

New Entrants to Farming

New Entrants Guide to Keeping Cattle



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Deciding to buy and keep cattle is a major commitment and financial investment for any business (even for well-established beef farmers). There is a lot to be considered from the breed of cattle, the classification of stock you decide to keep (over winter stores or having a small suckler herd), production system, housing, feeding and handling. To have a profitable and successful beef enterprise many factors all have to come together.



Getting Started

Assuming that you have registered your holding and land with Scottish Government Rural Payments and Inspections Directorate (SGRIPD), in order to keep cattle you must first of all register as a livestock keeper with the Animal and Plant Health Agency (APHA). You will receive a Herd Register for Bovine Animals as well as a Cattle Keeper's Handbook. This will be full of information on cattle registration, movements and record keeping.

You will also need to register with ScotEID and then ScotMoves+. ScotMoves+ records and maintains all cattle births, movements and deaths in Scotland. Births, movements (on and off) your holding and deaths can be reported electronically using ScotMoves+ or by calling ScotEID. There are two types of movements that must be reported, 'within business moves' i.e. to grazing or winter housing where you remain the keeper and 'external moves' where the animals are moving ownership. Cattle passports will be issued in the post and the receipt and subsequent movements must be documented on the passport with use of holding barcode stickers which are also issued by ScotEID. It is important that you do not lose the passports although a replacement can be issued with a fee. You must also maintain a herd register documenting all births, deaths and movements either on paper record or computer/software system. Visit www.scoteid.com for more information.

For more information on registering and recording see numerous fact sheets at https://www.fas.scot/new-entrants/getting-started/?fl_builder. You may also find the following fact sheet on buying and selling at the mart useful <https://www.fas.scot/downloads/a-guide-to-buying-and-selling-at-the-mart/>.

You will also need to register with your nearest vet (making sure that they are a practice who deals with large/farm animals). They will also advise you on health planning as you may wish to join a Cattle Health Scheme. There are a number of Health Schemes that exist for the monitoring of diseases specific to cattle such as Johne's and Leptospirosis. Your vet will also help with BVD (Bovine Viral Diarrhoea) screening which is mandatory and TB testing. Medicines can be bought from the vet. A record of medicines bought and administered will also need to be kept by you.



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What Beef Breed and System is the best for your Farm/Rented land?

Everyone has their breed preference but an important point to consider is what breed works for someone else may not necessary work for you. Your environment contributes heavily to what you can or can't do. Your chosen cattle breed should really be whatever suits your farm/farming system, environment and climate.

Native breeds have increased in popularity over the past decade with a number of farmers now opting back to a native breed attracted by their hardiness, calving ease and possible market premiums. In an attempt to reduce production costs some beef farmers have selected a native breed to out winter cutting the need for straw bedding and the associated costs of a building used to house cattle throughout the winter. Out wintering stock may not be possible for every farm, environment and system and there is the risk of poaching around feed and water troughs and gate areas. Not all breeds are suited to an out wintered system and remember if your farm is in an upland hill location then housing cattle in winter may be your best option.

If your intention is to run a suckler herd of cows then you will be looking for a maternal breed with females who have good fertility, milk and longevity. Calving ease may also be a consideration. If you decide that you would like to breed your own heifer replacements and build up a breeding herd then these maternal traits particularly, ease of calving are extremely important. Equally if you opt to buy heifers to then keep as cows you will be looking for a maternal breed. You will also need to think about a bull if you decide to go with keeping a small herd of cows. There is the option to buy a bull however this may not be cost effective if you are only running a small herd of cows. You will also need to consider where the bull will be housed in winter and where he will be kept when not in with the cows. There is also the year round associated costs with keeping a bull. Some farmers who have smaller suckler herds borrow a bull from a neighbour or hire a bull. Although this option is cheaper (there will be a fee for each cow served compared with the initial cost of a bull at say £3,000). There are disadvantages with this including the risk of a hired bull introducing disease to your herd. Artificial Insemination or AI as it is more commonly referred to may be the best option while you are getting started. After synchronisation an AI technician (or vet) will be able to artificially serve your cows using bull semen that you have bought. Nowadays advances in AI mean that for some breeds there is the option to use sexed semen (meaning that the semen straw inserted into the cow will have been sexed and you can opt to buy female sexed semen thus producing female calves). The use of sexed semen is particularly useful when building up a herd. AI will not have the costs associated with keeping and buying a bull however successful conception rates require the cow to be served at the optimum time, this can be achieved through the use of a oestrous synchronisation tool such as a prid.

Not everyone who keeps cattle has a suckler herd. There are farmers who finish (fatten cattle) or those who opt to buy weaned calves to over winter and sell in the spring as forward stores. If you are thinking of buying in either weaned or store calves then you will find that there is a diverse range of stores being produced with differences within breeds as well as between breeds. Think about what the marketplace is looking for including maximum carcass weight limits e.g. 400kg (Sept 2019). The biggest store sales take place at markets in the autumn. The heavier and bigger stores will cost more when purchased however the return will be quicker as they will take less feeding until reaching prime.

