# buildings

# Maintenance in farmyards – for an easier life

**Tom Fallon** Farm Buildings & Infrastructure Specialist, Teagasc Rural Economy Development Programme



re there maintenance jobs or improvements that could be made around your farmyard to make life easier next winter or spring?

The cost of doing small jobs can mount up, so we recommend that you do a budget for the rest of the year given the current low prices for farm

It might be helpful to think of things that have gone wrong or problems noticed in previous winters or perhaps near misses: did a cow go down because a concrete surface had become too smooth?

A good starting point would be making a list of what's wrong or needing improvement. It might be helpful to think in terms of what frustrates you or others working in the farmyard. What do other family members, fellow discussion group members, your vet or Teagasc adviser think? It may be as



The mat in this eight-unit parlour cost €400 plus VAT (€25/m²). The farmer is very happy with the extra comfort. It is soft under foot and insulating for the feet in cold weather.



Cows struggling to reach feed as the neck rail is too low at 1.12m above cow standing level.

simple as having more hanging gates or barriers so that stock can be moved efficiently around the yard. Think also in terms of reducing stress and injury to animals.

Apart from reducing stress, doing regular maintenance and improvement to the farmyard will also improve profitability. Buildings are

expensive assets and they will have a greatly reduced lifespan if not properly maintained. This will involve muck and steel to reduce corro-



minimising the Stanchion showing corrocontact between sion. Painting the base of stanchions and cubicles will prolong their life.

Many farmers have found that overcrowding and inadequate facilities have a big impact on animal performance and profitability. There is a realisation that more can be made with less - keeping less stock can increase profitability.

Many neck rails and feed barriers on farms need adjustment. They can often be bent and need repair. The boards under feed barriers may also need to be repaired or replaced.

Fixing the problem is not enough. You must determine the cause and



see whether it can be prevented from happening again.

Beware of anything that can cause injury to animals such as protruding gates, as shown below. The photo shows a gate that closes off a cubicle cross over but it can become a hazard when open. An extendable gate or a gate that slides up and down may work well here.



Protruding gates can cause injury to animals.

#### Time to check slats

The design lifespan of most shed components done to grant specification is at least 20 years. Intensive use, slurry reaching the slats in most years, stocking with bulls, etc, will shorten the lifespan of slats.

On the other hand, slats in open yards (where corrosive gases can more readily escape) can last longer. Slats and manhole covers need to be replaced before they fail. It is important that they are checked each year. Manhole covers need to be checked after every use: check for any damage, and that they are lying down or have been put back properly.

Power hose out the slatted shed completely and use the hose to clean the



# TIPS ON BUILDING MAINTENANCE

- 1 Clean out all buildings.
- 2 Paint/oil all steel work subject to
- 3 Fix leaks in drinking water sys-
- 4 Repair or improve yard surfaces and livestock feed barriers.
- 5 Clean out all gutters and repair

sides of the slats as far as possible.

Examine the entire floor (but especially the centre of the slats) for sagging, cracking, rust staining and spalling of concrete (breaking of layers or pieces of concrete from the surface edges). The placing of a straight edge across the centre of the slats will indicate which slats have sagged. Check for longitudinal cracks along the sides of the slats (about 4cm to 5cm up from the bottom of the slat). If present, use a fork to push at the crack to see if the concrete at the bottom of the slat comes away.

It will be easier to see this if the slurry is about a metre from the top. If any concrete comes away from the bottom of any slats they all need to be replaced.

Farmers might be tempted to get an extra year or two out of the slats but this would be foolish. Grant aid is available under TAMS II to replace slats. It will be necessary to have external agitation to qualify for the grant but extending the tank to provide this, is also covered under TAMS II.

When replacing slats or extending tanks it is wise to take the opportunity to remove the inevitable silt build up at the bottom of tanks. See Department of Agriculture, Food and the Marine Specification S123S (available on www.agriculture.gov.ie).

It is not practical to lift gang slats for checking. Teagasc does not recommend any farmer entering a slatted tank. There are specialist companies that use a breathing apparatus or an external fresh air supply to enter

tanks and check slats.

An endoscope-type attachment for a mobile phone/camera (as shown, right) could be very useful to check the underside of slats. The cost is about €30.



## Smooth yards and slats

Slipping can cause serious injuries to animals. Pay particular attention to the condition of surfaces in collecting yards, holding and feeding areas. Here, animals crowd and push each other as they cannot get out of the way. Smooth surfaces and broken edges can lead to falls or damaged hooves.

Slippery surfaces will potentially reduce thrive/milk yield and increase stress levels. Concrete grooving, sand blasting or overlaying with slat mats are all ways to sort the problem.

Grooving should be done along the length of slats and not across the width. Grooving across slats tends to break off the edges, which increases the risk of lameness.

Grooving can improve worn but otherwise structurally sound concrete surfaces. Grooves 6mm to 10mm deep and 10mm wide, which are cut 40mm apart at right angles to the direction of cow traffic can provide good results.

### **Grooved** concrete

Initially, the farmer grooved the end of the passageway but then the complete passageway after he found a cow had dragged herself a considerable distance so she could get up in the grooved section. Cows are resourceful!

#### Warning for new concrete floors

Beware of ending up with a "cobblestone"-like finish. These are difficult to scrape clean and are uncomfortable for cows because the concrete surface is not level.

One installer of automatic scrapers found passageway surfaces to be too rough following grooving using plastic concrete rollers.

## Other areas that could be addressed:

Cleaning lamps/lights and replacing tubes; replacing translucent roof lights with new sheets that have safety grids; securing mats and ensuring that sliding doors are moving freely and are securely attached.

Please always prepare a safety plan before undertaking specific projects. Too many farmers have fallen from heights or had mishaps around welders etc.

Do a written risk assessment on all these tasks before any work commences. Think about dangers involved especially the foreseeable, more risky and more likely ones. Write down the risks and hazards and make sure everyone involved is made aware.

Use the right equipment and wear appropriate PPE. As some of this type of work is not the normal day-to-day work on a farm it may be safer to employ someone competent in this area instead.