweaning mortality levels. Piglets are weaned at 28 days (42 – 64 days on some organic units) at approximately 7.5 kg.

Commercial pig breeding continues to move away from natural service to using AI, as since 2002 numbers have decreased by 57%, with boars only making up 0.27% of the total Scottish pig population in 2020.

Improved health, genetics and management have led to an 18% increase in productivity since 2009. Average daily liveweight gains for weaners in indoor systems are 440g/day, while for outdoor systems it is 469g/day and finishers 828g/day. This has also led to higher slaughter weights and therefore greater meat yield. In 2019 the average UK carcass weights were 84.9kg and 75% killing out percentages are regularly achieved.

## Markets

Within the Scottish pig industry, two producer co-operatives dominate, and contracts are common. Returns from pig production are heavily dependent on feed prices, feed conversion efficiency and price received for pigs. Feed accounts for 50 – 60% overall costs in pig production and between spring 2020 and spring 2021 wheat prices increased by 30% and barley by 50%. As a result, in the 1<sup>st</sup> quarter of 2021 GB pig production costs were at the highest since 2009, following an increase of 10 p/kg to 174 p/kg.

The average price for finishers is 160 p/kg deadweight, while typical deadweight prices for cull sows are 75p/kg for a 160 kg carcass and cull boars realise 65p/kg for 180kg carcasses, equating to £120 and £117 respectively.

Pigs slaughtered in Scotland are processed through the farmer owned Quality Pork Ltd abattoir in Brechin, which supplies Tulip Ltd. Karro owns an abattoir in Yorkshire, where many of their pigs are processed.

## Record keeping

Commercial pig farming is very data driven and requires a good eye for detail. Almost all commercial pig farming businesses in Scotland are members of the QMS Pigs Assurance Scheme

[https://www.qmscotland.co.uk/sites/default/files/qms\\_pig\\_standards\\_2020\\_2021\\_april\\_update.pdf](https://www.qmscotland.co.uk/sites/default/files/qms_pig_standards_2020_2021_april_update.pdf)

A UK wide electronic medicines book (<https://emb-pigs.ahdb.org.uk/>) enables the industry to monitor and record antibiotic use in the national herd.

Statutory standstill periods of 20 days are applied to pig movements and all movements on and off your holding must be pre-notified and accepted to ScotEID (<https://www.scoteid.com/>). All pigs must be identified by an ear tag or tattoo on their ear or a slap mark on the shoulder containing a herd mark. This pig identification and registration checklist provides a useful guide <https://www.fas.scot/downloads/smr-6-pig-identification-registration/>

## Health

Biosecurity very strict on commercial pig farms to avoid the introduction of disease. Most breeding companies and suppliers have specialist veterinary advisors who produce and implement health monitoring programmes. The Scottish Pig Health Scheme run by Wholesome Pigs Scotland Ltd produces quarterly reports of clinical disease for vets and farmers following post-slaughter carcass inspection. An eradication scheme for Porcine Reproductive and Respiratory Syndrome (PRRS) has been trialled on the Moray Coast. The Scottish Pig Disease Control Centre (<http://www.spdcc.org/> 01466 705247) is responsible for monitoring and control of porcine epidemic diarrhoea (PED) and can advise on health status requirements.

### Further information and advice

- National Pig Association <http://www.npa-uk.org.uk/>
- Scottish Pig Producers <https://www.scottishpigs.coop/>
- Scotlean <https://www.scotlean.co.uk/>
- Quality Meat Scotland (QMS) <https://www.qmscotland.co.uk/>
- Feed reps