

Feed Budget Tables

for the break of the season
in annual pasture systems of
southern Australia



lifetimewool

more lambs, better wool, healthy ewes

When to use these tables:

When green annual paddock feed isn't enough early in the season or managing ewes to targets over pregnancy and lactation. Use the Tables for Drought conditions when only dry feed is available.

Step 1. What they Need:

TABLE 1a.
Energy Required by Ewes @ Condition Score 3 to maintain weight

| Maintenance energy (MJ/d) for ewes under paddock conditions | | | | | | | | Confinement Fed |
|---|--|------|---|------|--|------|--|-----------------|
| Days pregnancy | small frame (45kg) maintain @ CS 3 single twin | | medium frame (50kg) maintain @ CS 3 single twin | | large frame (60kg) maintain @ CS 3 single twin | | medium frame maintain @ CS 3 single twin | |
| dry | 7.8 | 7.8 | 8.4 | 8.3 | 9.9 | 9.9 | 6.7 | 6.7 |
| 50 | 8.1 | 8.2 | 8.6 | 8.7 | 10.1 | 10.3 | 6.9 | 7.2 |
| 70 | 8.3 | 8.7 | 9.1 | 9.4 | 10.5 | 10.8 | 7.4 | 7.7 |
| 100 | 9.3 | 10.1 | 9.7 | 10.7 | 11.8 | 13.2 | 8.3 | 9.6 |
| 130 | 11.6 | 14.0 | 12.8 | 14.7 | 14.8 | 17.8 | 10.9 | 11.7 |
| days lactating | maintain @ CS 3 single twin | | maintain @ CS 3 single twin | | maintain @ CS 3 single twin | | ewes and lambs | |
| 10 | 17.3 | 21.7 | 19.2 | 24.0 | 21.9 | 28.7 | ask for advice on confinement feeding ewes and lambs | |
| 30 | 18.7 | 23.9 | 20.8 | 26.5 | 23.4 | 29.8 | | |
| 50 | 15.5 | 19.1 | 17.2 | 21.2 | 19.2 | 24.2 | | |

TABLE 1b.
Energy Required by Ewes @ Condition Score 2 to maintain weight

| Maintenance energy (MJ/d) for ewes under paddock conditions | | | | | | | | Confinement Fed |
|---|--|------|---|------|--|------|--|-----------------|
| Days pregnancy | small frame (45kg) maintain CS 2 single twin | | medium frame (50kg) maintain CS 2 single twin | | large frame (60kg) maintain CS 2 single twin | | medium frame (50kg) maintain CS 2 single twin | |
| dry | 6.9 | 6.9 | 7.2 | 7.2 | 8.7 | 8.7 | 6.7 | 6.7 |
| 50 | 7.1 | 7.2 | 7.4 | 7.7 | 8.8 | 9.0 | 6.9 | 7.2 |
| 70 | 7.4 | 7.7 | 7.8 | 8.4 | 9.3 | 9.5 | 7.4 | 7.7 |
| 100 | 8.3 | 9.4 | 9.0 | 10.3 | 10.7 | 11.7 | 8.3 | 9.6 |
| 130 | 10.1 | 12.9 | 10.9 | 13.7 | 13.1 | 15.9 | 10.9 | 11.7 |
| days lactating | CS 3 0kg supplement single MEM Lwt g/kg/d | | Maintaining CS 3 with supp single MEM Oats kg/d | | CS 2 0kg supplement single MEM Lwt g/kg/d | | Maintaining CS 3 with supp single MEM Oats kg/d | |
| 10 | 15.2 | 19.0 | 16.0 | 20.8 | 18.5 | 24.1 | ask for advice on confinement feeding ewes and lambs | |
| 30 | 16.1 | 21.3 | 17.8 | 24.0 | 19.9 | 26.7 | | |
| 50 | 12.9 | 16.7 | 13.6 | 17.9 | 16.3 | 20.9 | | |

Background:

This is only a guide – monitor your sheep to check that feeding rates are adequate. No account has been made for pasture growth rate, different composition or quality of feed.

These tables are based on Grazfeed® values for pastures with 20% clover and 12MJ/kgDM. For more detailed results refer to Grazfeed®.

Step 2. What they can eat:

TABLE 2a.
Intake for small frame ewes (MJ/day)

| | Small frame ewe (45kg) | | |
|------|------------------------|----------------|------|
| | d0-150 | mild lactation | |
| FOO | any | single | twin |
| 300 | 6.0 | 9.7 | 10.8 |
| 500 | 7.2 | 10.7 | 11.9 |
| 800 | 9.6 | 15.5 | 16.1 |
| 1000 | 11.3 | 16.9 | 18.8 |
| 1200 | 12.6 | 18.8 | 21.0 |

TABLE 2b.
Intake for medium frame ewes (MJ/day)

| | Medium frame ewe (50kg) | | |
|------|-------------------------|----------------|------|
| | d0-150 | mild lactation | |
| FOO | any | single | twin |
| 300 | 6.0 | 8.4 | 10.2 |
| 500 | 7.8 | 11.8 | 13.1 |
| 800 | 10.8 | 15.0 | 17.4 |
| 1000 | 12.0 | 18.0 | 20.4 |
| 1200 | 13.2 | 20.4 | 22.8 |

