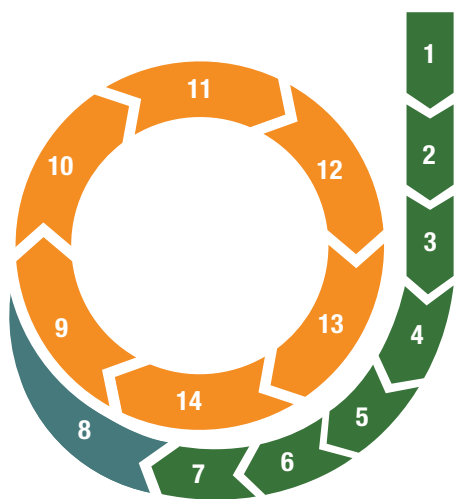


# Ahead of the Herd™

Efficient Dairy Reproduction



# Keeping you and your herd ahead



## Heifer

1. Birth
2. Rearing To Weaning
3. Wean
4. Grazing Transition
5. First Year Growth
6. First Mating
7. First Pregnancy

## Integration

8. Integration to the Herd

## Workforce

9. Calving
10. Early Lactation
11. Mating
12. Late Lactation
13. Dry Off
14. Dry Off Period

## Getting it right starts here

Improvement is central to driving any farm business forward, and continually improving the herd is high on the radar of most farmers.

That's because a great herd of cows is a cornerstone of the dairy farming business.

The more choice you have the faster you can drive herd improvement, building the herd you want. And more choice is a key benefit of good reproductive performance.

Getting good reproductive performance out of the herd comes down to managing the animals well throughout the season and across their lifetime; helping them to calve early and recover quickly year on year.

Whether you're managing young stock, calving, mating or body condition, there are many jobs to be done.

The Hoofe Doofer™ is designed with that in mind, to help you stay on top of those jobs, as you build the herd and herd performance you want.

## Using the Hoofe Doofer™

The Hoofe Doofer is one part of the Ahead of the Herd™ package of resources and can be used on the farm or in the office.

The 'Objectives' section helps everyone understand what you are trying to achieve and why.

'Tasks' keeps tabs on the main jobs to be done.

It can be used as a team training resource and has supplementary handy seasonal and life phase checklists available at

[www.6weeks.co.nz](http://www.6weeks.co.nz).

# 1. Birth

# Tasks

# Who and When



**The future of the herd begins here. Investing in them is investing in your own future.**

You control the factors which will influence her future fertility, milk production and longevity.

## Objectives

- Skilled, empathetic calf rearers get the best out of the calves.
- Good communication exists between the calf rearer and all other staff.
- The calf-shed feeding regime and routine is consistent and well understood.
- Staff know the herd management and calf collection protocols and keep things running smoothly.
- Intervention at the correct time maximises calf health and well-being.

### Health

Dip or spray navels with appropriate disinfectant.

Give each calf good quality colostrum, (they need 2-3L within 6 hours of birth).

Make and follow an animal health plan; have it available in the calf shed.

### Preparation

Design and follow an effective policy for calf collection and admission to the calf shed.

Identify calves (tag and record).

Calf shed: clean and disinfect between seasons, then keep hygienic and tidy.


## 2. Rearing To Weaning

## Tasks

## Who and When



**The first three months is crucial, she is at the start of her journey through the herd and getting it right now helps maximise her potential.**

Good nutrition and health in the calf shed will influence when she is weaned and how prepared she is for the next phase.

### Objectives

- A clean, hygienic calf shed is maintained throughout the calving season.
- Good communication exists between the calf rearer and all other staff.
- A consistent, quality calf feeding regime results in optimal growth rates and rumen development pre-weaning.
- Staff understand the importance of the different aspects of the feeding regime.
- Health issues are dealt with promptly and correctly.

### Health

Follow calf pen stocking and hygiene policies right through calving.

Staff monitor calf health daily and follow animal health plan.

Implement calf feeding regimes correctly.

Disbud calves as recommended and include pain relief.

