

## ANIMAL HEALTH IRELAND



BEEF HEALTHCHECK PROGRAMME UPDATE



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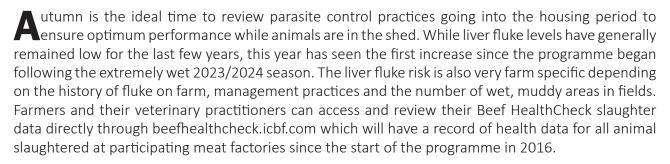




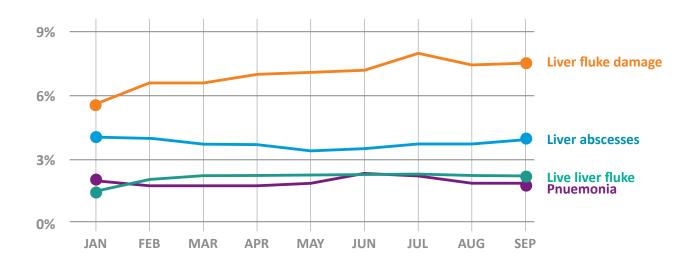


## BEEF HEALTHCHECK PROGRAMME UPDATE





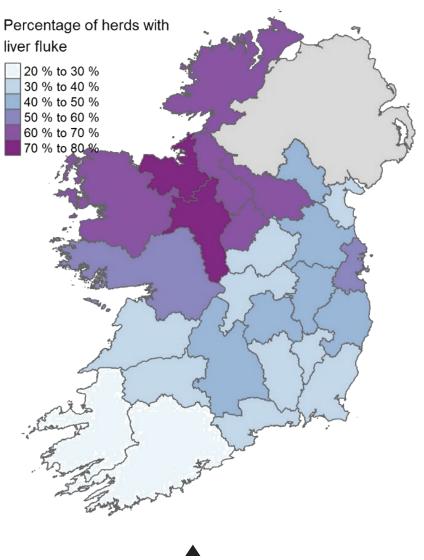
For 2024 to date, health information has been collected from 678,500 cattle. Of these 43% were steers, 29% were heifers, 6% young bulls, and the remainder were cows and bulls. Liver fluke damage has been seen in 7% of these animals and live liver fluke parasites in 2% of animals, which is an increase on last year. Pneumonia was seen in 1.9% of cattle and liver abscesses in 3.8%. In steers, liver abscess levels were 3.8% and this was lower in heifers at 2.9%. Autumn usually sees a slight increase in the number of animals presenting with liver abscesses at slaughter. These are often related to animals on high concentrate feeding and if a large number of animals in the herd are presenting with this at slaughter, it should be investigated to prevent performance losses on finishing cattle.



**Figure 1.** Percentage of lesions seen at slaughter as part of the Beef HealthCheck programme

#### **Beef HealthCheck Programme Update**

In 2024 so far, 23,700 herds have been recorded as part of the Beef HealthCheck programme. This year, 39% of these herds had at least one animal showing signs of liver fluke damage when sent to slaughter. Active infection in one or more animals was seen with 17% of herds, compared to only 13% last year. Nationally, the north-west counties have the highest numbers of herds affected by liver fluke, where between 67% and 80% of herds had signs of liver fluke at slaughter (Figure 2). On the other hand, there are 24% of herds that have not shown any evidence of liver fluke in animals that are presented for slaughter in the last four years. It is possible that these farms are currently free of liver fluke and may not need flukicide treatment but this should be discussed with your veterinary practitioner. Considering the high liver fluke risk this year, farmers should be cautious to prevent production losses.



**Figure 2.** Percentage of herds with at least one animal showing signs of liver fluke at slaughter in 2024 to date.

## CONTROLLING PARASITES IN CATTLE AT HOUSING

Dr Natascha Meunier, Beef HealthCheck Programme Manager



ffective parasite control at housing can keep animals free of gut worms and fluke until they are back on grazing and will help prevent pastures from becoming contaminated with worm eggs in the spring. Always follow the directions when giving treatments and weigh animals for an accurate dosage. Be sure to check withdrawal periods for any medicines used in dairy and finishing animals to prevent residues in milk or meat. Speak to your veterinary practitioner about the optimal timing for treatments and testing.

