Feeding weaners – planning and management suggestions
Peter Smith, Dept of Agriculture & Food, Karratha. September 2010

A number of pastoralists have taken on board the value of weaning calves to reduce the nutritional requirements of breeders during the extended dry period currently being experienced in areas of the Pilbara and the southern rangelands of WA. Calves of all ages have and are being weaned and while this is certainly good for the breeders it presents a management issue for pastoralists of how best to manage numbers of calves of different ages, weights and often genetics.

Calves of all ages can be successfully reared without their mothers all together – all cattle people have at some time successfully reared very young calves and dairy farmers have always reared calves with little post natal care from their mothers. So the information, products and experience is out there to successfully rear and manage calves and younger weaners.

The issue is not then really about the technology of rearing calves it is about the practicalities and future opportunities for the calves successfully reared.

Cows usually rear their calves to ‘normal’ (say 125kg +) weaner age/size as part of their role. ‘Normal’ weaners generally require limited additional feed or supplement to ensure their survival and continued growth until the first growing season following weaning. Weaning to a young age as part of a dry season breeder management program means that the high quality (milk) supplement and care provided by cows needs to be replaced. Hand rearing calves and growing them out to weaners where they can better provide for themselves or attain market weights is expensive. The cost of feed for young/light calves to gain around 0.5 kg a day will be in the vicinity of $1.00 a day on the feed in the Pilbara/Gascoyne area. Heavier weaners will cost significantly more.

Because there is a lot of cost potentially involved it is important to develop a plan of the whole calf feeding program preferably before weaning starts. Questions to be considered include:

- How long is the program likely to be required i.e. how long until a reasonable probability of useful rain?
- Assess how many of different weight/age groups are likely to be involved.
- What is the ‘vision’ for the future of the calves to be reared?
  - are they to be retained as future breeders or,
  - sold as soon as they attain a market weight.
  - Consider the option of humanely destroying young calves, or calves with genetics unattractive to the general market before feeding commences
- Explore future market opportunities for the calves effectively reared. Have some serious discussions with people directly involved with the marketing of cattle. More than one opinion may be useful.
- Discuss financial implications of the feeding program and potential gaps in future income with financiers.
With a clear aim established develop a feeding and management plan complete with a realistic budget.

**Managing young weaners**

As mentioned above very young calves can certainly be successfully reared but they require a higher quality diet and closer attention than older and heavier calves.

- Draft calves according to age, condition and weight.
- Provide access to clean water, shade and adequate feed trough space in yards or coolers.
- While mixes of grain, protein meal and other additives can certainly be formulated to successfully feed calves, feeding pellets of differing compositions and some hay is usually more convenient and effective to feed.
- To reduce the likelihood and affect of Coccidia outbreaks (usually evidenced by black scour) during feeding ensure that monensin, a coccidiostat, is included in the pellets or other feed mixes during manufacture. See ‘Coccidia’ in the notes section below.
- Manage the whole feeding program carefully. It is often desirable to allocate a person to manage the weaner feeding program. This ensures that the weaners are observed and fed regularly and feed intake and weaner performance is recorded.
- ‘Poor doers’ and non eaters should be drafted off and managed as a separate ‘hospital’ group. Euthanasia of these animals may be appropriate in some circumstances.
- Continually assess calves for performance and move them to heavier groups as they reach target weights. Rations fed to heavier groups are usually cheaper on a price per kg basis.
- If calves are to be fed for an extended period a 5 in 1 vaccination is recommended. Calves should be observed for symptoms of lice and worm infestations. While adequate nutrition will reduce and effect of these parasites treatment may be justified.
- Ensure calves have access to water at all times. Troughs may need cleaning on a regular basis if high grain rations are fed.
- Feed at least on a daily basis in yards. If some groups of larger weaners are fed in paddocks, feeding every second day or even twice a week may be appropriate.
- Feed the weaners well. As with children, young cattle need good nutrition to grow and develop. Poorly fed weaners are likely to be unsaleable and research indicates that poorly fed weaner heifers will be older and heavier at puberty and produce less calves in their lifetime.
- **It is usually better to do a good job on half the number than half a job on the lot.**

