

The Farm Management Handbook



Farm
Advisory
Service

Livestock



The UK reference
for farm business
management



Part of Scotland's
Rural College (SRUC)

Updated October 2024

Livestock Units

	Livestock units		Livestock units
Dairy cows	1.00	<u>Ewes and ewe replacements</u> ³	
Dairy bulls	0.65	Hill Ewes	0.06
Beef cows	0.75	Upland Ewes	0.08
Beef bulls	0.65	Lowland Ewes	0.11
Heifers in calf (rearing)	0.80	Rams	0.08
<u>Other cattle</u> ¹		<u>Lambs</u>	
0-12 months	0.34	Store lambs <1 year	0.04
12-24 months	0.65	Breeding ewe hoggs:	
Over 24 months ²	0.80	6 months – 1 year	0.06
Horses	0.80	Other sheep > 1 year	0.08

¹ excluding intensive beef systems

² reduced in proportion to time animal on farm

³ excluding suckling lambs

Notes

1. A Livestock Unit is usually defined in terms of feed requirements. The ratios in the table above are based on metabolisable energy requirements, with one unit being considered as the maintenance of a mature 625 kg Friesian cow and the production of a 40-45 kg calf, and 4,500 litres of milk at 36 g/kg of butterfat and 86 g/kg solids-not-fat.
2. To calculate the stocking density of grazing livestock allowances should strictly be made for variation in output, e.g., yield per cow or liveweight gain per head, and also for quantities of non-forage feed consumed by each category of stock.
3. To calculate the total livestock units on a farm, reduce in proportion the time animals are on farm within any year. The appropriate livestock units should be multiplied by the monthly average livestock numbers, except in the case of lambs and purchased stores where throughput should be used.
4. Because of the range in breed and type of animal within any one category (e.g. Friesian and Jersey dairy cows), the results obtained from the use of these figures must be interpreted with care.
5. Livestock units used by the Scottish Government for calculating stocking densities as part of eligibility for subsidy schemes differ slightly. See Rural Aid Schemes section for more detail.

Basis of data: Defra, 'Definitions of Terms used in Agricultural Business Management' (July 2024).

Livestock Traceability

Cattle

All cattle are required to have a 'passport'. Without a passport, cattle cannot be slaughtered for human consumption.

Cattle are required to be double tagged. Beef calves must have both tags fitted within 20 days of birth. Dairy calves must have one tag fitted within 36 hours of birth and the second tag fitted within 20 days of birth. **NOTE:** For all calves born in Scotland, births must be registered with ScotMoves+ (www.scoteid.com) within **7 days of tagging** and within 27 days of birth. Lost or illegible tags (including those with backs or fronts missing), must be replaced within 28 days of discovery.

Deaths must be reported and passports returned within 7 days. If the animal is over 24 months of age, it must be tested for BSE.

When an animal moves from one holding to another, both off and on movements should be recorded in the holding register within 36 hours of the movement taking place. For further guidance see www.scoteid.com.

An on-farm record must be retained for all cattle on the holding. All dairy births (within 7 days), any other calf (within 30 days), deaths (within 7 days) and movements (within 48 hours) all need to be recorded in farm records. These records must be retained for a 10-year period. A copy of a herd register can be downloaded at www.fas.scot/downloads/sample-blank-herd-register-bovine-animals/.

In Scotland, links between holdings no longer apply. To keep cattle you must register each holding that you use (owned, rented, or seasonally rented) with ScotMoves (<http://www.scoteid.com/>). Cattle moving to and from the different holdings (location codes) within a business must be recorded with ScotMoves within 48 hours of moving. This can be done by email, online, telephone/fax, paper or by using software packages. The keeper must be registered as a keeper of cattle at the receiving holding and no more than one keeper can be registered on that holding. Full details including possible exemptions can be found at www.scoteid.com.

