## EARLY WEANING OF WINTER-BORN BEEF CALVES AND THE USE OF NOSE-RINGS

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Dailey and Bishop (1972) reported that autumn-born calves were heavier as yearlings if weaned after, rather than before eight months of age. We have measured the growth of winter-born calves weaned at 6, 7.5 or 9 months and the possible benefits of applying nose rings to the calves 6 weeks before the two later weaning dates. These rings (Legeard S.A., France), which fit without piercing the nose, have four prongs attached to the upper front section, which prevent the calves sucking. They are used by the Mulguthrie Pastoral Company to reduce the stress of separation at weaning, particularly if the cows and calves are to graze in close proximity.

Fifty eight Angus and Murray Grey cross calves, born July 1988, were allocated to 5 groups by birth date, sex and weight (mean 221 kg ±8.5 s.e.) in January 1989. All cows and calves grazed the same phalaris and subterranean clover pasture and, as calves were weaned, they were injected with ivermectin (Avomec, MSDAGVET) and were run together on a similar pasture. Rings were removed at weaning.

| Table | 1 | Weight. | gain  | bv | calves | before | and | after | weaning |
|-------|---|---------|-------|----|--------|--------|-----|-------|---------|
| Table | _ | Mergiic | garii | 2  | Carves | Derore | and | arcer | weaming |

| Age at              | Age at           | No. of | Weight g | r 3 months |       |
|---------------------|------------------|--------|----------|------------|-------|
| weaning<br>(months) | ringing (months) | calves | 6-9      | 7.5-10.5   | 9-12  |
| 6                   | _                | 11     | 0.78     | 0.85       | 0.74  |
| 7.5                 | 6                | 12     | 0.36     | 0.89       | 0.86  |
| 7.5                 | -                | 12     | 0.67     | 0.85       | 0.84  |
| 9                   | 7.5              | 12     | 0.54     | 0.81       | 0.77  |
| 9                   | -                | 11     | 0.64     | 0.84       | 0.81  |
| s.e.d.              |                  |        | 0.098    | 0.176      | 0.061 |

Over the first 3 months (Table 1), calves weaned at 6 months gained twice as fast as those fitted with nose-rings at 6 months. They also gained faster than those fitted with rings at 7.5 months and at least as fast as calves weaned later without rings. Gains from 7.5 to 12 months were not significantly affected by treatment. At 12 months, there was no effect of weaning age but calves that had rings were still 9 kg lighter.

We conclude that early weaning at 6 months had no detrimental effect on the performance of the calves. The nose-rings did not appear to have any beneficial effect; they severely reduced weight gain when fitted at 6 months but had much less effect at 7.5 months. We did not observe any reduction in behavioural stress at weaning as a result of fitting rings,

BAILEY, P.J. and BISHOP, A.H. (1972). Aust. J. Exp. Agric. Anim. Husb. 12: 579.

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