### **Planning**

Parasite control is a key component of any herd health plan, ideally developed with your vet while considering broader farm health issues such as vaccinations, fertility, and nutrition. It should remain flexible, as factors like weather conditions can influence the plan throughout the year. For example, this year has seen a mild, wet summer following a mild winter and parasites like worms and flukes have thrived. With an increased worm burden comes reduced productivity, increased clinical disease and potential deaths in livestock. The Regional Veterinary Laboratories have issued a warning as they have seen significant numbers of problems with fluke and gut worms late this season. The Beef HealthCheck programme also saw the first increase of liver fluke at the meat factories in eight years. The farmer is best placed to spot any early signs of parasite problems and act accordingly, discussing the treatment and testing options with their veterinary practitioner, particularly as the early stages of infection can often have a negative faecal test result.



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#### **CONTROLLING PARASITES IN CATTLE AT HOUSING**

#### **Liver Fluke**

Autumn is the peak period for liver fluke infections. During summer, the parasite matures within snail hosts, and the infective stage attaches to grass near waterlogged areas. Grazing in these areas during autumn should be avoided, if possible. After an animal is infected, it can take up to twelve weeks for the fluke parasites to migrate from the gut to the liver, where they mature into adults that lay eggs which are detectable in a faecal sample. If animals are treated for liver fluke a number of weeks before housing, a follow-up treatment may be necessary for any additional parasite infections picked up after the treatment. Some flukicides only target adult liver fluke and a repeat dose may also be needed in this case. Check which parasite life stage the flukicide is effective against (early immature/juvenile, late immature/juvenile or adult only) and then time the treatment accordingly or repeat if necessary. Liver fluke will remain a risk for any sheep or cattle that are outwintered and may need repeated treatments late into the winter season.

#### Flukicides are grouped into three types:

- Adult-only flukicides (e.g., albendazole, clorsulon, or oxyclozanide) If only one treatment is planned, this should be given 10-12 weeks after housing. If the fluke burden is expected to be high, it is preferable to treat earlier and follow up with a second treatment to prevent production losses.
- Late juvenile to adult flukicides (e.g., closantel, nitroxinil, or rafoxanide) Single treatments should be delayed until 6-8 weeks after housing.
- All-stage flukicides (e.g., triclabendazole) Effective against all stages, including early-juvenile fluke. These can be administered two weeks after housing. Resistance to this flukicide has been reported in Ireland, follow up with your veterinarian if this is suspected on your farm.

Each farm has different liver fluke risks, so consult your vet to create a tailored treatment plan based on farm history. Liver fluke reports from the Beef HealthCheck programme are available online for beef and dairy animals sent to slaughter at participating factories through the ICBF website.

### Rumen (Stomach) Fluke

Rumen fluke infection rarely causes clinical disease, and adult rumen flukes are generally well tolerated. If rumen fluke eggs appear in a faecal sample but the animals are healthy, treatment is usually unnecessary. Disease is typically caused by immature rumen flukes with infections picked up in late autumn resulting in scour or lack of thrive. Similar to liver fluke, avoid grazing young animals on wet or poached land in autumn. As there is only one product available in Ireland for treatment for rumen fluke and its use is considered 'off-label', always discuss whether treatment is necessary with your veterinary practitioner.

#### **CONTROLLING PARASITES IN CATTLE AT HOUSING**

#### **Lice and Mites**

Lice and mites thrive in the winter housing environment with the longer hair coats, warmth, humidity, and lack of UV light. Closer contact between animals at housing allow lice and mites to spread easily between animals. Therefore, it's essential to treat all animals in a group at the same time to prevent reinfection. Lice and mites are typically treated with avermectin (clear drench), pour-on products, or topical pyrethroids. These treatments do not affect lice eggs, so a second treatment 3-4 weeks later may be necessary as eggs hatch. If a treatment appears ineffective, consult your veterinary practitioner to identify the parasite and develop a more effective plan. For example, injectable products tend to be less effective against chewing/biting lice, so pour-on products may be a better choice if these are present. Mites, on the other hand, usually respond well to injectable products.

#### Roundworms

Youngstock often need a gut worm treatment going into housing. Stomach and gut worms, as well as lungworms (collectively known as roundworms) can usually be controlled by any of the three main wormer classes. The exception to this is the larvae of the stomach worm *Ostertagia* which can become dormant in the stomach wall and cause scour in late winter/ early spring (Feb-May) when it resumes development. This issue primarily affects young animals exposed to high numbers of worm larvae in autumn. Levamisole (yellow drench) is ineffective against these inhibited larvae, so clear drenches (macrocyclic lactones) or certain white drenches (benzimidazoles) are recommended at this time to target these worms.