Exporting Livestock to EU

Following Brexit, all animals exported need to have an ear-tag with the country code 'GB', there are various options depending on whether the animals are currently tagged with UK tags or not. The simplest approach is to speak to your tag supplier.

Cattle tagging EID changes

Each country (England, Wales, Scotland and Northern Ireland) are developing their own traceability systems for cattle and sheep as part of a replacement scheme for BCMS.

There has been a recognition that EID is the way forward but timescales and the systems to be used are under discussion in each country. However, it should be noted that EID is not compulsory in cattle.

In Scotland, Ultra-High Frequency (UHF) tagging is the preferred technology by ScotGov as it has many advantages. The technology is cheaper, they are WYSIWYG (what you see is what you get) compatible, they can be read singly or in batches at a greater distance, they don't interfere with LF tags, and they can be encoded with information.

Currently, UHF tags are voluntary and available. ScotEID are encouraging producers to switch voluntarily to them, due to their advantages. A new consultation was undertaken in June 2024 to gauge the level of support across the whole supply chain. This must be evaluated before decisions are made. Implementation will require new domestic legislation, this can't happen until a decision on the future is made. At present, until there is an agreed UK position on cattle re-numbering for LF (Low Frequency), Scottish cattle keepers have two options regarding EID for cattle, to use current LF non-WYSIWYG tags and readers or to voluntarily use ScotEID UHF WYSIWYG tags.

Sheep

To keep sheep, you must register each holding that you use (owned, rented or seasonally rented) with your local Rural Payments and Inspections Directorate (RPID) office. It is compulsory for all Scottish sheep born after 31 December 2009 to be tagged with an Electronic Identifier (EID) before they leave the holding of birth (unless under a concession) or are 9 months old, whichever comes first.

There are three types of tag that can be used:

- Slaughter Tags (a single EID tag with a flock mark and no visible individual identifier).
- A matching set of double tags with individual identifiers, one of which must be an EID tag.
- An EID bolus and black ear tag.

All sheep that are to be sold or slaughtered by the time they are one year old can be identified with any one of the above tags (tag types must not be mixed). However, the most common type for sheep under 12 months old are slaughter tags for store and finished lambs.

Any animals kept beyond 12 months of age must have a matching set of double tags with individual numbers – one an EID tag. Any slaughter tagged animals that are to remain on the holding after they are a year old, must be upgraded (provided they are completely traceable) by removing the slaughter tag and replacing with a matching set of double tags with individual identifiers one of which must be an EID tag on or before they are one year old. These must be recorded in the replacement register.

A record of identification must be kept in the flock records with the date the animals were EID tagged and their individual number if double tagged or flock number if slaughter tagged. Batch recording can be used.

Any homebred sheep losing their tags must have them replaced within 28 days of discovery. If they are on the holding of birth you can use your existing double tags one of which must be EID. If the sheep are not on the holding of birth, then red replacement EID tags must be used. The exception to this is upgrading bought in ewe lambs that can be upgraded to your own existing tags provided they are fully traceable. Replacement tags must be recorded in the flock records.

Flock books should include a section on identification and replacements and a continuous record must be kept. The register must be retained for three years. A holding register (orange book) is downloadable from the Farm Advisory Service website www.fas.scot/downloads/blank-flock-register/.

Records for all on/off movements, identification and replacement of tags must be completed in the register within 48 hours. An annual flock inventory must be completed usually with the December Census.

All sheep movements in Scotland must be reported to SAMU (Scottish Animal Movements Unit) within 3 days. Any EID animals moving through Scottish Critical Control points (markets, abattoirs etc) are logged and uploaded to the ScotEID database. These movements can form part of your records. The ScotEID website (www.scoteid.com) is a source of information on tagging rules and regulations as is Scottish Government's own website at www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/IDtraceability/SheepandGoats

Goats

The rules for goats are identical to sheep except the EID component is not compulsory and tattoos can be used.

