Tasmania is a great place to dairy farm. It has a good climate, positive and skilled dairy farmers with a strong industry support network. This combination of positive factors has resulted in the Tasmanian dairy industry continuing to grow, bucking the national trend. And while there are certainly ups and downs and a wide range of profits, Tasmanian average dairy farm profitability is amongst the highest in Australia.

While this is positive, it doesn’t mean there aren’t concerns about the ongoing future of our industry. The dairy industry is very different today, compared to what it was 10 years ago, and it will continue to change during the next 10 years and beyond. How do we ensure Tasmanian dairy farms are profitable into the future? This is what the new Dairy HIGH project is focused on.

Dairy HIGH is jointly funded by Dairy Australia and the Tasmanian Institute of Agriculture (TIA). It follows on from the Dairy On PAR project, which had a focus on closing the gap between what is theoretically possible and what is practically...
being achieved on farms. Dairy HIGH expands on those themes, looking at the sustainability factors that are of particular importance to Tasmanian dairy farms. These include:

- **People**
- **Profit**
- **Production from pasture**
- **Animal welfare**
- **Environment**

### People

Skilled people are essential to the success of any dairy farm. TIA social researchers will be talking with dairy employers and employees about the employment challenges and successes seen across the industry. These conversations will provide an up-to-date picture of employment on Tasmanian dairy farms. Given the number of large herds in Tasmania (Tasmania has the highest average herd size in Australia), the researchers are particularly interested in talking with large herd teams.

In association with the people-focused research, Dairy HIGH provides an extension program specifically aimed at people skill development.

The extension program includes:

- Continuation of regional discussion groups
- Pasture workshops and pasture coaching
- Pasture measuring and monitoring boot camps
- Development of a Pasture Masterclass
- Seasonal field days and workshops
- Tassie Dairy News

### Profit

If dairy farms aren’t profitable, they cannot be sustainable. Benchmarking is going to be the focus for this component of the project. At this point some of you are probably rolling your eyes and groaning, because you don’t like benchmarking or are tired of hearing about benchmarking. We would love to hear from you! We want to improve our understanding of why more farmers don’t participate in benchmarking, so we hopefully can encourage more people to become involved. We know there is a lot of value in benchmarking for individual farms but currently only about 10% of Tasmanian dairy farmers participate in benchmarking.

We will continue to provide the Dairy Business of the Year Award and Share Dairy Farmer of the Year Award to highlight and promote practices that lead to profitable businesses.

### Production from pasture

Having a high proportion of pasture in the diet is important in helping to achieve low cost of production. Research conducted in this component of the project will look at herd dynamics, particularly in large herds, and the impact herd dynamics have on pasture intake. Researchers will also investigate novel grazing management practices and technologies that increase individual cow pasture intakes.

### Welfare

Having healthy and happy cows is something farmers want because they care about their animals. Healthy, happy cows are also important in achieving good production and profit.

We also know animal welfare issues are becoming increasingly important to consumers. A consumer survey conducted by L.E.K. Consulting last year in the USA, determined a quarter of people were committed to purchasing food they considered was ethically produced.

The percentage of consumers making purchasing decisions based on ethical considerations is increasing with each generation.

One aspect of dairy welfare that dairy farmers and consumers both care about improving is that of bobby calves. The first aspect of the welfare component for Dairy HIGH is to learn more about current bobby calf management and the opportunities for change. You will soon be receiving a survey in the mail – please take the time to fill this in and return it.

If you don’t receive a survey by the end of May, please contact Tom Snare at Thomas.Snare@utas.edu.au or 0429 940 063 and one will be sent to you. An online version of the survey can be accessed at https://survey.sogosurvey.com/r/dD2jxm.

Further research and extension activities for bobby calf options will be developed based on the results of the survey.

### Environment

Pasture consumption is critically important to the profitability of Tasmanian dairy farms – regardless of the farming system. Nitrogen is a nutrient applied to boost pasture growth, it is also a nutrient that can be a negative impact on the environment if not managed well. TIA researchers will be trialling organic nitrogen sources as well as investigating the ability of different pasture species to utilise the soil organic nitrogen pool.

### What does the name mean?

For those who are wondering what Dairy HIGH means: Dairy is simply the industry we work in. HIGH stands for the focus for this component of the project. At this point some of you are probably rolling your eyes and groaning, because you don’t like benchmarking or are tired of hearing about benchmarking. We would love to hear from you! We want to improve our understanding of why more farmers don’t participate in benchmarking, so we hopefully can encourage more people to become involved. We know there is a lot of value in benchmarking for individual farms but currently only about 10% of Tasmanian dairy farmers participate in benchmarking.