Staff check water and feed availability daily.

Isolate sick calves and follow best practice 'hospital pen' routines.

Ensure safe and humane calf euthanasia practices, in accordance with animal welfare codes.


### Preparation

Ensure a quality grazier is lined up and the contract is agreed upon.

Schedule routine animal health treatments / procedures in the diary.


## 3. Wean

## Tasks

## Who and When



**Weaning at the appropriate time and stage is important for continued good development post-weaning.**

Following a consistent best-practice weaning regime will give calves the best chance to continue growing as required after they've been weaned.

### Objectives

- A good weaning regime is in place and everyone understands why it is important.
- Calves are weighed regularly and weaned once they have reached their target weight.
- The weaning protocol results in a smooth transition off milk and meal without a growth check.

### Health

Know and follow the target weaning weights for different dairy breeds, or for your own animals.

Weigh regularly and wean the calves off milk that are up to weight and eating 0.75-1kg of meal per day (where feeding meal).

Hold back the lighter, younger calves and don't wean until they are up to weight.

Monitor health and treat appropriately and in good time.


## 4. Grazing Transition

## Tasks

## Who and When



**Getting the heifers on to the right grazing farm now is important for good growth and maximising their future potential.**

The first year is critical for skeletal and muscle development, so what you do to help meet growth targets will reap rewards in the long-term.

### Objectives

- Calves are closely monitored and managed in the weeks after transition to the grazing block for weight gain and health.
- A contract is agreed on and stuck to, so the heifers have the best chance possible.
- Heifer calves are up to weight targets and are healthy before they leave the home farm giving them the best start on the grazing block.
- The grazier is provided with necessary supplies to make the transition for the calves easier, as agreed in advance.
- Good research results in the right grazier being chosen.

### Feed

Ideally, continue to feed meal to the calves up until the time they leave the home farm, and then provide the grazier with a week's worth of meal so the transition to the new farm is smoother.

If this is not practical, ensure they're weaned off meal well before they leave for grazing and check that suitable grass is available on arrival.

### Planning

Communicate with the grazier; check roles and responsibilities are clearly agreed.

Discuss a trucking strategy with your advisor, especially if calves are travelling long distances.

### Health

Have an agreed health plan with your grazier. Complete all treatments on time.

Don't send heifer calves to the grazier if they aren't up to weight or are looking unhealthy.

Monitor calves closely in the days/weeks after moving onto the grazing block and deal with any poor performing individuals promptly.

More Young Stock resources are available at [www.dairynz.co.nz](http://www.dairynz.co.nz)

## 5. First Year Growth

## Tasks

## Who and When



### Well grown heifers are more productive.

The first 12 months are critical for the skeletal growth required to achieve live weight targets at 22 months.

## Objectives

- Heifers receive enough high quality pasture to achieve live weight targets.
- Rising one year olds are 40% of mature weight at 9 months and 60% at 15 months.
- Agreed expectations and responsibilities are in place between the grazier and the stock owner.
- Good monitoring with regular weighing, reporting and communication is maintained.
- An agreed mating plan is in place in advance.

### Health

Have, and implement, an agreed action plan if heifers fall below agreed thresholds.

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Stick to the animal health plan as set up with the vet and agree who calls the vet.

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### Weight

Weigh regularly, compare against target weights and deal with poor doers appropriately.

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### Monitor

Keep in touch with the grazier regularly; visit the heifers if possible.

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Discuss strategies for unexpected eventualities.

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### Feed

Have an agreed feed plan that ensures good quality pasture, and supplementary feed if necessary.

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Discuss winter feed types and seek advice if required.

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## 6. First Mating



**A well-managed mating period is essential if heifers are to get in calf quickly.**

Heifers need to be cycling well and mated at the right time to get good results.

### Objectives

- Heifers get in calf quickly so they'll calve down early in the main herd.
- Heifers are at target live weight, cycling and growing well when mating starts at 15 months.
- During AB, programmes are implemented correctly and achieve good results.
- During natural mating, service bull performance achieves good results.
- Mating length is appropriate to avoid late calvers.