There will have been a high lungworm risk this autumn and animals can be set back by secondary pneumonias because of this parasite. Lungworm could still be a cause of coughing 3-4 weeks after housing and animals may need treatment. There could be other causes of coughing such as bacteria and viruses, so this should be investigated with the help of your vet.







# ASSESSING CATTLE FOR FINISHING THIS AUTUMN



Aisling Molloy, Teagasc Future Beef Programme Advisor

With recently harvested feed barley making ~€190/t, it is expected that ration prices will be lower this winter in comparison to last year. The recent dry weather and good ground conditions are providing an excellent opportunity to finish some forward stores at grass, instead of housing them over the expensive winter period.

Heifers and steers should be over 500kg before going onto a finishing diet. They can be fed 3-4kg/head/day where grass quality is good (covers 1200-1400 kg DM/ha) or 5-6kg/head/day where grass quality is poor or supply is low. A high energy ration with a low protein content is recommended to encourage cattle to lay down fat and to avoid burning excess energy when processing excess protein. Many seasoned finishers feed rolled barley, splitting the feeding once you go above 3kgs. No mineral is required at grass as it is a quick finishing period. All cattle should have full time access to clean drinking water during this time.

While weather conditions may deteriorate into the autumn, heifers and steers should easily achieve over 1kg/day where their health, genetics and diet allows. This will help to reduce the silage, ration and housing costs over winter if they can be finished sooner. Even if cattle have to be housed for a period of time, they will have achieved their 'build up' period on ration at grass. Reducing the finishing age in cattle can also help to reduce the methane emissions on your farm, the amount of feed required and reduces the amount of slurry produced.

A 600kg animal will eat approximately 12kg dry matter/head/day. If they are grazing 8kg DM good quality grass (cost 9c/kg DM) and supplemented with 4kg ration (cost 36c/kg DM @ $\leq$ 310/t) it will cost  $\leq$ 2.16/day to feed them at grass, excluding any other costs. If the animal was being fed a grass silage diet indoors they would eat 7kg DM of good quality silage (70% DMD) (24c/kg DM) and 5kg ration (cost 36c/kg DM @ $\leq$ 310/t) it would cost  $\leq$ 3.48/day to feed them, excluding any other costs. This results in a feed saving of over  $\leq$ 1/animal/day so it makes economic sense to feed forward cattle at grass.

Autumn 2023 born bulls that are destined for finishing under 16 months of age should be housed for finishing. They can do a lot of damage to paddocks, may have a poor response to ration in poor weather conditions, can have poor live weight gain if they are roaming a lot and there are health and safety risks associated with feeding bulls outdoors too.

Spring 2023 born bulls that are to be finished under 16 months of age can be forward creeped onto 3kg of ration before they are weaned and housed.

## **Producing In-Spec Cattle for Finishing**

It is really important to monitor your cattle's performance to ensure that they are meeting their targets and that they will be in spec when finished. This can be done in a number of ways:

- 1. Weighing cattle regularly Cattle on a finishing diet should be weighed at least once per month. This will show if they are meeting their target weight gains and will indicate if there is any underlying issues such as parasite burdens, respiratory disease or poor diets.
- 2. Handling cattle It is important to assess the fat cover of your finishing cattle to make sure that they do not go over fat which is a waste of money and may also lead to severe financial penalties at the time of sale. Further details on how to judge this are outlined below.
- 3. Watch dates and weights As well as watching the average daily gain of your cattle, you also need to be mindful of the expected carcass weights and the age of the animal. It is important to know your market and to chat to your agent to make sure you are producing animals to the desired carcass weight to meet consumer preferences. Slower growing cattle should be monitored to ensure that they are not over age (ideally less than 30 months) at finishing which will again have financial implications.

The finished animal is paid according to its classification, with an example in Table 1 below. The '0' indicates the base price at the time of sale. The poorer the animal's conformation, the more c/kg that is deducted from the base price (negative numbers). The better the animal's classification, the higher the price/kg.

