

Well-designed sheep handling systems are essential for every Welsh sheep farmer. Investment in re-designing an existing or buying a new handling system will be recovered rapidly due to the increase in the speed, safety and efficiency of handling sheep, leading to cost savings e.g. labour requirement for tagging, weighing or worming. The animals will also benefit as stress levels will be reduced and their welfare will be improved, which will have knock-on benefits of improved meat quality.

There are several factors to consider when handling sheep:

1. Assess your current handling system to identify problem areas, e.g. where sheep always stop, and evaluate what improvements could be made.
2. When assessing adjustments to your current system or possibly a new one, ensure that you know the number, size and type of sheep to be handled, the frequency of handling and primary handling purposes so the system can be matched to your needs.



3. Assess where you need the handling system. Is it easier to take this system to the sheep or visa versa? Handling sheep on new ground each time may help to reduce diseases such as footrot. Be aware of any ground water issues especially when using dip baths. Further information is available from the Environment Agency www.environment-agency.gov.uk.

4. An understanding of how sheep behave is necessary when designing a successful sheep handling system. Its features should encourage sheep to move through the system with minimum human interference.

5. The way that sheep behave during handling will

be influenced by breed, sex, age, condition, how they have been reared and previous experiences of being handled (good or bad).

6. When handling sheep try to be quiet, calm and patient to allow the sheep to find their own way and try to use their strong flocking tendency to your advantage. Handlers can have positive and negative effects on sheep behaviour so ensure that handlers understand how they themselves affect the way the animals behave.



7. Sheep have a strong flight reaction and the general status of the flock in relation to flight can be monitored by observing the number of sheep facing the handler; the greater the proportion facing away the closer the animals are to flight. The use of the flight reaction is an appropriate method for the movement of sheep in handling systems as long as there are obvious escape routes otherwise balking will occur.
8. Sheep can be easily distracted by changes in light, shadowy areas, races that appear to have dead ends, and by the movement of sheep in other pens. Systems should be designed to minimise these distractions.

Future proofing

If the system is made in a modular way then it will be easier to add in future developments such as

- EID and automated handling equipment
- Increasing flock size
- Reduced available labour
- Bio-security requirements eg cleaning of pens
- Change of breed (either bigger or smaller)



| Feature | Requirement |
|------------------------|--|
| Collecting Pens | Should be capable of holding all the sheep to be handled at one time - 0.3m ² /sheep |
| Forcing Pen | Usually circular or diamond shaped, leading to treatment pens or races Should hold at least 30 ewes The space allowance should be 0.3 m ² per ewe The fences should be 1.1m high The sides should be solid and smooth |
| Treatment Pen | Should hold at least 30 ewes The space allowance should be 0.3 m ² per ewe The pen should be 0.75 – 1.05m wide The fences should be 0.9m high The sides should be solid and smooth |
| Drafting Race | Designed to arrange the sheep into single file and leads towards the drafting gate Should have a minimum length of 4.5m Should have sloping sides to give a width of 0.3m at floor level and 0.6m at the top The fences should be 0.9m high The sides should be solid and smooth |
| Footbath Race | Should have two sections The first containing clean water to clean the feet and the second containing the treatment |
| Drafting Pen | Preferably there should be two pens The smaller pen should be able to hold up to half of the group to be handled, while the larger pen should be able to hold up to three quarters of the group |

| Feature | Design requirement | Behavioural Reason |
|---------------------|---|---|
| Site | The site should be as level as possible | Sheep move better on the level or on slight uphill gradients |
| Lay outs | Circular and curved layouts should be preferred to square or rectangular ones with 90° corners or sharp bends | Sheep dislike sharp angled bends because they appear to have dead ends and they lose sight of the animal in front |
| Orientation | The main direction of stock flow should be planned to fit the yard layout and avoid making animals move towards a low sun | Sheep dislike moving with the sun shining directly in their eyes and move best towards other groups of sheep |
| Lighting | A good standard of lighting- natural or artificial should be provided | Sheep dislike moving into dark areas and can balk at sharp shadows cast by railings and fences on the ground |
| Surfaces | Floors should be surfaced with material that allows people and animals to move freely in all weathers as well as being visually uniform | Sheep may injure themselves on slippery surfaces and will balk at changes of light and other apparent obstacles |
| Sides | The sides of the facilities should be solid at key handling points to focus animals on where they have to go. The rails should be of a sufficient height to contain the animals but allow treatment | Sheep are easily distracted by people, movement of other sheep, noise and objects outside the immediate handling area |
| Holding Pens | Pens should be long and narrow rather than square, available in sufficient number and sited to allow easy animal flow to and from the main working area | Sheep cannot circle and bunch nearly as easily in long, narrow pens, and prefer movement which does not require sharp turns or changes in direction |
| Crowd Pens | Circular crowding pens should be preferred to square or rectangular ones, and should be of a sufficient size for the number of sheep to be handled | Sheep move better when they can follow one another up the races way and corners may cause bunching |
| Raceways | Raceways should be built on a gentle curve or in a straight line, with at least two sheep lengths before the first turn | Sheep move more easily through curving races providing the turns are not tight enough to give the appearance of a dead end |
| Gates | Gates should be both easy and quiet to open and close and should be secure when closed | Sheep movement can easily be disrupted by badly fitting and positioned gates |