Deer

To keep deer, you must register each holding that you use (owned, rented or seasonally rented) with your local Rural Payments and Inspections Directorate (RPID) office. Deer must be identified as required by the Tuberculosis (Deer) Order 1989 (as amended) before moving on or off a holding and before a TB test (unless under 16 weeks old). The owner/keeper must complete a movement declaration found at: <https://www.gov.scot/publications/animal-health-movement-restrictions/pages/exemptions/>

The movement declaration must be retained on the premises of departure for six months.

Pigs

To keep pigs, you must register your holding with the local RPID office and obtain a County Parish Holding (CPH) number for every holding that

you use within 30 days of when pigs are first kept. You must also contact your local Animal Health Office (AHPA) to register as a keeper of pigs and also to obtain a pig herdmark. All pigs born on your holding must be identified before leaving the holding of birth by an eartag or a permanent tattoo (either on the ear or a slapmark on the shoulder). See www.gov.scot/publications/pig-identification-registration-guidance-keepers-scotland/.

If under 12 months old, a temporary mark (paint) can be used for farm-to-farm movements only. For all movements to a show or exhibition, for breeding purposes, to a semen collection centre or, intra-community trade or export or under a walking licence, all pigs must also have an eartag or a tattoo with the herd mark and a unique individual identification number) not a slapmark. A slapmark, eartag or tattoo can be used for movement to a market or slaughterhouse. All replacement tags must be cross referenced in the holding register.

Movements must be notified either prior to leaving the holding or on the day of the move. This can be done electronically through www.scoteid.com or by telephone or in writing to the ScotEID information Centre. The receiving keeper must check and confirm receipt of pigs within 3 days of their arrival. The movements also need to be noted in the holding register within 48 hours of the move. These records must be kept for a minimum of 3 years and once a year, the pigs on the holding must be recorded. ScotEID can be used for this. Rules for movements between England, Wales and Northern Ireland, and for imports and exports can be found at: www.gov.scot/publications/pig-identification-registration-guidance-keepers-scotland/pages/5/

Poultry

Following the UK's worst ever outbreak of Avian Influenza in October 2021, new measures have been taken to protect the poultry industry from bird flu. From 1st September 2024, all bird keepers – even those who keep a single bird - must register their bird location(s) on the new Scottish Kept Bird Register (SKBR). A link will be available at <https://www.gov.scot/publications/avian-influenza-bird-flu/pages/register-your-birds/> from the 1st September.

Premises where birds are kept must be re-registered on the new SKBR on 1 September if they were previously registered on the Great Britain Poultry Register (GBPR).

Keepers must register, or re-register, their bird location(s) online or by telephone between 1 September and 1 December 2024. This is a legal requirement. Details must be updated at least annually.

The registration requirement does not apply to birds on the premises that belong to the order Psittaciformes (parrot family, including budgerigars) or Passeriformes (perching birds, including jays and finches), which have no access to the open air.

Registration will be free, quick and simple. Once registered, keepers can access their information online at any time. Movement records must be kept for poultry and/or eggs. Where the breeding, laying or broiler flock has more than 250 birds, salmonella testing records must be kept.

All livestock movements

All movements of cattle, sheep, goats and other ruminating animals (except camelids) and swine are subject to a standstill period (unless an exemption applies). This period of standstill, in effect, does not permit the movement of any animal to a market if it has been presented at a market within the previous 13 days (20 for pigs), or an English or Welsh market within the previous 6 days (20 for pigs), except any animal marketed in a livestock market in any of the Scottish island areas. Many exemptions apply and they can be found at:

<https://www.gov.scot/publications/animal-health-movement-restrictions/pages/exemptions/>

Animal Health Planning

Effective livestock health planning is an auditable, team driven process that continuously safeguards and improves animal health, welfare, and production efficiency.

