Sheep worm control and lambing time in high rainfall areas

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RESULTS FROM RECENT RESEARCH

SHEEP WORM CONTROL AND LAMBING TIME IN HIGH RAINFALL AREAS

By F. C. Wilkinson

Indications from a continuing sheep trial at Margaret River are that farmers in high rainfall areas could increase stocking rates and lamb growth rates by lambing in September-October rather than July-August. The results also indicate that farmers in the area may be spending more than necessary on worm control.

Increasing sheep numbers in the high rainfall areas of the South-West are partly associated with continuous grazing and the use of summer wet pastures. However, sheep management in the area has been complicated by worm parasites, especially *Haemonchus contortus*, slow lamb growth rates, and pasture deterioration at high stocking rates. This trial, to investigate these problems, was begun in December, 1967.

Method

Four paddocks, of 28, 32, 15 and 61 acres, were set stocked at 3.5 sheep per acre with full-mouth Corriedale x Polwarth ewes. The paddocks had been previously grazed by sheep and each contained a small area of summer moist ground growing perennial pasture.

Treatment of sheep in each paddock is summarised in Table 1. In addition, 15 sheep and 15 lambs in each paddock were used to indicate average fortnightly worm egg counts and monthly body weights.

Results

*Pasture*

The summer moist flats were grazed by the ewes during January and February but were eaten out by March.

**TABLE 1.—EXPERIMENTAL TREATMENTS**

<table>
<thead>
<tr>
<th>Paddock</th>
<th>Mating Time*</th>
<th>Shearing and Dipping</th>
<th>Worm control Commencing Jan. 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddock 2</td>
<td>Late</td>
<td>Sept. 3</td>
<td>Farmer routine. Tetramizole applied Jan. 10, Feb. 21, April 17, July 12, Sept. 17, Oct. 28 and Nov. 12</td>
</tr>
<tr>
<td>Paddock 3</td>
<td>Late</td>
<td>Sept. 3</td>
<td></td>
</tr>
<tr>
<td>Paddock 4</td>
<td>Early</td>
<td>Oct. 17</td>
<td></td>
</tr>
</tbody>
</table>

* Early groups were with the rams from March 6 to May 6, late groups from May 1 until July 1.

Figure 1.—Effect of time of lambing on ewe body weight. (Groups 1 and 4 early lambed, groups 2 and 3 late lambed.)

![Graph showing effect of time of lambing on ewe body weight](image-url)
Clover burr and dry pasture then formed the main feed until May when short green feed became available. Pasture remained short in all paddocks until August when it grew rapidly in the late lambing paddocks (Nos. 2 and 3) and reached three to four inches high by the start of lambing in late September. The pasture growth was poor in all paddocks was considerably greater than in the early lambing paddocks at the end of December.

Discussion

Pastures

The appetite of ewes increases by 50 per cent after lambing and lambs commence grazing within two weeks of birth. As a result the differences in pasture growth seen from August to November can be related to differences in the time of lambing. Thus the early lambing groups ate the foliage as it was produced and prevented a spring flush. Paddock 1 was overstocked.

Requirements of the late lambing groups were less during August and September with the result that there was ample pasture at lambing time. This pasture was not all eaten and a lot of dry feed remained in the paddocks in December. Both paddocks appeared understocked.

The amount of seed set in the paddocks was not measured but clover seed-set appeared to be limited in paddocks 1 and 4.

Production

Late born lambs grew faster than the early lambed group, probably because their mothers were in better condition during and after lambing and produced more milk for a longer time.

Group 2 and 3 ewes had only 10 months wool when shorn compared with 12 months for...
groups 1 and 4. Fleece weight differences were not significant at this shearing but the heavier ewes could produce more wool during the next 12 months.

Parasitism

Worm parasitism of the ewes was influenced more by time of lambing and body condition than by drenching routine. As a result ewes in good condition resisted or overcame infestation with or without drenching. Those lambs born in September-October to ewes in good condition with plenty of milk did not become parasitised and paddock 2 lambs were sold without any worm treatment. The pre-lambing drench given to ewes in paddock 4 did not prevent clinical haemonchosis from occurring four weeks after lambing.

The experimental drenching treatment cost 25 cents per ewe and was cheaper than the farmer treatment (50 cents per ewe) because a cheaper drench effective only against 

*Haemonchus* worms was used.

1969 results

The experiment has been continued this year with the following changes made in January, 1969:

- The stocking rate in the late lambing paddocks 2 and 3 was raised to five ewes per acre.
- Ewes in the early lambing groups 1 and 4 were mated one month later.
- The experimental drenching groups 1 and 2 will receive eight consecutive drenches.

In May, 1969, body weights of these groups were: Group 1, 88 lb., Group 2, 114 lb., Group 3, 113 lb., and Group 4, 99 lb. Parasitism has been at a low level in all groups.

Acknowledgments

Thanks are extended to Mr. S. Dilkes, Agricultural Adviser, Busselton, who assisted in the trial work and to Mr. C. Armstrong on whose property the trial is being conducted.

CORRECTION

An incorrect caption was printed on the picture below, in the article "Deferred Grazing Improves Soft Spinifex Association", *Results From Recent Research*, November 1969. The caption should have been as shown:

Deferred and continuously grazed plots in the third growing cycle. Left—deferred plot with dense grass, mostly *Eragrostis eriapoda*; right—continuously grazed plot showing a tussock of *Triodia pungens* and some *Psoralea* shrubs.
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