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Grazing behaviour of feral and crossbred goats grazing improved irrigated pastures during spring and summer

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Knowledge of the behaviour of goats grazing pasture is scant. The author has not seen any report on the grazing pattern or grazing behaviour of goats kept only on pasture land. In order to obtain a greater understanding of the behaviour of grazing goats, observations were made during two seasons on two groups of goats with continual access to pasture.

Thirty three domesticated feral goats (captured in North Western Victoria in May 1976) were grazed on irrigated white-clover perennial ryegrass pastures without supplementary feed for twelve months. In September 1977 the grazing times of four adult does (mean live weight 33 kg) was estimated using a vibracorde. (Kienzle-West Germany) for 11 consecutive days. The accuracy and reliability of the vibracorders with grazing goats had been confirmed by comparison with direct observations over the previous fortnight. Concurrently the grazing times of four Angora x Saanen (XB) does (mean live weight 43 kg) grazing an adjacent paddock were estimated. All does kidded in November 1977. Observations were repeated on five feral does with kids over 11 consecutive days in January 1978. During the period of observation all goats grazed 1 ha paddocks with pasture availability over 2000 kg/ha of dry matter and pasture 10 cm high. Results are summarised in Table 1.

TABLE 1 Grazing behaviour of domesticated feral and crossbred (XB) does grazing improved irrigated pastures

<table>
<thead>
<tr>
<th>Observation</th>
<th>XB does</th>
<th>Feral does</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>September</td>
<td>September</td>
</tr>
<tr>
<td>Grazing time (hr)</td>
<td>0.04 (1.15)</td>
<td>0.02 (1.45)</td>
</tr>
<tr>
<td>Starting time (am)*</td>
<td>8.47 (1.00)</td>
<td>7.37 (1.25)</td>
</tr>
<tr>
<td>Finishing time (pm)*</td>
<td>18.9 (0.39)</td>
<td>18.65 (0.57)</td>
</tr>
<tr>
<td>Night grazing (hr)**</td>
<td>1.73 (0.73)</td>
<td>0.72 (0.76)</td>
</tr>
</tbody>
</table>

*Start and finish times are Australian Eastern Standard Time.
**Night grazing - Grazing between 10 pm and 6 am.

The data suggest that feral does have a different distribution of grazing and make up for reduced evening grazing by commencing grazing earlier in the morning and grazing more intensively during the day than domesticated goats. In January lactating feral does grazed for very short periods at night even though total grazing time increased. One possible explanation for this behaviour could be that does spend the night camped with their kid and prefer not to graze.

Arnold (1962) found the average grazing times of various classes of Merino sheep was 8.2 hrs. Grazing peaked in mid-morning and late-afternoon in spring and summer. Grazing was more intense in spring with 87% occurring between 6 am and 6 pm. In summer only 68% occurred between 6 am and 6 pm. Arnold found no effect of number of lambs carried, days before parturition, or stress of milk production on grazing time. The grazing patterns of goats reported here are in general agreement with Arnold's findings except for the reduced evening grazing during January.


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