	U+	U=	U-	R+	R=	R-	0+	0=	0-	P+
2+	24	18	12	6	0	0	-18	-24	-30	-36
3	24	18	12	6	0	0	-12	-18	-24	-30
4-	24	18	12	6	0	0	-12	-18	-24	-30
4=	24	18	12	6	0	0	-12	-24	-30	-36
4+	18	12	6	0	-6	-6	-18	-24	-30	-36
5	0	-6	-12	-18	-24	-24	-36	-42	-48	-54

Table 1: Price differentials on the QPS grid

In addition to this, cattle must meet certain criteria to qualify for this payment;

- 1. Heifers and steers must be under 30 months of age
- 2. Meet the necessary fat and conformation grades
- 3. Have a maximum of 4 residencies
- 4. Be on a Bord Bia Quality Assurance farm(s) for at least 70 days continuously before finishing
- 5. Be on a Bord Bia Quality Assured farm for at least 60 days pre-finishing on the last SBLAS farm

The Bord Bia Quality Assurance payment delivers bonuses ranging from 8c/kg to 20c/kg depending on the animal's classification which is shown in Table 2 below.

	20c/kg	12c/kg	8c/kg
Under 30 Months	Yes	Yes	30-36mths
Max. 4 Residencies	Yes	Yes	Yes
Conformation Grade	Min O =	0-	Min. O=
Fat Grade	2+ to 4=	4+	2+ to 4=
Min. 60 day residency on QA Farm	Yes	Yes	Yes

**Table 2: Bord Bia Quality Assurance Bonus Rates** 

Table 3 below shows an example of producing a finished heifer at 24 months of age that meets the classification criteria for financial bonuses and one that did not meet the criteria. There is a difference of €405 between an R=3+ heifer at 330kg carcass weight when compared to an O-4+ heifer at 272kg carcass weight.

Animal	Age at Finish	Carcass Weight	Conformation	Fat Score	Base Price (e.g. €5/ kg)	QA bonus?	Total/ head
Heifer	24 months	330kg	R=	3+	Base: €5/kg	20c/kg	€1716
Heifer	24 months	272kg	O-	4+	Base minus 30c/kg: €4.70/kg	12c/kg	€1311
Difference		+58kg			+30c	+8c	€405

Table 3: Example of Financial Differences Between In-Spec and Out-Of-Spec Cattle.

## Out of Spec Cattle Finished in 2023

The 2023 report published by the Beef Carcase Classification & Price Reporting Section of the Department of Agriculture, Food and the Marine shows that 13.8% of steers finished in 2023 had a fat score of less than 2+, with 0.3% at 4+ or higher.

5.3% of heifers finished had a fat score of less than 2+, with 4.5% scoring 4+ or higher. This results in a reduction of between 6-54c/kg carcass weight, based on the animal's conformation. They also lost the quality assurance bonus of 8-20c/kg which significantly impacts the profit margins on these cattle.

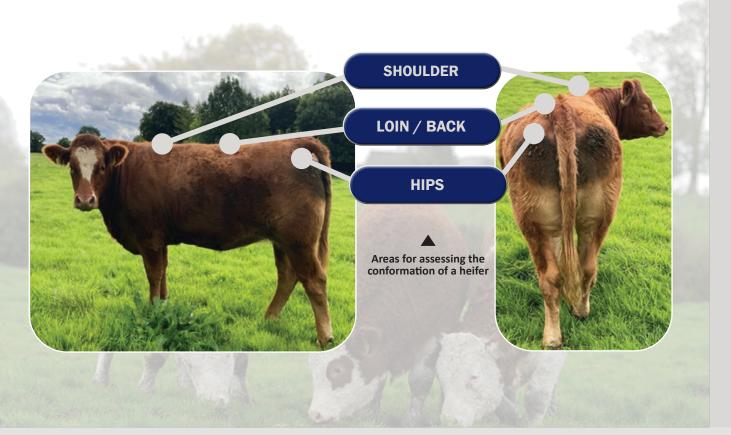
- 22.1% of young bulls had a fat score of less than 2+ which again has financial losses.
- 62.3% of steers, 51% of heifers and 36.9% of young bulls finished in 2023 had a conformation of O or P. This results in a deduction of 12-54c/kg from the base price and a possible loss of 8-20c/kg from the quality assurance bonus.

