

LAMENESS AND LANEWAYS

As the dry period approaches, now is the time to consider laneway maintenance in preparation for next season. Modifying laneways during the lactation can lead to disastrous consequences. A better approach is to reflect on problems observed in the previous season and implementation of changes during the dry period.

Lameness is a significant problem in dairy herds as it can result in decreased milk yields, weight loss, increased culls, infertility (due to weight loss), increased veterinary fees plus lost time in treatment and management of a lame cow herd. Increased levels of lameness are seen during wet periods, in large herds and during the first part of the lactation when cows are not conditioned to the walking and standing associated with milking.

Laneways, yards and management of cows can have a significant influence on lameness. As around 90% of lameness is due to feet problems, it is clear to see the effect of the walking surface on lameness.

Laneways

The key elements of a Laneway are:

Width

As cows need space to see where they are placing their feet, the lane should be:

- 5m for herds under 120
- 6m for 250 - 350 cow herds
- 6.5m for 350 - 450 cow herds
- 8m for herds greater than 450.

This width should be increased a further metre near the dairy and care should be taken to avoid congestion points anywhere on the laneway.

Distance

The laneways should be as short as possible to minimise the time the cows spend walking.

Base

The base should be firm and very well compacted. It should be above the water table to prevent it becoming soft and boggy.

Surface

The surface should cover the entire base and there should be no rocks present in the surface. Rocks are a major cause of lameness due to bruising and puncture wounds. The surface should be at least 50mm thick and well compacted. The surface must be sealed and crowned to enable run-off to prevent the base becoming wet. This will ensure that the laneway remains firm and dry.

Drains

Drains at either side of the laneway need to be large enough to accommodate all of the run-off as well as being deep enough to stop seepage from the drain into the base. Sun will dry the laneway out during the day (sometimes!) so keep shade to a minimum. A dry lane is paramount in lameness management as wet laneways can harbor footrot bacteria. Wet laneways also soften cows hooves making them more prone to injury and fine mud can also get into cracks and establish infection.

Yards

The Yards are also another source of potential problems in terms of lameness:

Size

Cows need to be able to have enough room to place their feet correctly. Therefore they need adequate space in the yards. One recommended figure is 1.7 square metres per cow.

Surface

The surface of the yards is a difficult but important point. The surface should be abrasive enough that cows do not slip over as this can lead to serious injury for man/woman and beast. However a surface that is too abrasive can wear cow's hooves to a point where they are extremely prone to bruising and lameness. Textured concrete is a recommended surface.

Further Points

It is optimal to keep milking to around 2 hours. Extra time on concrete can result in excessive wear of the hooves leading to bruising and lameness. This situation can be more pronounced in heifers as they are often the last to be milked. There should also be no sharp turns for the cows as these can lead to injuries due to slipping animals. Drainage should also be in place to prevent cows standing in water.

Cow Management

It is also important that Cow Management is considered in lameness management:

As with many factors on dairy farms, management of the herd is just as important as the farm itself. A well-maintained laneway and yards cannot compensate for poor stockmanship and management. Cows need to see where they are walking to place their feet to avoid obstacles. If they are forced and closely packed in the laneway, they are unable to look at the ground and cannot safely place their feet. Therefore they may step on obstacles such as rocks and damage their feet resulting in lameness. For this reason it is very important that cows are allowed to move up and down the laneway at their own pace. This may take more time but the benefits are worth it.

Management of the lame cowherd is also important in returning lame animals back to the normal herd. Rest is vital in repair of hoof injuries. Keeping the lame cows in a paddock near the dairy can therefore help lame cows heal faster. A dry clean paddock can also pay dividends in the healing process.