SRUC Veterinary Services have been working on the development of the HerdPlan, a new health planning tool that aims to make effective livestock health management quicker and easier for farmers and vets. The HerdPlan is currently available to early adopter farmer and vet users and will be launched in autumn 2024.

The tool can be used to:

- Connect the whole team, including the farmer, their staff, vet and consultants.
- Make an effective livestock health plan with the team quickly and easy.
- Ensure that livestock health events get done timely by using reminders.
- Respond to new health threats by accessing flexible modules for individual diseases or health problems.
- Work continuously with the whole team to improve herd/flock performance.
- Ensure compliance with farm assurance schemes.

Interested UK farmers and vets can register their interest at www.herdplan.co.uk. The current health planning service (SAHPS: The Scottish Animal Health Planning System) will continue to be supported while HerdPlan is further developed and launched. SRUC's Health Planning Services and developments have been supported by the Scottish Government.

The Scottish Government has also introduced Animal Health and Welfare Interventions under their Preparing for Sustainable Farming (PSF) support package. There is a total of nine interventions that Scottish farmers can undertake and any investigations and actions related to those interventions must be completed by 31 December 2024 and any claims submitted by 28 February 2025.

Full details can be found at <https://www.ruralpayments.org/topics/all-schemes/preparing-for-sustainable-farming--psf-/>

Premium livestock health schemes

The Premium Health Schemes run by SRUC Veterinary Services provide an important framework for establishing the disease status of a flock or herd. These national schemes offer an effective programme of testing and management to control multiple infectious endemic diseases in cattle, sheep and goats for both pedigree and commercial flocks and herds across the UK. Buyers of breeding replacements and breed societies are increasingly demanding stock sold with Certified Accredited health status and it is a requirement for export in some countries.

SRUC works in close partnership with veterinary practices and farmer subscribers to offer a cost-effective programme for the reduction, eradication, and certification of freedom from infectious endemic disease. SRUC has two health schemes:

- **The Premium Cattle Health Scheme (PCHS)** which is one of the largest Cattle Health Certification Standards (CHeCS) licensed schemes and covers bovine viral Diarrhoea (BVD), Johne's disease, infectious bovine rhinotracheitis (IBR), leptospirosis and neospora, alongside the CHeCS Bovine TB Herd Accreditation programme www.cattlehealth.co.uk.
- **The Premium Sheep and Goat Health Schemes (PSGHS)** offers both Accreditation and a newer Monitoring option and covers Maedi Visna (MV), Caprine Arthritis Encephalitis (CAE) and Johne's Disease. SRUC also provides a Scrapie Monitoring Scheme for export and Scrapie Genotyping for selective breeding www.sheepandgoathealth.co.uk.

Veterinary medicine records

The principle behind record keeping requirements is to ensure the traceability of medicines, which is crucial for public health and animal welfare. For example, the veterinary medicine records can be reviewed in case the recall of a medicine, due to contamination or a manufacturing defect in a particular batch, is required. The review will allow to identify the keeper of food-producing animals supplied with the affected batch and the animals that have been treated with it. This will permit the appropriate measures to be in place to prevent any potential harmful residues entering the food chain.

Keepers of food-producing animals or people that treat farm animals intended for human consumption, must keep records for at least 5 years following the administration or other disposal of the product, irrespective of whether or not the animal concerned is no longer in the keeper's possession or has been slaughtered or has died during that period.

They must include:

- A record of the proof of purchase or, where medicines were not bought, documentary evidence of how they were acquired.
 - ✓ name and batch number of the product
 - ✓ date of purchase
 - ✓ quantity purchased
 - ✓ name and address of the supplier

- A record of all veterinary medicine products administered to the animals, including those administered by the vet.
 - ✓ name and batch number of the product
 - ✓ date of administration
 - ✓ quantity administered
 - ✓ identification of the animal treated
 - ✓ withdrawal period
 - ✓ name of person/vet that administered the product

- A record of the disposal of all veterinary medicine products that have not been used for animal treatment.
 - ✓ date of disposal
 - ✓ quantity of product involved
 - ✓ how and where it was disposed

All records must be durable, permanent, and made available for inspection on request by an authorised person. The records may be kept electronically either at the various Farm Management Software Applications and/or at <https://emb-pigs.ahdb.org.uk> and <https://ahdb.org.uk/medicine-hub> for pig and dairy, beef, sheep producers respectively.