Notes:
Coccidia organisms are present in all cattle. Numbers increase in cattle suffering stress and attack the gut lining resulting in ‘black scour’. Affected calves should be isolated and treated for scour. Seek veterinary advice for appropriate products. Coccidia infections often don’t become obvious for some weeks after the stress event; in this case probably weaning. Good nutrition and management during the weaning process will reduce the likelihood of Coccidia related problems.
Table 1.
Example rations.
The ration suggestions below are based on full hand feeding in yards using commercially available pellets. The feeding regimes and expected animal performance is based on information from the Nutrition EDGE training course and apply to healthy well managed animals. The effects of disease or parasites will reduce performance. Products manufactured by Milne Feeds are used as examples only.
Disclaimer: These feeds are provided as examples only, and are not intended as an endorsement of any particular product or supplier. Check your preferred supplier for available products and prices

<table>
<thead>
<tr>
<th>Weaner age/weight</th>
<th>Growth target/day</th>
<th>Example ration</th>
<th>DM Intake</th>
<th>Indicative cost / 30 days*</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;70kg 1 – 2 mths</td>
<td>~ 500 g</td>
<td>1.5 kg 20% CP pellets (e.g. Calfgro) + 250g hay</td>
<td>~2.5% body weight c.1.75kg a day</td>
<td>$19</td>
</tr>
<tr>
<td>71 – 100 kg 2 – 3 mths</td>
<td>~ 500g</td>
<td>1 kg 18% CP (e.g.Weaner pellets) + 1 kg 14% CP pellets (e.g. Easybeef) + 250g hay</td>
<td>~2.25% body weight c. 2.25kg/day</td>
<td>$23</td>
</tr>
<tr>
<td>101 – 125kg 3 – 4 mths</td>
<td>250 – 500g</td>
<td>2 kg 14% CP pellets + 500g hay</td>
<td>~2% body weight c.2.5 kg a day</td>
<td>$24</td>
</tr>
<tr>
<td>126 – 150kg 4 – 6 mths</td>
<td>250 – 500g</td>
<td>2.5 kg 12%CP pellets (e.g. Cattle cubes) + 500g hay</td>
<td>~2% body weight c. 3 kg a day</td>
<td>$26</td>
</tr>
<tr>
<td>&gt;151kg 6 mths +</td>
<td>250g +</td>
<td>3 kg Cattle cubes + 500g hay</td>
<td>~ 2% body weight c.3.5 kg/170 kg weaner</td>
<td>$31</td>
</tr>
</tbody>
</table>

- N.B. All costs are based on 2010 price ex Perth and do not include freight

Table 2.
Energy (MJME) and Crude Protein (CP) analyses of products included in Table 1.

<table>
<thead>
<tr>
<th>Product</th>
<th>MJ/ME/Kg</th>
<th>Crude Protein%</th>
<th>Indicative price 1/9/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calfgro Pellets – small calves</td>
<td>12</td>
<td>20</td>
<td>$387</td>
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<tr>
<td>Calfgro-S Cubes - weaners</td>
<td>11.5</td>
<td>18</td>
<td>$357</td>
</tr>
<tr>
<td>Easybeef</td>
<td>11</td>
<td>14.5</td>
<td>$354</td>
</tr>
<tr>
<td>Cattle Cubes - live export pellets</td>
<td>10</td>
<td>12</td>
<td>$313</td>
</tr>
<tr>
<td>Easyway hay replacer - nugget</td>
<td>8.5</td>
<td>6</td>
<td>$199</td>
</tr>
<tr>
<td>Lupins</td>
<td>13</td>
<td>30</td>
<td>NQ</td>
</tr>
<tr>
<td>Oaten hay – good quality</td>
<td>8.5</td>
<td>6</td>
<td>NQ short supply</td>
</tr>
</tbody>
</table>

Note: All prices are 2010 ex Perth +GST in 1 tonne bulk bags.

Summary:
- Don’t fail to plan any calf feeding operation – from start to reasonable end point
- Exploring market options should be a key part of the plan
- Do the job properly. Healthy strong conditioned weaners are more likely to find a home than ‘poddies’.
- Targeting lower growth rates e.g. 250g/day for younger calves will be marginally cheaper per day but calves will need to be fed longer so savings, if any, will be minimal.
- The costs quoted in Table 1 are an indication only and do not include freight
- Do the sums to ensure there are sufficient funds to see the programs through
• While not a pleasant option, euthanasia of calves which are deemed poor risks or simply uneconomic to feed may be appropriate in some situations.
• Keep good records of animal performance and feed intake of various groups. Weighing calves on a regular basis is good education for them and provides a good guide of how they are performing and helps with the progression of calves to appropriate feeding groups.
• Yard reared calves have few life skills and significant (heartbreaking) losses from wild dogs have occurred when successfully reared calves have been turned out at the end of sometimes long and expensive feeding programs.