



# FACT SHEET

MARCH 2013

## MEASURING PASTURE COVERS USING THE SWARD STICK

The Beef + Lamb New Zealand sward stick is a simple but effective tool which measures pasture height. It is used to calculate the relative pasture mass commonly referred to as pasture cover in kilograms of dry matter per hectare (kgDM/ha). The tool is calibrated to provide estimates for each season and can be applied across all of New Zealand.

## BENEFITS OF USING THE SWARD STICK

- Helps with feed budgeting
- Estimates covers up to 4,500kg DM/ha
- Helps calculate feed utilised and pasture growth rates
- Includes estimates for five different growth periods
- Quick and easy to use
- Fits in your pocket and is durable

## HOW TO USE THE SWARD STICK

Consistency is the key. You should take at least six measurements within each paddock to ensure you have an accurate sample of average pasture height.

Measure 40-60% of the paddocks to get a precise sample of pasture mass across the farm. It is important to take measurements from a range of paddocks as they have different properties such as forage type, contour and aspect.

Measure the height of the tallest clover leaf or the average ryegrass height to determine the average height of the sward. Alternatively, lay a flattened hand over the sward and measure the pasture height when you feel resistance.

To ensure your 'eyemeter' is consistent, regularly check that your own visual estimates align with the sward stick.

Recording your measurements on a farm map can also be useful.

## ALIGNING PASTURE CHARACTERISTICS WITH THE SEASON

It is important to be aware that pasture mass in relation to height varies each season. Table 1 defines which season to use relative to visual characteristics of the sward.

Occasionally pasture characteristics will need to be modified for each season. For example, the summer measurement on the sward stick may be more appropriate when experiencing a dry autumn and pasture contains predominantly dead material and minimal green leaf.

**Table 1.** Identifying which season to measure

Season	Visual Sward Characteristics
Spring	- No seed head - Green and leafy
Late Spring	- Substantial seed head
Summer	- Dead material present - Large amounts of seed head
Autumn	- Fresh green material emerging - Reasonable dead material at base of sward
Winter	- Pure sward of grass

## ACKNOWLEDGEMENTS AND MORE INFORMATION

The Beef + Lamb New Zealand sward stick has been developed in conjunction with Farmax and data supplied by AgResearch using the latest information available.

If you would like to receive the latest Beef + Lamb New Zealand sward stick email enquiries@beeflambnz.com or freephone 0800 BEEFLAMB (0800 233 352).

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