Nutritive Values and Relative Values (£) of Feedingstuffs

The feedingstuffs tables overleaf are provided as a general guide and should be used with care. Each foodstuff has been attributed a specific nutritive value and often this will vary, e.g. the nutritive value of draff. The relative values of the feedingstuffs are also affected by the rationing situation.

The relative values for ruminants are calculated on an ME (metabolisable energy) and CP (crude protein) basis using barley and rapeseed meal as standard reference foods. The relative values for pigs are calculated on

a NE (net energy) and Dig Lys (digestible lysine) basis, using barley and hipro soya as standard reference foods.

If the relative value of a foodstuff is higher than the price then it is good value for money. For ruminants, this does not take into account other characteristics of the feedstuff, for example, the high digestible undegradable protein (DUP) content of soya bean meal for ewes in late pregnancy or digestible fibre properties of sugar beet pulp. For pigs, relative value does not take into account the content of other amino acids and for both types of animal the negative characteristics such as low palatability.

Nutritive values of feedingstuffs-ruminants

	Dry matter (g/kg)	ME (MJ/kg DM)	CP (g/kg DM)
Rapeseed meal	900	12.0	400
Barley	860	13.2	115
Hay (average)	850	8.6	85
Hay (good)	860	9.2	100
Silage (average)	240	10.6	130
Silage (good)	240	11.2	140
Barley straw	860	6.3	35
Oats	870	12.0	100
Wheat	860	13.6	115
Maize	860	13.8	95
Brewers grains (draff)	230	11.1	200
Wheat dark grains	900	13.5	340
Maize dark grains	900	14.0	317
Maize gluten (20%)	880	12.9	220
Soya bean meal (47%)	890	13.3	530
Potatoes	210	13.3	90
Swedes	105	14.0	90
Molassed sugar beet feed	890	12.5	100

Relative values (£) of feedingstuffs-ruminants

	£/t					
RAPESEED MEAL	300		350			
BARLEY	175	200	225	175	200	225
Hay (average)	115	131	146	116	132	148
Hay (good)	129	145	161	131	147	164
Silage (average)	43	48	53	45	50	55
Silage (good)	46	51	56	48	53	58
Barley straw	74	87	101	70	84	97
Oats	157	181	204	155	179	203
Wheat	170	198	227	166	194	221
Maize	174	202	231	169	193	226
Brewers grains (draff)	51	55	58	55	59	62
Wheat dark grains	287	296	305	324	319	331
Maize dark grains	281	294	306	314	326	338
Maize gluten (20%)	221	238	255	238	255	272
Soya bean meal (47%)	368	361	354	438	431	424
Potatoes	40	46	53	39	45	52
Swedes	21	24	28	20	24	27
Molassed sugar beet feed	165	191	217	163	189	214

Nutritive values of feedingstuffs-pigs

	NE (MJ/kg as fed)	Dig Lys (g/kg as fed)
Hipro soya bean meal	8.4	26.6
Barley	9.6	2.8
Oats	8.0	3.0
Wheat	10.5	2.5
Wheat feed	7.7	4.6
Wheat bran	6.2	4.0
Maize	11.1	1.8
Wheat dark grains	9.3	5.6
Maize gluten (20%)	7.0	4.0
Peas	9.7	12.5
Beans	8.6	12.8
Molassed sugar beet feed	6.6	2.9
Molasses	7.0	0.1
Biscuit waste	11.7	2.5
Rapeseed meal	6.5	14.0