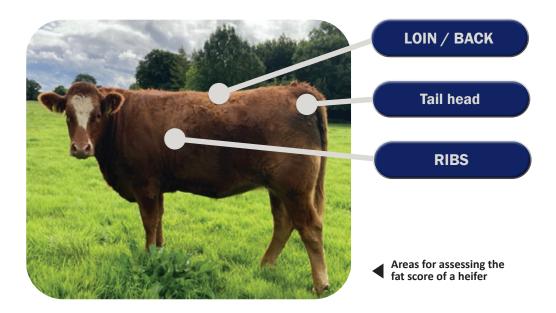
## **How Are Cattle Classified at Finishing?**

Prime cattle that are finished in Ireland are assessed for payment based on the EU Beef Carcass Classification Scheme. The aim of this scheme is to standardise carcass classifications across Europe which allows the EU to have a standardised beef price reporting system. Most beef carcasses are analysed by a machine in the factory where video images are analysed for various measurements of the carcass and to determine the classification.

Cattle are classified by a number of means;

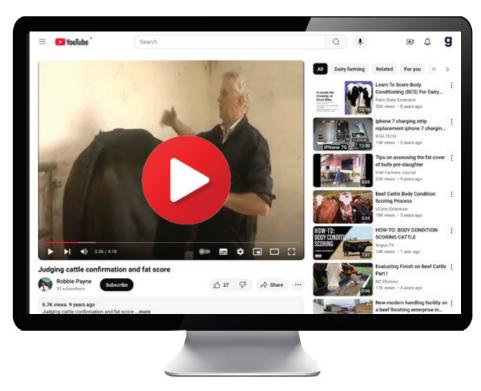
- 1. Conformation The shape and development of the carcass, identified from the hind quarter, loin/back and shoulder of the animal. This is denoted by the letters E, U, R, O, P. This is then subdivided into-, + and = within some rankings. An E grading animal would be an exceptional double muscled animal with wide hips, a wide back/loin and wide shoulders whereas a P grade animal would be poorest with very narrow hips, back and shoulders.
- 2. Fat cover The amount of fat on the animal which is denoted by the numbers 1, 2, 3, 4, 5. A fat score of 1 would be very poor and a score of 5 would be over fat. This is then subdivided into-, + and = within some rankings. Fat cover for heifers and steers can be assessed around the tail head, ribs and loin. In bulls the topline of the animal also needs to be assessed, along with the scrotum area, the flank and the brisket.
- 3. Sex of animal The cattle are denoted by letters based on their sex. A is a young bull under 16 months of age, B is a bull over 16 months of age, C is a steer, D is a cow and E is a heifer.





It is really important to ensure that cattle are presented to factories in spec to maximise the profit from your beef enterprise this year. Taking advantage of good quality grass, good weather conditions, taking precautions to ensure good animal health, noting the genetically superior animals and regularly monitoring weight gains are important this autumn.

An informative video on assessing conformation of your cattle was produced by John O'Connor from Kildalton College and is available at: <a href="https://www.youtube.com/watch?v=POb9tVvVRas">https://www.youtube.com/watch?v=POb9tVvVRas</a>



https://www.youtube.com/watch?v=POb9tVvVRas

# WINTER HOUSING ON BEEF FARMS

Niall Kerins, Beef specialist Teagasc



The daily routine of removing plastic from bales and feeding cattle begins to be the norm again as cattle settle indoors for the winter months. There are numerous beef systems on farms across the country including weanlings recently housed, finishing stage for beef cattle and suckler cows due to calve down next February. Needless to say that independent of the system there are many common factors to address to maintain an animal's performance while indoors. Good management of housed cattle is essential to ensure the health, comfort, and productivity of cattle while indoors. This article outlines key considerations and best practices for providing effective winter housing for cattle.

## **Fodder Budget**

To ensure enough silage is available to get you through the winter period, a fodder budget should be completed at this stage if not previously done. It is a quick and simple task and completing it now may help alleviate any shortfall later during the housing period. A fodder budget will give a good indication of fodder available and working on the projected stock numbers, you can quickly identify if the farm is in a surplus or deficit situation. A fodder budget needs to be updated again two-three months into housing to ensure reserves are available to see you through the housing period. Weanlings for example, which are gaining body weight daily will have an increased forage intake as they grow. This may result in extra fodder consumed and action may need to be taken on farm. The attached table is a useful guide to calculate your fodder demand and availability:

		A	В	С	AxBxC		
	Stock Type	No. of Stock	Number of Winter Months	Tonnes of fresh weight of silage required per month	Total required		
	Suckler Cows			1.4			
	2+ year olds			1.3			
	1-2 year olds			1.3			
8	Weanlings			0.7			
	Total tonnes of fodder required→						

