FutureBeef

Weaner management

in northern beef herds

Russ Tyler
Tyler rural consulting
Gayndah

A joint initiative of:

Queensland Government | Northern Territory Government | Department of Agriculture and Food | mla MEAT & LIVESTOCK AUSTRALIA

The book

- Initiated by MLA
- Compiled by beef extension staff from Queensland, Northern Territory and Western Australia

Aim

To compile into one publication the knowledge on weaning and weaner management using current publications, experience of producers and departmental staff

Why wean?

To manage cow condition

- Aim
  - Cows in condition score 3.5 (minimum) at calving

Body condition score of 3.5

- Benefits
  - Halve nutritional requirements of cow
  - Improve conception rates during lactation
  - Reduce mortality

Why wean?

To avoid this…

When to wean

Controlled mated herds

- End of wet season (March to May)
- At least one month before pasture quality declines to allow cow time to gain condition

When to wean

Continuously mated herds

- **First round muster**
  - End of wet season (March to May)
  - At least one month before pasture quality declines to allow cow time to gain condition
- **Second round muster**
  - Second half of dry season
  - Reduce weight loss in cows
  - Increase early conceptions when season breaks

What to wean

Controlled mated herds

- All calves – may need 2 weanings with longer mating

Continuously mated herds

- Down to 100kg at both musters

Drought

- Wean earlier than normal possibly to 60kg

Managing the cow

- **Weaning similar to feeding cow 2kg of grain or 3kg molasses per day**
- Weaned cows
  - Delay start of supplementation
  - Urea based protein supplement usually sufficient
  - Many may not need supplement
- Focus supplement on weaners rather than breeders!

Managing the cow

- Cow has 75 days to conceive after calving to calve every 12 months
- **MUST** conceive while lactating
- Improved reproductive performance will accumulate over time

Managing the calf

- Calf must be fed and managed well
- Have good quality hay available as soon as calves go to weaner yard
- Weigh and draft into groups for targeted feeding and management
- Calves under 150kg liveweight must gain some weight
- Welfare is always a consideration

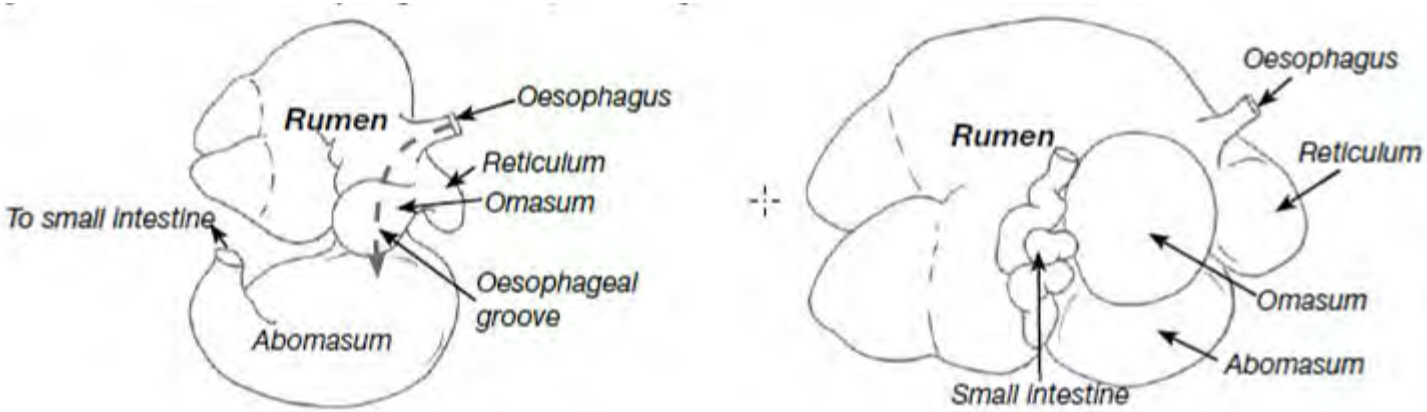
Managing the calf

Draft calves according to weight

Nutrition

Calf stomach

- Fully functional BUT still developing
- Will develop quickly with change from milk to roughage diet



Nutrition

Pasture

- Spell weaner paddocks over the wet season
- Have a separate paddock for second round weaners

NEVER use weaner paddocks as a 'spare paddock' for other stock

Nutrition

- Type and level of feeding determined by:
  - Target market
  - Pasture quality (test with NIRS)
  - Level of growth required
- For growth above 0.1kg per day in calves under 150kg, high energy and protein are required
- Consider implications of compensatory growth?

Nutrition

Can they eat enough if the hay quality is poor?