Relative values (£) of feedingstuffs-pigs

	£/t					
HIPRO SOYA BEAN MEAL	350		400			
BARLEY	175	200	175	200	175	200
Oats	151	171	192	153	173	193
Wheat	187	215	243	186	214	241
Wheat feed	160	177	195	164	182	200
Wheat bran	131	145	159	135	150	164
Maize	191	221	251	188	218	248
Wheat dark grains	193	215	236	199	221	242
Maize gluten (20%)	144	160	176	148	164	181
Peas	256	272	289	276	292	309
Beans	241	254	267	262	275	288
Molassed sugar beet feed	128	145	161	130	147	163
Molasses	112	132	152	108	128	148
Biscuit waste	206	237	268	204	235	267
Rapeseed meal	217	223	229	242	248	254

Gestation Table

Gestation Table

Date of service		Births due		Date of service		Births due		Date of service		Births due		Date of service		Births due	
Cow	Hind	Ewe	Sow	Cow	Hind	Ewe	Sow	Cow	Hind	Ewe	Sow	Cow	Hind	Ewe	Sow
01-Jan	12-Oct	30-May	19-Aug	24-Apr	06-May	15-Feb	23-Dec	28-Aug	08-Sep	20-Jun	05-Feb	27-Apr	31-Dec	06	17
06	17	04-Jun	24	29	11	20	08	28	13	25	10	02-May	05-Jan	11	22
11	22	09	29	04-May	16	25	13	02-Jan	18	30	15	07	10	16	27
16	27	14	03-Sep	9	21	02-Mar	18	07	23	05-Jul	20	12	15	21	01-Nov
21	01-Nov	19	8	14	26	07	23	12	28	10	25	17	20	26	06
26	06	24	13	19	31	12	28	17	03-Oct	15	02-Mar	22	25	31	11
31	11	29	18	24	05-Jun	17	02-Nov	22	08	20	07	27	30	05-Feb	16
05-Feb	16	04-Jul	23	29	10	22	07	27	13	25	12	01-Jun	04-Feb	10	21
10	21	09	28	03-Jun	15	27	12	01-Feb	18	30	17	06	09	15	26
15	26	14	03-Oct	8	20	01-Apr	17	06	23	04-Aug	22	11	14	20	01-Dec
20	01-Dec	19	8	13	25	06	22	11	28	09	27	16	19	25	06
25	06	24	13	18	30	11	27	16	02-Nov	14	01-Apr	21	24	02-Mar	12
02-Mar	12	30	19	24	05-Jul	16	02-Dec	21	07	19	06	26	01-Mar	07	17
07	17	04-Aug	24	29	10	21	07	26	12	24	11	01-Jul	06	12	22
12	22	09	29	04-Jul	15	26	12	03-Mar	17	29	16	06	11	17	27
17	27	14	03-Nov	9	20	01-May	17	08	22	03-Sep	21	11	16	27	06
22	01-Jan	19	8	14	25	06	22	13	27	08	26	16	21	27	06
27	06	24	13	19	30	11	27	18	02-Dec	13	01-May	21	26	01-Apr	11
01-Apr	11	29	18	24	04-Aug	16	01-Jan	23	07	18	06	26	31	06	24
06	16	03-Sep	23	29	09	21	06	28	12	23	11	31	05-Apr	11	21
11	21	08	28	03-Aug	14	26	11	02-Apr	17	28	16	05-Aug	10	16	26
16	26	13	03-Dec	8	19	31	16	07	22	03-Oct	21	10	15	21	31
21	31	18	8	13	24	05-Jun	21	12	27	08	26	15	20	26	05-Feb
26	05-Feb	23	13	18	29	10	26	17	27	08	26	15	20	01-May	10
01-May	10	28	18	23	03-Sep	15	31	22	31	22	26	21	20	26	26

Note: Refer to the Miscellaneous section for gestation values for the above livestock. Values will change for different breed types.