Table 4- Calculating the fodder demand on your farm

#### WINTER HOUSING ON BEEF FARMS

#### Points to note

- When measuring the fresh weight in tonnes in your silage pit, measure length X width X height in meters and divide your answer by 1.4 (this is allowing for a silage pit at 22% dry matter)
- Fresh weight of bales can vary from farm to farm as a guide allow 750 kg fresh weight per bale when completing your calculations

#### **Nutrition indoors**

There are many sources of fodder that can be used in diets for cattle. Diets can be tailored for growing young cattle, finishing animals or to maintain current body condition. Fodder types range from beet, whole crop, grass silage, concentrates to straw, and the list continues. Speak to a nutritionist if there are a few ingredients in the diet. This is to ensure that an animal's requirement in terms of energy (UFV's), protein, minerals and other dietary requirements are met on a daily basis. Cattle consuming too much of one fodder source may experience a dietary imbalance elsewhere and result in under performance in cattle.

Grass silage over the winter period is often the main source of forage used to make up the diets on beef farms. Weather patterns in 2024 created challenges when it came to harvest time, and the quality of silage can vary as a result. Some diets will need to be supplemented with concentrates so that animals achieve their daily liveweight target. Silage quality can be analysed through a local laboratory and diets then tailored to suit the cattle dietary needs. Weigh cattle and monitor their performance to determine if the target daily liveweight gain is being achieved. Table 1 indicates meal required for daily liveweight gain based on silage quality available on farm.



#### **WINTER HOUSING ON BEEF FARMS**

## **Water requirements**

Silage quality

Cattle on a high dry matter diet can consume large volumes of water daily. Fresh water plays a critical role in maximising performance and in the overall health, productivity, and well-being of cattle. The majority of water intake occurs after the animal has foraged for a period of time. This is where adequate trough size and water pressure play a fundamental role in meeting water requirements. Cattle can drink up to 15 litres of water for 100 kilograms of liveweight i.e. 500 kg finishing steer could consume up to 75 litres of water daily - especially when foraging on a high dry matter diet.

Water in troughs can become stale or contaminated with feed and as a result cattle are less likely to drink from them. Cattle flicking water at troughs with their tongue can be an indication that the water has a foul taste from it. When looking at water in a trough ask yourself, would you make your tea with it? If the answer is no, then the trough needs to be cleaned thoroughly, including scrubbing the trough walls where algae and bacteria can grow.

**70 DMD** 

**74 DMD** 

**66 DMD** 



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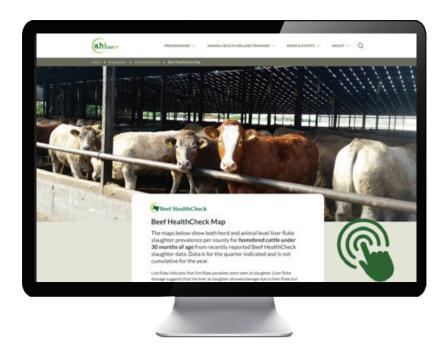
#### **WINTER HOUSING ON BEEF FARMS**

## Have your cattle enough space for lying down in their pens?

It is essential for daily liveweight performance that animals are comfortable and not overstocked in pens. Where cattle are overstocked there will be a big impact on their performance over the winter. It is not uncommon to see pens of cattle that need to have two or three cattle removed to meet the optimum space requirements. Table 6 outlines the recommendations for lying space required in both slatted and straw-bedded pens for different groups of stock. Don't guess the dimensions of your pens. Take out a measuring tape and calculate exactly what number of stock each pen can hold. Don't forget to make an allowance for what the stock size will be by the end housing.

Table 6: Recommended space allowance (m²/animal)						
Animal type	Feed Space (mm)	Slatted floors (m²)	Straw bedded (m²)			
Suckler cows	500-700	2.5-3.0	5.0			
Cattle 220- 300 kg	300-400	1.2- 1.5	1.8-3.0			
Cattle 310- 450 kg	400-600	1.5- 2.0	2.4- 3.0			
Finishing cattle 500- 750 kg	600-700	2.2- 2.7	4.0			

The housing period can be the most expensive time on farms. While it isn't simple to reduce some of these costs, there are steps which can enhance animal performance while indoors. These measures will indirectly reduce the time an animal spends on farm or indoors which invariably reduce associated costs with the housing period. The measures discussed here, which are sometimes overlooked, will impact animal performance and the resulting financial margin.





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To contribute to an economically, socially and environmentally sustainable farming and agri-food sector through improved animal health and welfare.



















