**Calculating livestock feed requirements**

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| LANDHOLDER NAME: | |
| MOB NAME: | Description: (Body weight, livestock class, goals etc) |
| NUMBER OF ANIMALS **(A)**:  DAYS ON FEED **(B)**: |

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| **How much energy do they need?**  (Note: 1 DSE = 8.3 MJ ME/day for maintenance) | = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ MJ ME/day **TOTAL ENERGY (C)**  *(Refer to energy tables)* |
| **How much feed can they eat?**  \* DM = Dry Matter: material after removal of moisture in feed.  (The more fibre in the diet the less they can eat, eg for straw or poor quality hay it will be 2%, for silage or grain it will be 3%) | In kg DM\* = 2-3% of body weight  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *(insert live weight in kg) (% depending on feed 0.02-0.03)*  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kg DM/day **MAXIMUM CONSUMPTION (D)** |
| **What quality feed do they need?**  (The *energy and protein* concentrations of a feed can be found on a standard feed test, if you don’t have a feed test refer to Tables as a guide, however hay and grain can be highly variable from season to season and it is recommended to test each batch, feed tests are relatively inexpensive and results can be available in 1-3 days)  (The *percentage of Dry Matter (DM)* of a feed can be found on a standard feed test, if you don’t have a feed test refer to Tables) | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  *TOTAL ENERGY* ***(C)*** *MAXIMUM CONSUMPTION* ***(D)***  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ MJ ME/kg DM  **MINIMUM ENERGY CONCENTRATION**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ % Protein  *(insert Protein from Tables)*  **MINIMUM PROTEIN CONCENTRATION** |

**Rules of thumb:**

High quality feed = 10-12 MJ ME approx. (Grains, lucerne hay, clover hay, ryegrass hay, silage)

Medium quality feed = 8-10 MJ ME approx. (Grass hay, late cut hay and silage, cereal hay)

Low quality feed = 6-8 MJ ME approx. (Late cut cereal hay, cereal straw)

1 Tonne of Feed

= 2 Large Squares = 3 Round Bales = 40 Small Squares = 20 Bags of Oats = 17 Bags of Barley = 15 Bags of Wheat

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| **Comparing different feeds** | | |
| FEED TYPE:  PRICE ($/t):  DRY MATTER (%):  ENERGY (MJ ME/kg DM):  PROTEIN (%): | FEED TYPE:  PRICE ($/t):  DRY MATTER (%):  ENERGY (MJ ME/kg DM):  PROTEIN (%): | FEED TYPE:  PRICE ($/t):  DRY MATTER (%):  ENERGY (MJ ME/kg DM):  PROTEIN (%): |
| (\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x100) / 1000  *Price $/t*  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  c/kg Feed Dry matter eg 0.8  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  c/kg DM Energy MJ ME/kg DM  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Cents/ MJ ME | (\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x100) / 1000  *Price $/t*  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  c/kg Feed Dry matter eg 0.8  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  c/kg DM Energy MJ ME/Kg DM  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Cents/ MJ ME | (\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x100) / 1000  *Price $/t*  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  c/kg Feed Dry matter eg 0.8  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  c/kg DM Energy MJ ME/kg DM  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Cents/ MJ ME |

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| **How much should I feed them?** | | |
| \_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_\_  *TOTAL ENERGY* ***(C)*** *Energy in feed*  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  kg DM/hd/day Dry matter eg 0.8  =\_\_\_\_\_\_\_\_\_\_\_\_ / (1-\_\_\_\_\_\_\_\_\_)  kg Feed/hd/day Wastage 0.1-0.3  =\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_  kg As Fed/hd/day No. of animals **(A)**  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kg As Fed  /Mob/day | \_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_\_  *TOTAL ENERGY* ***(C)*** *Energy in feed*  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  kg DM/hd/day Dry matter eg 0.8  =\_\_\_\_\_\_\_\_\_\_\_\_ / (1-\_\_\_\_\_\_\_\_\_)  kg Feed/hd/day Wastage 0.1-0.3  =\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_  kg As Fed/hd/day No. of animals **(A)**  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kg As Fed  /Mob/day | \_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_\_  *TOTAL ENERGY* ***(C)***  *Energy in feed*  =\_\_\_\_\_\_\_\_\_\_\_\_ / \_\_\_\_\_\_\_\_\_\_\_\_  kg DM/hd/day Dry matter eg 0.8  =\_\_\_\_\_\_\_\_\_\_\_\_ / (1-\_\_\_\_\_\_\_\_\_)  kg Feed/hd/day Wastage 0.1-0.3  =\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_  kg as Fed/hd/day No. of animals **(A)**  = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_kg As Fed  /Mob/day |

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| **How much feed do I need to buy?**  **How much will it cost me?**  (When choosing what type of feed to use you will need to consider the cost/MJ ME, the availability of feeds and the facilities and equipment available to both handle and store different feeds)  (Grain should be introduced slowly over a 2-3 week period)  (It is important to allow for a wastage factor as not all of the product fed out will be consumed, some will be trampled or spoiled through manures, the level of wastage will depend on the feeding system you have in place and will vary from 10-30%) | (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)/1000  *kg as fed/Mob/day Days on feed*  = (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) x \_\_\_\_\_\_\_\_\_\_\_\_\_\_  *Tonnes Feed Feed on Hand (t) Price $/t*  = $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ESTIMATED TOTAL COST FOR DAYS ON FEED |

Original layout: Greg Bekker & Ashley Paech, Agriculture Victoria, Department of Economic Development, Jobs, Transport and Resources, 2012