

## Stand-off pads: proactive management and maintenance (8-5)

Stand-off pads offer an opportunity to keep stock off pasture in times of poor weather and saturated soils, for soil and pasture protection.

*Farmfacts* 1-9a, 1-9b, 1-42 and 5-40 provide more information about restricted grazing and soil protection while 8-4 provides more on the design and construction of stand-off pads.

DairyNZ's *Minimising muck, Maximising money* booklet offers practical information and advice for managing and maintaining stand-off pads. Here are some of the key points.

### Proactive animal health management

Maintaining animal health while using pads requires the observation and management of three main areas; mastitis, lameness and tiredness.

**Mastitis** causing bacteria grow in wet, dirty and warm environments. To address this, ensure the pad has adequate drainage, and try to keep the pad as clean and dry as possible. Large-size organic material like bark chip, is preferable to finely chopped material like sawdust, which can harbor more bacteria and cause blockages in drains. Finer material will also absorb and hold onto moisture and slow the movement of water and effluent drainage through the bedding.

**Lameness** risk increases with the length of time cows spend on hard or wet surfaces. Providing adequate space and a soft, clean, dry, non-slippery surface for cows to lie down will reduce the risk. If using pads for extended periods, the detection of lameness also becomes more difficult as there is less opportunity to observe cows walking.

**Tiredness** will develop if cows are not able to lie down comfortably. Prolonged tiredness can lead to exhaustion and reduced feed intake. Adequate space and a proper lying surface will reduce the risk of this. Bullying can also be a factor influencing tiredness and the willingness to lie down. Grouping the cows by age and size or dominance can reduce the effects of social pressure. A single-wire electric fence 'partition' on the pad could help with this.

Signs of stressed cows include:

- hanging their heads and appearing "tired" during standing-off
- mastitis levels increase
- excessive stiffness or lameness
- standing rather than lying down when returned to the stand-off area after grazing
- cows lying down instead of grazing when back at the paddock after being stood-off.

## Effluent management

Like any other area where cows congregate, there will be a large volume of effluent produced on a stand-off pad. Stand-off effluent management must meet any permitted activity or resource consent conditions when being managed.

For soft-surface pads like woodchips, effluent solids will be held and absorbed into the top 400mm of material. Liquid effluent needs to be trapped by an impervious layer under the pad, and directed to the effluent system via subsurface drainage.

The addition of a stand-off pad to the farm may require changes to the effluent system to accommodate it. The *Minimising muck, Maximising money* booklet and Effluent Farmfacts provide information and advice to help you do it right.

## Ongoing maintenance

Stand-off pads will only serve their purpose well if they are properly maintained. Here are some suggestions for regular maintenance.

**Before the pad is needed:** the stand-off pad should be topped up with bedding materials before the onset of the wet months. Replacement of 1m<sup>3</sup> of sawdust or 0.5m<sup>3</sup> of woodchips per animal is recommended.

**During use:** it may be beneficial to scrape the top off the pad once or twice during the period of use. Removing cow pats from the surface after use will lengthen its life. (Dung speeds up breakdown of the bedding material and may contribute to failure of the drainage system).

**After use:** at the end of use, the pad should be scraped down to a firm / clean surface – usually 400mm below the pad surface. A firm surface will indicate that the under-pad drainage is functioning correctly. Scrapings can be incorporated into cropping land. The remaining bedding should be ripped to allow drying over the summer months, before being topped back up with fresh material.