Native breeds (Aberdeen Angus, Luing and Shorthorn) tend to have a smaller frame and are usually early maturing. They are well suited to forage (grass) based systems. Continental breeds however (Limousin, Charolais and Simmental) are usually larger framed animals and require feeding a higher level of input to finish.

You may also want to consider whether or not you want to keep bulls, heifers or bullocks (castrated male calves). Bulls tend to have higher growth rates than bullocks and heifers (but may not be as easily managed for someone who is new to keeping cattle). Heifers in comparison tend to lay down more fat (get fatter) at a younger age than male animals so will require to be fed a growing ration (diet) for longer. A drawback to fattening bulls is there a limited market for them once ready for slaughter.

Buying in young calves to rear to weaning age (approx. 6months) is also an option. These calves are typically weeks old and bought from a dairy herd and will usually be a pure dairy breed or beef cross dairy breed. Similar to the bull beef enterprise there tends to be a limited market for these dairy bred male calves so you may want to opt for rearing beef cross heifer calves where there is the option for the heifers to be used for breeding. This system requires relatively low capital investment in comparison to the other options of buying cattle and is a low cost way to start keeping cattle.

Feed, Fodder and Forage

Once you have decided what class of cattle (suckler cows, rear heifer calves to sell as bulling heifers, over winter stores etc.) then you will need to think about feeding your stock. Best practice would be to consult a livestock nutritionist if feeding cattle is a new concept to you, as providing cattle with the right dietary requirements is crucial

to ensuring high health and welfare and a profitable enterprise. Feeding cattle correctly and good nutrition is closely linked to health and welfare and efficiency. Nutrition is the biggest driver of herd performance.

For further information on cattle nutrition refer to <https://www.fas.scot/downloads/feeding-beef-cattle-sheep-practical-guide/> and <https://www.fas.scot/downloads/feed-budgeting>.

Grass is often the cheapest feed available, if managed well. Aim to stock fields more heavily during rapid growth e.g. spring and summer and reduce the stocking rate as the season moves forward to keep control of the sward (grass) height and quality of the grass.



If making silage for winter feed or buying in silage then it's advisable to carry out a silage analysis which will give you a more accurate idea of quality and feed value than simply looking at the silage. This will allow you to supplement each class of stock correctly e.g. growing cattle have different nutritional requirements from in calf cows.

Don't forget about water. Whether cattle are grazing outside on grass or housed inside you will need to make sure that stock have access to clean drinking water. There should be enough water available for at least 10% of housed cattle to drink at any one time. Think about where water troughs are located in the shed. Position troughs where they are protected from fouling and ensure that there is sufficient space around the trough for cattle to access the water trough. Water troughs or bowls should be easily accessible. Be sure to regularly check water is clean and free flowing and that there are no blockages or

leakages. A leaking water trough can lead to an increase of bedding used.

For cattle out in the fields you'll need to make sure that there is enough (and of a suitable size) water troughs to supply the size of the field and the number of animals in the field. As with inside troughs these need to be readily accessible at all times.

Bedding cattle throughout the winter on straw is for most farmers the usual practice. However straw availability, straw quality and increasing variable costs associated with livestock production has meant that alternative bedding products are now more widely used. There are a number of wood based (wood fines & chips) and non-wood based (peat & sand) bedding alternatives which you may want to consider using as a bedding product. The following factsheet will help you decide what bedding is best for you. <https://www.fas.scot/downloads/alternative-bedding-materials/>.

Housing, Handling & Fencing

You will need to think about housing for your cattle. Housing cattle is necessary to provide stock with protection from adverse weather and to reduce damage to grass and pasture caused by poaching from out wintering. The design and layout of any livestock building should support good health and welfare and contribute towards an efficient and a safe environment.

The following table (based on cattle housed in a cattle court) gives a guide to space requirements for different classes of cattle. Space allowance needs to be suitable to the cattle size and allow for growth during the housing period.

Remember this table should be used as a guide and represents the minimum space allowance required. More space per animal is recommended to enhance welfare. Also bear in mind that in calf animals require plenty of space and tend to seek isolation away from other cows in the group/building as calving approaches.

Animal type	Space Allowance (m ²)			
	Live Weight (kg)	Solid Floors	Fully Slatted	
		Bedded Area	Total Area	
Suckler Cow & Calf (excluding creep area)	500	3.75	5.00	2.50
	600	4.35	6.00	2.75
	700	4.65	6.50	3.00
	800	5.15	7.30	3.25
				Space allowance should be based on age, weight and behavioural needs of the stock, together with the size of the group
Growing/Finishing Stock	200	2.00	3.0	1.10
	300	2.75	3.95	1.50
	400	3.50	4.90	1.80
	500	4.25	5.85	2.10
	600	5.00	6.80	2.30
	700	5.75	7.75	2.50

Ventilation is crucial to ensuring good health and maximum performance from livestock when housed. Natural ventilation is best and the least cost option for cattle sheds. A technical note (TN698) on ventilation systems can be found on the FAS website, <https://www.fas.scot/downloads/technical-note-tn689-cattle-housing-ventilation/>

The building used to house cattle should provide animals with the least stress. Handling facilities for carrying out routine procedures such as dosing and tagging may want to be incorporated into your shed. A number of farmers use self-yoking head yokes as a way to safely handle cattle. Generally handling facilities will consist of a holding pen, a forcing pen, race and crush. Handling gates should be used instead of make shift gates and hurdles which can be dangerous to stock and those handling stock.