## Tasks

### Mating

Mate heifers 7-10 days earlier than the main herd.

Apply heat detection aids, if being used.

If using AB, draft and mate the heifers at the right time.

### Bulls

Monitor service bull performance and replace injured bulls immediately.

Take bulls out from heifer mobs in good time to avoid late calvers.

Source, select and health check sufficient, suitable service bulls early.

Seek advice about bull ratios.

### Communication

Finalise mating plan and ensure everyone (grazier, vet and herd improvement company, if using AB) knows and understands the plan and dates in advance, working together as a team.

Agree on and communicate key dates.

## Who and When








# 7. First Pregnancy

## Tasks

## Who and When



**Early calving heifers that meet live weight targets are more likely to get in calf again early next mating season.**

Ensure heifers are growing steadily so they are on track to meet target liveweights.

### Objectives

- Heifers are at live weight target at 22 months and well prepared for transition into the herd.
- Heifers are ready to enter the main herd with their treatments up to date, including any vaccinations and mastitis prevention treatments.

### Health

Weigh regularly and manage heifers so they are on track to make target live weight at calving.

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Keep up with parasite control, vaccination and other health treatments according to animal health plan.

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Ensure teat sealants are booked in and administered at the right time, if being used.

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### Mating

Pregnancy test the heifers at the right time to get as much quality information as possible.

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### Management

Monitor feed levels especially through a dry summer or autumn.

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Have a winter management plan in place so that transition on and off winter feed is smooth.

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Have a transition plan in place for their return home.

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### Communication

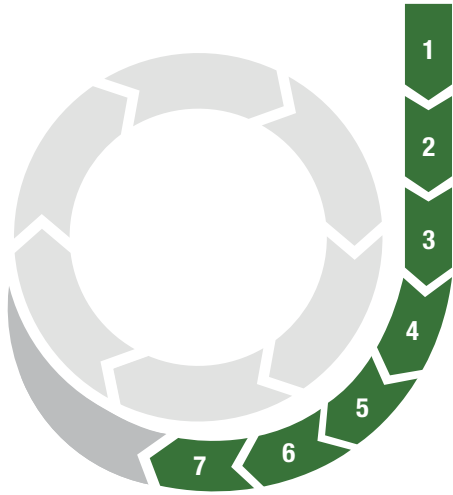
Keep up continued good communication with grazier.

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# Heifer Overview

# Notes

# Targets



## Heifer

1. Birth
2. Rearing to weaning
3. Wean
4. Grazing Transition
5. First year growth
6. First Mating
7. First Pregnancy

### Preparation

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### Preparation

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### Weight

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### Weight

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### Things to consider

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### Things to consider

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## 8. Integration into the Herd

### Tasks

### Who and When



#### Don't forget about your two and three year olds!

Effective integration and management of young cows in the herd allows them to better survive and thrive.

#### Objectives

- Heifers are fully grown and successfully transitioned into life in the herd, achieving a 90% 3 week submission rate at their next mating period.
- First and second calvers have a tight calving pattern and few empties.
- A socialisation plan is in place for transitioning the heifers to the home farm and into the herd.

#### Preparation

Introduce a proportion of mixed age cows to the mob so the heifers get familiar with herd hierarchies.

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Train staff pre-calving in calving management and animal first aid.

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#### Body Condition Score

Monitor growth and condition score so they are calving at target liveweight the appropriate condition score.

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Manage condition loss once they calve so they meet BCS targets at mating.

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Manage 3 year old condition scores closely so targets are met at calving and mating.

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#### Things to consider

Bring heifers back to the home farm early enough to get them used to the farm and changes in feed.

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## 9. Calving



**Calving can be a high risk period for the cow and calf so vigilant management will help deliver a smooth calving period for both.**

An easy calving and transition into the milking herd will increase the cow's chances of getting back in calf early in the next mating season.

