



A New Holland 945 baler towing a flat-eight sledge

Making hay while the sun shines

Hay making is an art form. It needs a perfect weather window as well as expertise to know when the cut crop is ready for baling. Organic farmer **Christine Page** offers tips that will ensure the bales in your barn will be loved by all your livestock

As spring rolls into summer, hay meadows start to sway mesmerizingly in the breeze, enticing farmers to oil their mowers and obsessively watch both the long and short-term weather forecasts. They are looking for the right weather window to make the most precious harvest of the year, that all important crop of hay that will keep stock well fed through the long winter months.

The ideal conditions to achieve that high-quality

make are five days in a row of full summer sun, with a light to moderate breeze. In theory, this allows for mowing on day one after the dew has lifted, then tedding once around midday on days two, three and four, followed by rowing-up and baling in the afternoon of day five. In practice, however, as with everything to do with farming, flexibility and adapting to local conditions, including the size of the crop and the weather, will dictate the actual course of events.

Once the decision to mow has been made, the distinctive hum of mowers all down the valley usually quickly follows, as one farmer after another comes to the same conclusion. And raptors, like the red kite, appear as if from nowhere, circling fields and following the tractors. Hay making time provides rich pickings for the growing chicks of voles, mice and even young rabbits.

MAKING HIGH-QUALITY HAY

A key part of making high-

quality hay is locking the nutrients into the plant as it dries, and speed of drying is vital for this. However, there is a balance – too fast drying in extreme heat and very strong sunshine can cause uneven drying and will rapidly bleach the mown pasture, leading to nutrient loss. At the other extreme, and the bane of all hay makers, is that unforecast shower, or worse, heavy rain, once the pasture is mown, or colloquially referred to as ‘down’. Any rain on the crop will not only leach



A small hay meadow rippling in the breeze and ready to be mown

nutrients, but mean the hay subsequently takes longer to dry, and every day added to the making process means a poorer quality crop. This can lead to unsavoury 'tobacco' hay, a totally bleached, uniform straw-coloured hay that will likely only be tolerated by hungry beef suckler cows.

If the weather window does start to close in, or there is extreme heat, tedding twice a day, at around 11am and 3pm, will keep the crop moving and drying more evenly, and this can reduce the make down to four days, or even three days at a stretch with a very light crop and an extra tedding on the morning of day three before rowing up and baling.

DRYING SPEED

One of the many benefits of a diverse pasture of native species is that they tend to dry more quickly, having lighter, less sappy stems than the modern rye grasses which have been bred for silage making and fast growth boosted by artificial nitrogen.

To further encourage desiccation, it is now common for contractors to use a mower-conditioner. The conditioner thwacks the grass as it is mown, which bruises the stems and aides drying.

If you can afford to take a slightly smaller crop in exchange for higher quality,

then raising the height the mower slightly so that the field is not scalped, leaves the very old stems at the bottom of the plant standing. These stems hold the mown grass off the soil, allowing air to circulate underneath, which further aides drying and means that the soil is less likely to be picked up in the crop. It can also mean that the hay is much less dusty and, assuming the rest of the make goes to plan, is then suitable for horses who suffer with respiratory issues. ▶

BALE SIZES

Hay bales come either in 'squares' or 'rounds' and are named after the shape of the bale as viewed end on. Thus, even though traditional small bales are rectangular in shape when viewed from the side, farmers will refer to them 'small squares'.

Baling into traditional small square bales weighing around 15kg each makes winter feeding a simple, machinery-free task and is ideal for the small-scale farmer. However, it is hard work on baling day as all square bale hay needs to be brought inside before nightfall to prevent them drawing moisture from the ground.

Lugging in small bales is a hands-on job that often requires calling in favours from friends and neighbours.

A flat-eight sledge towed behind the baler leaves eight small bales in a group ready to be picked up, which (when it works!) can speed up the process. And a flat-eight grab on the front of a loader can pick up these eight bales to place them onto a trailer or bring them straight into the hay store to be stacked.

Finding someone locally with a small baler, however, can be a challenge these days and so large round bales, weighing upwards of 250kg each, are the next step up. They can be rolled by one person to be opened and fed, but moving them any distance or placing them whole into a feeder requires a tractor or loader. An advantage here is that there is less urgency to bring round bales in from the field on the day of making, as left on their 'round' (side) in the field means that any rain will shed and they will draw up very little moisture if not left out too long — ideally no longer than a month.

Another difference between these two bale types is the mechanism of baling. A small square baler chops the hay as it creates the 'wads' that make up the bale. This makes it suitable for just about all stock, including horses. Round bale hay, however, can be baled either with or without being chopped. The latter is extremely beneficial for cattle, as their rumen function thrives on long, unbroken fibres.



Every small bale must be brought inside before nightfall

■ Hay Making

Getting set for baling



Red kites are never far away at hay making time

In addition, without those very old stems the crop itself will be of higher nutritional quality. Leaving more behind also has the benefit of keeping soil covered, a key regenerative farming practice, preventing soil desiccation and erosion. And keeping moisture in the ground at the height of summer means that the pasture will regrow faster to provide earlier autumn grazing.

DRY ENOUGH TO BALE?

There is a fine line between baling perfectly dry, but not over-cooked hay, and there is nothing to beat the

eye, hands and boot of an experienced farmer. Giving the hay a kick will show how light it is and if it stays up in a fluffy mound. Rough old hands buried deep into various places along the rows instinctively know the feel of hay that is ready to bale, or if there is still too much moisture. It needs to feel perfectly dry and warm - not cool. And when a novice eagerly announces that it must surely be dry enough to bale now, the measured gruff reply will likely be “another hour of sunshine should do it”. ■

NEXT TIME: Storage and safety, plus finding a contractor.

All about Christine Page

Christine Page owns and runs a small-scale regenerative organic pastoral farm in south Shropshire. For more information visit www.smilingtreefarm.com



If necessary, round bales can be left in the field for up to a month

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