

## Take Care of Silage Bales

Bales of silage can be safely stored for as long as the plastic film in which they are wrapped continues to exclude air. This means that, if properly made and stored, two year old bales of silage will still be in good condition. However if damaged plastic film allows air access to the silage over an extended duration of time this will result in contamination by mould growth. This may end up with localised rotting of the silage which can extend throughout the bale over time.

Silage adjacent to punctures in a bale will become wetter and have reduced dry matter digestibility and increased ash. The pH will rise and this will diminish the preservation of the silage bale initially in the area of the puncture but again spreading throughout the bale over time. All of these factors will cause the punctured bale to have a much diminished feed value.

Newly wrapped silage bales should always be regular-shaped and very firm. This helps both in applying the plastic film correctly and in reducing the risk of damage while the bales are being mechanically handled. Bales should also have sufficient plastic film properly applied.

Bales should be carried to the storage yard immediately after baling/wrapping. At this point they are firm and will be less prone to damage compared to later when they will lose shape. Transport at this stage will also reduce the risk of them being damaged in the field by birds etc. Though it may not be practical the best option to avoid damage is to carry unwrapped bales to the yard area and bale them there.

Depending on the moisture content of the grass silage bales of silage can weigh from 350 - 1000 kg. This weight together with the fragility of the plastic film will require careful handling of the bales by equipment to avoid damage. Metal arms of bale lifters should be smooth and bales should be lifted and carried very gently. Care should be taken when lifting bales into their storage position - when bales are being tipped to store on their flat end they can be damaged.

Place the wrapped bales on a smooth surface which will not puncture the film. Bales can be successfully stored on either their curved or flat side. Bales should be stored on level ground to reduce the risk of movement. If this is not possible when storing on sloping ground the bales should be placed with their flat ends facing the slope or on their flat end. If storing bales in a field situation it is a requirement under Nitrates regulations that they should not be within 20m of a watercourse or a drain. Where bales are stored in a yard there should be facilities to collect any effluent. If the bales are stored in a field this may require fencing off the bales from livestock. In any event they should be protected from bird damage. Methods for this include use of nets, tyres, painting with water based paint or using wind streamers to discourage birds. Consideration should also be given to damage from cats and rodents. Over the course of the year bales should be inspected regularly and if damage occurs it can be repaired by silage tape.

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