### Objectives

- All cows are at target body condition score at calving.
- A compact calving pattern is achieved with healthy, trouble free calvings.
- Body condition loss and non-cycler cow numbers are minimised through pro-active management right from the start.
- Farm policies and staff training are in place before calving starts.
- Tasks are allocated so everyone knows their responsibilities.
- Communication channels are clear to all staff.

## Tasks

### Preparation

Set up and communicate policies and procedures for calving, springer, colostrum, hospital and milking mobs.

### Health

Follow animal health plan closely; vet supplies and spring first aid kit at the ready.

Identify and deal with 'At-Risk cows' early.

### Management

Allocate responsibilities for mobs; put the best stock-person in charge of the colostrum mob.

Complete staff training for calving management and cow/calf first aid before calving starts.

Regularly monitor the calving mob for cow health and calving difficulties; record and deal with problems promptly.

Follow calf collection, identification and calf-shed delivery plan.

## Who and When



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# 10. Early Lactation

## Tasks

## Who and When



### Prepare for peak production and mating.

Cows are generally increasing their production through the spring; body condition loss needs to be minimised so cows can produce well and start cycling in preparation for mating.

### Objectives

- Body condition score is managed to meet targets.
- Cow health is continually monitored and all problems treated promptly and appropriately.
- Staff are fully trained and know their responsibilities prior to the next stage of the season - mating!
- All staff have the necessary resources to begin monitoring heats prior to the start of mating.
- A plan is in place for managing non-cycling cows.

### Management

Split herd into management mobs according to the farm policy e.g. condition, age structure.

Send staff on heat detection training courses as a refresher and to get everyone focussed on mating.

Start recording pre - mating heats and confirm the mating plan.

### Body Condition Score

Body condition score the herd and manage cows to meet targets.

### Health

Have an animal health plan and stick with it so health tasks are done in good time.

Make sure bulls are ordered, BVD tested and vaccinated; confirm arrival dates.

Keep monitoring cow health and treat promptly and appropriately.

# 11. Mating

## Tasks

## Who and When



**During AB, accurate heat detection helps ensure cows are mated at the right time; for natural mating you'll need sufficient quality service bulls.**

The best heat detection program involves careful planning, good observation and effective use of heat detection aids.

### Objectives

- Staff are trained and know responsibilities during mating.
- 90% 3 week submission rates are achieved with minimal intervention.
- Heat detection is accurate and efficient.
- Non-cycling cows are identified and dealt with early.
- Recording practices ensure all heats and matings are recorded and progress monitored.
- Bull selection and management is top notch.

### Mating

Heat detect cows, draft, double check and put them up for mating.

Check bull power and management is best practice — ask your advisor.

Decide on a pregnancy testing strategy with your advisors to get the best information for decision making.

### Health

Continue to monitor cow health, feed quality and feed intake.

Source healthy, suitable service bulls and get them on farm early to settle in.

### Management

Complete heat detection policy, training and task allocation.

Ideally, do paddock checks 2 hours after milking (to help improve heat detection efficiency).

Ensure good communication throughout all of mating and don't let staff fatigue go undetected.

Decide when to take bulls out from the herd and stick with that date.

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## 12. Late Lactation

## Tasks

## Who and When



**The best time to review the herd's reproductive performance and plan ahead for the next year.**

Once you have your pregnancy scanning results, make time to sit down with your advisors and your team to review this year's performance and to identify areas you'd like to work on next year.

### Objectives

- A feed budget and body condition score (BCS) management plan are in place to meet BCS targets.
- A dry-off plan is in place with flexibility allowing for feed and weather conditions.
- Winter feed budgeting is complete and crops assessed.

### Mating

Make sure the whole herd has been pregnancy tested and decide how the empty cows will be dealt with and identify culls.

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Consider a second late pregnancy test to avoid dry cow therapy treatment or winter grazing of cows that have slipped.

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### Body Condition Score

Body condition score herd and manage to achieve targets.

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### Preparation

Book in a mating review with your rural professional.

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Agree with your winter grazer on expectations and responsibilities.