Top Tips for Handling Stock Safely

- Secure the cattle crush to the ground
- Opt for a circular collecting pen
- Use a curved, sheeted race – this will aid flow as it cuts down the sight of the crush & handler
- Ensure cattle are securely held when in the crush – never with an unsecured animal behind
- Make sure the crush floor is clean & a non-slip surface
- Ensure doors & gates are operated from the working side of the race – they're should be no reaching across the race
- Never position yourself between a moving gate and wall

Farm yard manure (FYM) is something you will need to think about. The quantity of FYM produced in a bedded court over the housing period will vary depending on the number and size of stock housed as well as the quantity and bedding type. FYM is a valuable source of crop nutrients. You will need to think about where the FYM will be stored (in a midden) after being removed from the cattle shed/court.

The table below (adapted from SAC Technical note T309) will give you an idea of quantities.

	Livestock weight (Kg)	Dry matter (%)	Typical weight of solid manure produced per day (tonnes)
Suckler cows	500	25	0.024
	600	25	0.028
	700	25	0.033
	800	25	0.038
Growing/finishing cattle	200	25	0.010
	300	25	0.014
	400	25	0.019
	500	25	0.024
	600	25	0.028
	700	25	0.033

For further information on cattle housing see <https://www.fas.scot/downloads/beef-cattle-housing/>.

As well as housing cattle you will need to think about fencing to keep them in. Robust fencing is needed for cattle. Fencing will need to be strong, as cattle tend to be hard on fencing due to leaning and rubbing against the wires. Ensure fence posts are strong also.

Other Considerations

Body Condition Scoring (BCS) - is something you should familiarise yourself with. Scores range from 1 to 5 with 1 being very thin/lean to 5 being very fat. BCS is a useful tool used by farmers as a guide to feeding for suckler cows based on body condition. It is an excellent tool, to ensure your management of the stock is correct, e.g. if cows are too lean, then something isn't right and needs adjusted. Ideally it should be done regularly at key stages in the production cycle (calving, weaning etc.).



Target condition scores for beef cows:

	Autumn Calving	Spring Calving
Housing	3.0	3.0 - 3.5
Calving	3.0	2.5 - 3.0
Turnout	2.5	2.5
Breeding	2.5 - 3.0	2.5 - 3.0

QMS have two excellent videos available on condition scoring beef cattle at https://www.youtube.com/watch?v=i_vIJ39ZARs and <https://www.youtube.com/watch?v=uzLbEEboKJA>

Biosecurity - Biosecurity measures help to prevent the spread of diseases (including notifiable diseases). Disease control through biosecurity is important and safe guards your herd and stock health. On farm biosecurity methods include cleaning and disinfecting clothing and vehicles before and after contact with animals. You should ensure that any vehicles or equipment coming onto your farm or land are clean, have been disinfected on arrival and are free from animal excreta.

You should check the health status of livestock before buying or selling animals. New animals should be kept separate from existing stock on first arrival. You should try to prevent and limit contact with your cattle and neighbouring stock (this is why good stock proof fencing is required).

Disposal of fallen stock (animals that die on your farm) is an extremely important biosecurity control measure.

Carcases must be disposed of under the rules of the National Fallen Stock Scheme.



You should familiarise yourself with the Welfare of Cattle Codes. A copy of the Welfare Codes associated with cattle can be found here <https://www.gov.scot/publications/code-practice-welfare-cattle/>

Farm Assurance Scheme – You may want to join a Farm Assurance Scheme. These are voluntary schemes which establish production and welfare standards. Most farms operate under a FA Scheme.

Animal Health Scheme – Cattle Health Schemes exist for monitoring of diseases such as Johne's and Leptospirosis. These schemes are voluntary and there is usually an annual membership fee. This may be of particular interest and benefit if your intention is to sell in calf or bulling heifers. There are farmers who nowadays only look to buy in female breeding stock from a herd which is accredited under a health scheme.

- Ensure that you and your holding are registered to keep cattle and all legalities have been covered
- Familiarise yourself with the record keeping that is associated with keeping cattle
- Seek advice from an agricultural consultant with knowledge of cattle, your vet and other farmers before buying any cattle
- Think about what breed and system will work for you and your farm/land
- Consider the different classes of stock – suckler cows, weaned calves or fattening cattle
- Facilities – do you have suitable housing, handling facilities, fencing & water troughs etc.?
- Understand stocking rates and space requirements for cattle
- Don't underestimate the importance of cattle nutrition – seek advice from a nutritionist on feeding cattle.
- FYM management
- Biosecurity – don't risk your health or that of your livestock.