ROTATIONAL GRAZING OF DRY COWS DURING WINTER M.MAGUIRE\*, T.PHILLIPS\*, J.URIE\*, P.BRIDGE\*

Cow condition and feed availability at calving are critical determinants of potential lactation yield. Management of cows during the dry period will affect both cow condition and pasture availability.

To demonstrate the usefulness of feed planning to research and extension personnel and farmers, a trial was carried out in which two different systems were used to manage dry cows over winter. Three aims were set at the beginning of the trial. One, to have enough pasture to fully feed the cows after calving by following a calculated feed budget. Two, that cows be in condition score 5 (Earle 1976) at parturition and three, to improve the pasture composition with grazing management. The sytems compared a short (SR) 60 day with a long (LR) 120 day grazing rotation on 2 matched areas of perennial ryegrass/white clover pasture with 2 groups of 62 cows, The trial began in May and ended in August.

Feed planning involved the weekly assessment of cow condition score, pasture availability, and the appropriate adjustment of hay allowance to meet the feed requirements for maintenance, stage of pregnancy, condition score gain and also to save the desired amount of pasture.

Cows in the LR system received the majority of their hay during the first half of the trial while cows in the SR system received the majority of their hay in the second half of the trial.

| Rotation<br>(days) | Total<br>area<br>(ha) | Area/<br>day<br>(ha) | Pasture available<br>tonne/ha |            | Cow condition |         | Нау             |
|--------------------|-----------------------|----------------------|-------------------------------|------------|---------------|---------|-----------------|
|                    |                       |                      | May lst                       | August lst | May lst       | Aug lst | used<br>(bales) |
| 60                 | 27                    | 0.45                 | 1.58                          | 1.84       | 4.23          | 5.0     | 1105            |
| 120                | 27                    | 0.23                 | 1.55                          | 1.76       | 4.24          | 5.1     | 1087            |

TABLE 1 Effect of length of rotation on pasture availability and cow condition score

At the end of the trial, similar amounts of hay had been used in both systems and cows were in similar body condition score (Table 1). Pasture growth and total available pasture were similar but the distribution of pasture over the two farmlet systems was different.

The trial demonstrates that despite large differences in management systems the feed planning technique can be used to reach desired goals.

EARLE, D.F. (1976). J. Dept. Agric., Vic. 74:228.

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