Successful calf rearing workbook 2020



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Housing

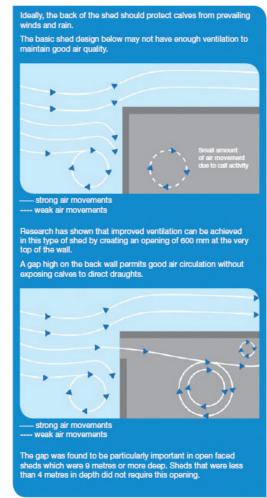
All calves need an environment that:

- ✓ Is draught free.
- ✓ Is ventilated to prevent gas build-up.
- Provides separation between groups.
- Provides at least 1.5m² of space per calf.
- Has easy access to feed, fibre and water.
- And is easy to clean for rearers.

Bedding

For calves bedding should:

- ✓ Be free draining.
- Have insulation properties for warmth.
- ✓ Encourage lying down.
- And be easy to clean and dispose of at the end of the season for rearers.



Reference: Dairy Australia Rearing Healthy Calves Manual 2nd edition.

Shelter

When outside it is recommended that calves have a sheltered area that reduces the exposure to wind and rain.

- Check calf paddocks.
- Feed availability.



Collection

Replacement heifers

- Pick up calves as often as possible to ensure early colostrum feeding (or take colostrum to paddock).
- Transport with care to ensure no injuries.
- Ensure trailers are clean to prevent risk of disease transfer.
- Group calves as they are brought in and keep group together in the same pen until they leave the shed.



Beef rearing

When purchasing calves look for the following in the animals:

- Have been fed with a good colostrum programme.
- Show no signs of illness.
- Weigh over 40kg.
- Come from as few sources as possible.
- NAIT tags.



Colostrum

What is colostrum?

- First milk produced by the cow from the first milking.
- Contains antibodies (immunoglobulins/IgG), vitamins, minerals that help early development of the calf.
- Colostrum is an essential first feed as there is no transfer of antibodies between the cow and calf in utero.
- Calves use antibodies in colostrum for protection until they can make their own.



The 4 Q's of colostrum

Quickly

- The sooner colostrum is consumed, the better it is absorbed. Ideally, the first feed should be given before 6 hours of age. After the first 24 hours of life, less IgG can be absorbed.
- As the gut develops, less IgG is absorbed but colostrum is still very important
 - Higher nutritional value than standard milk.
 - Helps prevent bad bacteria in the gut causing disease and illness.



Quality

- High quality colostrum is essential to ensure the calf receives the immunity they need.
- Colostrum quality declines from the point of calving so the earlier the cow can be milked, the better the milk quality of colostrum.
- Colostrum should be collected in clean buckets, with lids, and stored correctly.

Quantity

 Calves should receive 10 – 15% of their body weight in the first 12 hours. Ideally this should be split into 2 feeds.

	Example		
Birth Weight	X	= Colostrum	
40kg	10 %	41	
	15 %	61	

Your Calves								
Birth Weight	X	= Colostrum						
	10 %							
	15 %							

sQueaky

Hot wash after all feeding.



What should you look for when choosing calf feed?

Great taste

Early feed intake is the key to good rumen development; palatability is vital from day one.

- Smell fresh.
- ✓ Taste great.
- Stale/mouldy smell.

Protein

Feeds should include high quality proteins, essential for efficient growth of calves.

- Soya bean, cottonseed, sunflower and canola meals.
- 🗴 Urea.

Fillers

Try to avoid 'filler' ingredients.

Palm kernel, bakery and confectionary waste.

Vitamins and minerals

Vitamins and minerals are essential for calves to ensure good growth and help fight off diseases.

- ✓ Balanced calcium and phosphorus levels.
- ✓ Vitamin E.
- Selenium.

Coccidiostat

A coccidiostat is essential to prevent coccidiosis, and must be included in calf feed at a rate to suit calf size. To ensure calves don't over or under consume the required rates provide sufficient trough space for all calves to eat at the same time.

✓ Lasalocid (Bovatec®) or Monensin (Rumensin®).

Water

All calves of all ages need to have continued access to clean and fresh water.

- ✓ Clean, fresh, daily.
- ✓ Daily cleaning of water trough.

Fibre

Calves need access to long fibre; hay or straw.





Wean calves from milk when they:

- Weigh <u>at least</u> 65kg.
- Are eating 1kg of meal each day consistently for 3 days.
- Have a prominent "pot belly".

Calculate weaning growth targets

Weight at weaning from meal (kg) – birthweight (kg) = Required gain (kg)	
Gain (kg) Rearing period (days) = Average gain/day (kg)	
Average gain (kg) x 1,000 = Average gain (g)	





"How to" in the shed

However you run your calf rearing system it is important that it's consistent and that everyone is clear on responsibilities and what to do. Write a plan and put it up in the calf shed.

Calving check-list

	Notes
Housing	
Bedding	
Shelter	
Calf pick up	
Trailer	
Colostrum	
Pen set-up	
Disinfectant	
Electrolytes	
Milk	
Feed	
Fibre	
Water	
Paddock rotation	
Vet plan	



	Notes
First aid kit	
Drench	
Vaccines	







Calving contacts list

	Who	Contact number
Calf rearer		
Farm manager		
Vet		
Feed rep	SealesWinslow	0800 287 325
Rural retailer		







The short period known as calf rearing is the most important step in developing a productive cow. Attention to detail is essential. If something goes wrong, don't panic, walk through your plan step by step. Was something missing?



You are important too.
Take breaks when
possible. Look after
yourself and your team.

Don't forget to ask for help. Calf rearing can be a stressful period so remember to ask for help or advice about anything you are unsure of.

As the season progresses, tiredness can creep in, but the last calf still needs the same care as the first.



Young stock target liveweights

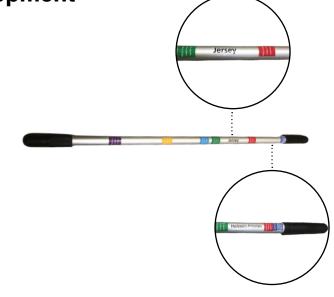
	Age in months:	3	6	9	15	22
Breed	Mature liveweight (kg)	20%	30%	40%	60%	90%
Jersey	350	70	105	140	210	315
Jersey	400	80	120	160	240	360
JxF	450	90	135	180	270	405
Friesian	500	100	150	200	300	450
Friesian	550	110	165	220	330	495

Reference: DairyNZ Facts & Figures for New Zealand Dairy Farmers

My cows	Mature liveweight (kg)	20%	30%	40%	60%	90%

Don't forget BCS (Body Conditioning Scoring) and skeletal development





Notes

Notes