TABLE 2c.
Intake for large frame ewes (MJ/day)

| | Large frame ewe (50kg) | | |
|------|------------------------|----------------|------|
| | d0-150 | mild lactation | |
| FOO | any | single | twin |
| 300 | 7.2 | 9.6 | 10.2 |
| 500 | 9.6 | 14.2 | 15.8 |
| 800 | 12.8 | 19.2 | 21.5 |
| 1000 | 15.1 | 22.6 | 25.2 |
| 1200 | 16.8 | 25.1 | 28.0 |

Step 3. Losing or gaining weight?

| Deficit MJ/day | expected loss g/h/d | CS in 10 days (45kg) | CS in 10 days (50kg) | CS in 10 days (60kg) |
|-------------------|------------------------|-------------------------|-------------------------|-------------------------|
| 2 | -70 | -0.1 | -0.1 | -0.1 |
| 4 | -135 | -0.2 | -0.2 | -0.1 |
| 6 | -200 | -0.3 | -0.2 | -0.2 |
| 8 | -270 | -0.4 | -0.3 | -0.3 |
| 10 | -340 | -0.5 | -0.4 | -0.3 |

| Surplus MJ/day | expected gain g/h/d | CS in 10 days (45kg) | CS in 10 days (50kg) | CS in 10 days (60kg) |
|-------------------|------------------------|-------------------------|-------------------------|-------------------------|
| 2 | 40 | 0.1 | 0.0 | 0.0 |
| 4 | 75 | 0.1 | 0.1 | 0.1 |
| 6 | 120 | 0.2 | 0.1 | 0.1 |
| 8 | 160 | 0.2 | 0.2 | 0.2 |
| 10 | 200 | 0.3 | 0.2 | 0.2 |

Step 4. How much to feed?

TABLE 4. Approximate Feed Values

| Grain | ME (MJ/kg DM)* | Crude Protein % | DRY MATTER % |
|-----------|----------------|-----------------|--------------|
| Oats | 10.4 | 8.8 | 90 |
| Barley | 12.3 | 10.8 | 90 |
| Wheat | 13.1 | 14.2 | 90 |
| Triticale | 13.0 | 12.0 | 90 |
| Lupins | 13.1 | 31.3 | 90 |
| Oaten hay | 9.0 | 6.0 | 85 |

* grains vary considerably, where possible have your feed tested.

TABLE 5.
Ration to be Fed
(ME of ration in left hand column and energy deficit in body of table)

| ME of feed | Ration to be fed (kg as fed assuming 90% dry matter) | | | | | | | | | |
|------------|--|-----|-----|-----|-----|-----|-----|------|------|------|
| | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 |
| 6.0 | 0.5 | 1.1 | 1.6 | 2. | 2.7 | 3.2 | 3.8 | 4.3 | 4.9 | 5.4 |
| 6.5 | 0.6 | 1.2 | 1.8 | 2.3 | 2.9 | 3.5 | 4.1 | 4.7 | 5.3 | 5.9 |
| 7.0 | 0.6 | 1.3 | 1.9 | 2.5 | 3.2 | 3.8 | 4.4 | 5.0 | 5.7 | 6.3 |
| 7.5 | 0.7 | 1.4 | 2.0 | 2.7 | 3.4 | 4.1 | 4.7 | 5.4 | 6.1 | 6.8 |
| 8.0 | 0.7 | 1.4 | 2.2 | 2.9 | 3.6 | 4.3 | 5.0 | 5.8 | 6.5 | 7.2 |
| 8.5 | 0.8 | 1.5 | 2.3 | 3.1 | 3.8 | 4.6 | 5.4 | 6.1 | 6.9 | 7.7 |
| 9.0 | 0.8 | 1.6 | 2.4 | 3.2 | 4.1 | 4.9 | 5.7 | 6.5 | 7.3 | 8.1 |
| 9.5 | 0.9 | 1.7 | 2.6 | 3.4 | 4.3 | 5.1 | 6.0 | 6.8 | 7.7 | 8.6 |
| 10.0 | 0.8 | 1.8 | 2.7 | 3.6 | 4.5 | 5.4 | 6.3 | 7.2 | 8.1 | 9.0 |
| 10.5 | 0.9 | 1.9 | 2.8 | 3.8 | 4.7 | 5.7 | 6.6 | 7.6 | 8.5 | 9.5 |
| 11.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 5.9 | 6.9 | 7.9 | 8.9 | 9.9 |
| 11.5 | 1.0 | 2.1 | 3.1 | 4.1 | 5.2 | 6.2 | 7.2 | 8.2 | 9.2 | 10.4 |
| 12.0 | 1.1 | 2.2 | 3.2 | 4.3 | 5.4 | 6.5 | 7.6 | 8.6 | 9.7 | 10.8 |
| 12.5 | 1.1 | 2.3 | 3.4 | 4.5 | 5.6 | 6.8 | 7.9 | 9.0 | 10.1 | 11.3 |
| 13.0 | 1.2 | 2.3 | 3.5 | 4.7 | 5.9 | 7.0 | 8.2 | 9.4 | 10.5 | 11.7 |
| 13.5 | 1.2 | 2.4 | 3.6 | 4.9 | 6.1 | 7.3 | 8.5 | 9.7 | 10.9 | 12.2 |
| 14.0 | 1.3 | 2.5 | 3.8 | 5.0 | 6.3 | 7.6 | 8.8 | 10.1 | 11.3 | 12.6 |
| 14.5 | 1.3 | 2.6 | 3.9 | 5.2 | 6.5 | 7.8 | 9.1 | 10.4 | 11.7 | 13.1 |

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