

CALF REARING AND HEIFER MANAGEMENT PRACTICES IN  
DAIRY HERDS IN WESTERN AUSTRALIA

G.M. HOUGH\*, G.J. SAWYER\*, I.R. BELL\* and E. HAGGETT\*

The mediterranean climate of south-western Australia may pose additional and unique problems for management to ensure a high level of productivity in young dairy heifers. A survey was conducted to obtain information on whether the potential existed to improve the productivity of replacement dairy heifers.

Fifty-three producers (11% of the W.A. dairy industry) were selected at random and asked questions on calf rearing and the management of heifers. One-third of producers interviewed had irrigated farms and the remainder were dryland farms. Total farm size averaged 220 ha and market milk quota was 700 l/day, which was 50% of the total milk produced.

In 1988, an average of 116 calves were born per farm with a year-round calving distribution except during the months September-December on some dryland farms, when few calves were born. Virtually all farmers recorded the date of calving and reared calves by hand, with 42% feeding calves individually using buckets compared to 54% who were group-feeding using a trough. Calves were fed 5.4 l milk/day on average (range 2-9 l/day). Supplements were fed prior to weaning as either meadow hay (*ad lib.*) and/or grain or pellets which were invariably rationed. The average age at weaning was 13 weeks (range 5-26 weeks). Only 23% of producers could produce an estimate of rearing costs to three months of age which averaged \$90/head, exclusive of labour and veterinary costs. The average calf mortality rate was 4% (range 0-19%), and the major health problem identified was scours with more than 20% of calves affected. Twenty-six percent of farms with a health problem related to rearing calves used antibiotics on a regular basis, 74% used antibiotics strategically and 66% used electrolytes strategically.

In the period between weaning and mating more than half the producers ran heifers on run-off blocks. The majority provided hay as supplementary feed and none weighed or condition scored their heifers during this time. Thirty percent of producers mated their heifers to calve at a particular time of year, 30% mated them when big enough, 23% mated heifers to calve at a particular age and 8% mated them to calve year-round. The majority of heifers were paddock mated with Hereford (38%), Friesian (28%) or Angus (20%) sires. Only 6% of producers used A.I. exclusively on heifers, and 11% used A.I. initially with a bull to "mop up". Due to the large use of non-dairy sires only 34% of producers kept heifers from first calvers as replacements. One in six heifers (range 0-77%) had difficulty at calving, with one in nine first-lactation heifers being culled due to low milk production (44%), temperament (17%), mastitis (15%) and udder problems (12%).

The survey highlighted aspects of calf rearing and heifer management where the potential exists to improve productivity. Very few farmers used early weaning and/or *ad lib.* feeding of calves which are currently recommended on the basis of economics. Most are foregoing potential increased productivity by not using artificial insemination of heifers with semen from proven sires. Because heifers were not weighed or condition scored we could not determine if delays in mating beyond the recommended age were due to poor growth rate, hence small size, or due to deliberately withholding mating beyond a commonly recommended size or weight. Heifer growth rate from birth to first calving is currently the subject of a study on commercial properties.

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\* W.A. Department of Agriculture, PO Box 1231, Bunbury, W.A. 6230.