

## 1-30 Summer Management Overview

Restricted pasture growth and milk production occurs in many parts of New Zealand as a result of dry summers and irrigation restrictions. These events are unpredictable and vary in their timing, severity and duration. The impact of these events on milksolids production and farm profit can be minimised by the early implementation of proven strategies.

The key is to have a plan and to make timely decisions based on the best available information. Having no plan coupled with indecision, leads to unnecessary stress and lower profit.

Whatever the summer conditions, the first management rule is to fully and efficiently use spring pasture before dry and hot conditions reduce the growth and quality of pasture. With irrigation restrictions many of the strategies are the same but there are also differences. Best practice grazing management in summer and autumn builds on with those good practices applied in spring.

### **Summer Management Objectives:** (In order of priority)

1. To protect next season's production and reproduction by getting all cows to body condition score (BCS) 5.0 by calving.
2. To achieve maximum, profitable milksolids production for the rest of the current season.

## Key Strategies

### **Farm Policy**

1. Cow Quality. Have high Breeding Worth cows and manage mastitis and somatic cell counts.
2. Soil fertility. Ensure soil P fertility levels are optimum.
3. Pastures. Have pastures of modern quality grasses and clover varieties.

### **Management**

4. Have a summer management plan with defined trigger points i.e. cow condition, pasture cover, supplements available to action key decisions by certain dates.
5. Manage pastures in the spring and apply nitrogen in November/early December to have productive, quality feed going into the summer (surplus pasture management and early summer nitrogen use).
6. Get onto summer rotation before low soil moisture reduces pasture growth.
7. Monitor soil moisture deficit levels especially if irrigating.
8. If facing irrigation restrictions, maximise pasture growth by properly watering a reduced portion of the farm (the best part of the farm).
9. Match feed demand to supply. (Reduce feed demand to match reduced feed supply or increase feed supply through crops or other purchased feed to match demand).
10. Keep as many cows milking as practicable to make use of a recovery in pasture growth from autumn rains.
11. Feed supplements once significant autumn rains arrive.
12. Dry off cows on BCS criteria and calving date, in time for them all to get to BCS 5.0 at calving.
13. Have a no rain/irrigation, final dry off date, when the focus shifts from the current season's production to setting the farm up for the following season.

## Farm Policy

### Have high Breeding Worth (BW) cows and manage mastitis and SCC

High BW cows, particularly those also with high Production Worth are excellent converters of feed into milk and will increase their milk production when the amount and/or quality of feed supplied to them is again increased. High BW cows will increase milk production after a period of underfeeding but they will not put on much weight until they are dried off.

If the bulk somatic cell count of the herd is over 150,000, milking the cows once a day to match feed supply to demand will not be possible due to grading. Therefore decisions to get the herd's somatic cell count under control before the dry are important – culling cows, early detection, preventative treatments.

### Optimal soil phosphate levels

Trials (*TARS 1990*) with both pastures and crops consistently showed that having high phosphorus (*Olsen P values of 35 – 40 for volcanic ash soils*) resulted in much better growth over summer in dry conditions.

### Have pastures of modern quality grasses and clover varieties

Pastures that contain modern varieties of ryegrass, fescue, phalaris and clover grow more and leafier pastures into a summer dry. These will also be better set up if subsurface drainage, stand off or other farm infrastructure are used to prevent pugging of soil and pasture in wet conditions.

Even minor pugging will reduce plant populations of improved ryegrasses, allow invasion of weed grasses, and destroy soil structure. Weed grasses are usually annuals that have either short period of production e.g. *poa annua* or are very poor quality e.g. summer grasses.

Damage to soil structure caused by pugging will reduce the soil's capacity to hold moisture, and will reduce the plant roots ability to access that moisture.