What a 100kg weaner needs to eat to gain 0.5kg/day

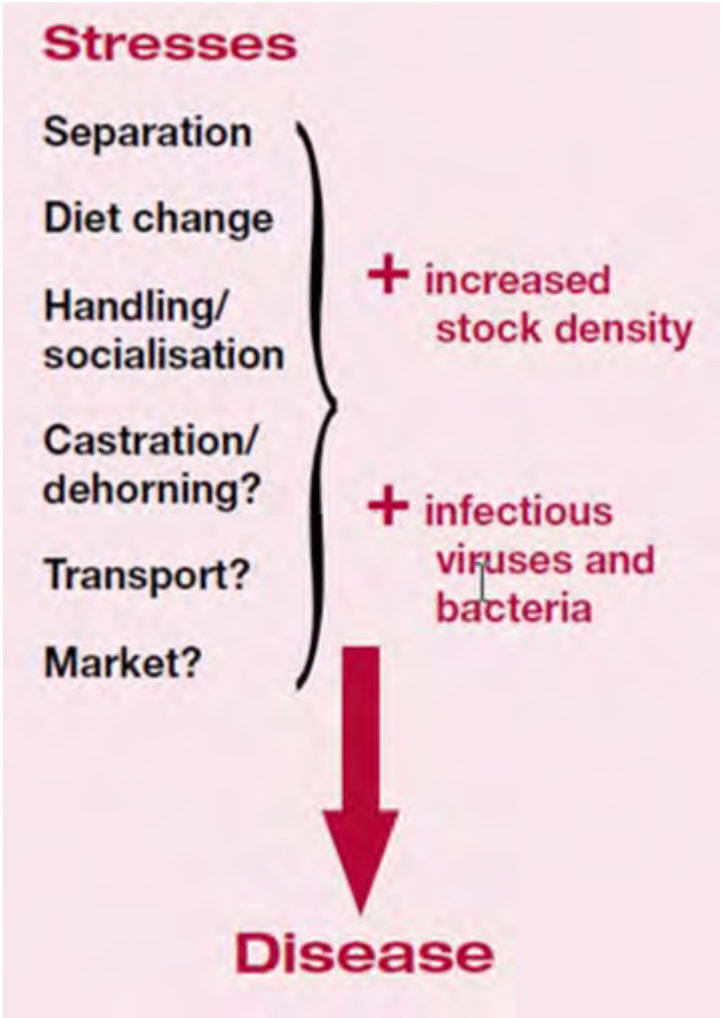
What a 100kg weaner can actually eat

Calculations

Some handy calculations to:

- Determine the dry matter of a feed
- Work out cost per kg of dry matter
- Gauge cost per kg of a nutrient in the feed
- Convert $ per tonne to cents per kg

Health


Stresses
Separation
Diet change
Handling/ socialisation
Castration/ dehorning?
Transport?
Market?
+ increased stock density
+ infectious viruses and bacteria
Disease

Health

- Parasites (internal and external) can be a problem
- Particularly Coccidiosis
  - Initiated by stress
  - Reduced by good nutrition and management
- Coccidiosis commonly not evident until 4–6 weeks following weaning
- All supplements should contain a coccidiostat

Weaner training

- Good training makes calves easier to handle for life
- Training programs vary - all aim to make cattle easier to handle
- Calves that are handled well at weaning perform better later in life
- Provides safer working environment for cattle (welfare)

Pasture

- Match stocking rate to feed available
- No chance of performing to potential if nutrition is poor
- Manage pasture to maximise pasture yield and quality (3P grasses etc.)

Pasture

Higher reproductive rates

- Fewer breeders for same number of weaners
- Lower stocking rates
- Improved pasture condition
- Improved cow condition

Economic impact

Economic impact of improved weaning and weaner management:

- Will vary according to current level of management
- Needs to be determined on individual basis

Growing replacement heifers

Better growth of replacement heifers allows:

- More at target weight from which to select
- Heavier culls before and after mating
- Greater opportunity for yearling joining

Table 8.2. Heifer growth rates required to achieve a minimum target mating weight of 300kg

Weaning weight 1st May (kg)	Weight gain to reach 300kg (kg)	Average daily gain required to reach 300kg (kg/day)	
		Yearling mating 1 Dec (214 days post-weaning)	2-yr-old mating 1 Dec (580 days post-weaning)
100	200	0.94	0.34
140	160	0.75	0.28
180	120	0.56	0.21
220	80	0.37	0.14
260	40	0.19	0.07

Benefits of good weaning

- Better breeder condition
  - Higher reproduction
  - Lower mortality
  - Lower supplement cost
  - More females to sell
  - More concentrated calving
- Quiet well-handled cattle
- Good market reputation for sale cattle

Extra costs

- Infrastructure to handle and manage weaners
  - Yards
  - Fencing to segregate weaners by weight and supplement
  - Feed equipment (loaders, feed bins and troughs)
  - Feed storage
- Expensive supplements for weaners less than 150kg
- Extra labour to manage younger calves

Issues to be aware of

- Weaners **must** be weighed
  - Problem not realising number of calves under 150kg, therefore not managing them appropriately
- Recognition of stress of weaning
  - Weaning process
  - Transport
  - Large numbers
  - Branding, castrating and dehorning

Issues to be aware of

- Recognition of nutrition required to meet target growth rates
- Health and welfare issues
- Designated weaner paddocks, including separate paddock for second round weaners
- Spell weaner paddocks over wet season

Where to from here?

- Measure the impact of rate of gain from weaning to slaughter on carcase characteristics (using weaners of a range of weights at weaning)
- Establish minimum growth targets to optimise future productivity of different weight weaners for a range of markets including live export
- Demonstrate the value of NIRS as a tool to predict diet quality of weaners
- Use diet quality to determine supplementary feeding requirements to achieve a range of growth rates

To get a copy

- To order hard copy
  - Call MLA membership services hotline on 1800 675 717
  - Email publications@mla.com.au

- To download
  - Go to www.mla.com.au/publications

- Russ Tyler 07 41 611 306
  0437 611 306
  russelltyler@bigpond.com

More information

- Contact your local Beef Extension Officer

  or

- Russ Tyler 07 41 611 306

  0437 611 306

  russelltyler@bigpond.com