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### Feed

If feed pinches arise, cull early and allocate feed to the cows you'll still have next year.

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Monitor feed quantity and quality and adjust your plan if necessary.

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Organise winter grazing and ensure that plans for the best winter grazing possible are still on track.

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# 13. Dry Off



**It's time to ensure that your cows are in good health and condition going into winter so they can be in top form at calving.**

Planning dry off and managing cows strategically can help farmers meet age group body condition score (BCS) targets for their herd.

## Objectives

- A dry-off plan is in place and is adjusted according to weather and feed conditions.
- Cows are successfully dried off and a BCS management plan implemented.
- Staff understand the importance of correct drying-off procedures.
- Cows are successfully transitioned onto winter feeding regimes.
- Culling strategies are used to help set the herd up for next season's calving.

## Tasks

## Who and When



### Management

Make a dry off plan based on body condition score, calving date and feed budgets with your advisors.

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Train staff on the importance of correct dry-cow therapy insertion.

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Communicate with your winter grazer early to assess winter feed supply and confirm the management plan.

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Book heifer teat sealant dates in early, if required.

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### Health

Use your herd test results when making culling and treatment decisions.

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Cull final empties and any others that need to leave the herd.

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Make a dry-cow treatment plan with your vet.

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### Body Condition Score

Measure and manage body condition to meet targets.

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# 14. Dry Off Period

## Tasks

## Who and When



**Monitor feeding to ensure cows are fit, healthy and in the correct condition at calving.**

Monitoring and adjusting feed as necessary is important to ensure cows are on track for a successful calving and a productive milking season.

### Objectives

- Dry cows are monitored and managed closely.
- Cows wintering out transition on and off crops smoothly and meet body condition gain targets.
- The season to date is reviewed with your team to identify gaps, celebrate successes and plan for next year.

### Management

Manage dry cows at home to meet BCS & feed budget targets and to minimise pasture damage.

Ensure good communication with graziers.

Hire new staff, make them welcome and commence training.

Take a holiday if you can, and ensure everyone is refreshed and ready for the new season.


### Preparation

Be prepared for bad weather and act promptly.

Start preparing for calving e.g. calf sheds and spring first aid kit.


### Health

Regularly check cows at winter grazing, bring home poor doing cows.

Identify and treat health issues promptly, including mastitis after dry-off.

Manage body condition proactively, drafting between mobs for targeted feed allocation.


## Workforce Overview



### Workforce

- 9. Calving
- 10. Early Lactation
- 11. Mating
- 12. Late Lactation
- 13. Dry Off
- 14. Dry Off Period

## Notes

### Preparation

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### Weight

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### Things to consider

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## Targets

### Preparation

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### Weight

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### Things to consider

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# Targets Overview

## Young Stock Targets

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Liveweight at maturity (kg) = 500 kg +  
Liveweight Breeding Value (Lwt BV)

Age & percentage of mature weight

6 months	30%
9 months	40%
15 months	60%
22 months	90%

## Herd Reproduction Targets

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6 week in-calf rate	78%
3 week submission rate	90%
Overall conception rate	60%

## Bull Numbers

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- Run one bull per 20 – 30 yearling heifers.
- Use at least one bull for every 30 cows still needing to get in calf.

## Body Conditioning Score Targets

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BCS targets at calving

- Mature cows/ BCS of 5.0.
- Heifers and rising 3 year olds/ BCS of 5.5.
- No more than 15% of herd below BCS 5.0.
- No more than 15% of herd above BCS 5.5.

BCS targets at mating

- The average decrease in BCS for the herd is no more than 1.0.
- No more than 15% of cows below BCS 4.0 and cows should be gaining BCS.

Any advice, tasks or suggestions given in this programme booklet (“advice”) are of a general nature only and may not be suitable for your individual herd requirements. We recommend that you discuss your individual herd requirements with your veterinary and farm advisory professionals.

Any results from the advice given in this programme booklet may vary and LIC gives no warranty that the intended outcome will be achieved.

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