We will continue to provide the Dairy Business of the Year Award and Share Dairy Farmer of the Year Award to highlight and promote practices that lead to profitable businesses.

The percentage of consumers making purchasing decisions based on ethical considerations is increasing with each generation.

One aspect of dairy welfare that dairy farmers and consumers both care about improving is that of bobby calves. The first aspect of the welfare component for Dairy HIGH is to learn more about current bobby calf management and the opportunities for change. You will soon be receiving a survey in the mail – please take the time to fill this in and return it.

If you don’t receive a survey by the end of May, please contact Tom Snare at Thomas.Snare@utas.edu.au or 0429 940 063 and one will be sent to you. An online version of the survey can be accessed at https://survey.sogosurvey.com/r/dD2jxm.

Further research and extension activities for bobby calf options will be developed based on the results of the survey.

### Environment

Pasture consumption is critically important to the profitability of Tasmanian dairy farms – regardless of the farming system. Nitrogen is a nutrient applied to boost pasture growth, it is also a nutrient that can be a negative impact on the environment if not managed well. TIA researchers will be trialling organic nitrogen sources as well as investigating the ability of different pasture species to utilise the soil organic nitrogen pool.

### What does the name mean?

For those who are wondering what Dairy HIGH means: Dairy is simply the industry we work in. HIGH stands for the focus for this component of the project. At this point some of you are probably rolling your eyes and groaning, because you don’t like benchmarking or are tired of hearing about benchmarking. We would love to hear from you! We want to improve our understanding of why more farmers don’t participate in benchmarking, so we hopefully can encourage more people to become involved. We know there is a lot of value in benchmarking for individual farms but currently only about 10% of Tasmanian dairy farmers participate in benchmarking.

We will continue to provide the Dairy Business of the Year Award and Share Dairy Farmer of the Year Award to highlight and promote practices that lead to profitable businesses.

The percentage of consumers making purchasing decisions based on ethical considerations is increasing with each generation.

One aspect of dairy welfare that dairy farmers and consumers both care about improving is that of bobby calves. The first aspect of the welfare component for Dairy HIGH is to learn more about current bobby calf management and the opportunities for change. You will soon be receiving a survey in the mail – please take the time to fill this in and return it.

If you don’t receive a survey by the end of May, please contact Tom Snare at Thomas.Snare@utas.edu.au or 0429 940 063 and one will be sent to you. An online version of the survey can be accessed at https://survey.sogosurvey.com/r/dD2jxm.

Further research and extension activities for bobby calf options will be developed based on the results of the survey.
for High Integrity Grass-Fed Herds. This recognises the high standard we set for ourselves in the dairy industry. We aim to produce milk with integrity – milk of high quality coming from an industry that cares for its people, animals and environment. The name also highlights the importance of pasture to our industry. It doesn’t exclude other feed inputs as we know there is a wide spectrum of feeding practices on Tasmanian dairy farms. We just want to make sure the industry can maximise the pasture advantage we have in Tasmania.

This is a brief snapshot of activities taking place in the Dairy HIGH project. We will provide more detail and updates in future issues of Tassie Dairy News - Dairy HIGH.

An industry of opportunity

Symon Jones, TIA

She is quietly spoken, very well organised, considered and humble in her achievements.

Growing-up in Sydney, Angelique Korpershoek had never heard of the small town of Stanley, situated on the picturesque coast of Tasmania’s far North West, near where she now calls home.

From a young age Angelique was interested in both medicine and science, which led to her deciding she wanted to be a vet (research shows most people who become vets decide on their career in grades 5-6). Angelique studied veterinary science at Sydney University, the oldest veterinary college in Australia. After graduating, she moved to Tasmania to work as a large-animal vet at Smithton Veterinary Service (SVS).

While working full-time at SVS she met local dairy fitter Isaac Korpershoek and they became engaged. Angelique had always wanted to travel so she and Isaac organised a working holiday to the United Kingdom where they planned to spend two years. However, the trip was cut short when Isaac received a phone call asking if he would like to run the family farm. It was ‘now or never’ situation and while it meant the end of their working holiday, the decision to return home and take on the family farm has paid-off for the couple.

Angelique continues to work as a vet two days per week as well as working on their 300-cow dairy farm at Forest. She and Isaac have four children:
- Isabella, 7 years old
- Sienna, 6 years old (pictured with Angelique)
- Ari, 4 years old
- Celeste, 2 years old

Working as both a vet and dairy farmer, Angelique has developed a passion for the dairy industry and the Circular Head community she now calls home. This motivated her to become a member of the People in Dairy ‘Pro-Dairy’ Advisory Committee, a committee aiming to build a positive image in the dairy industry through promotion and education.

In 2017 Angelique was appointed as a DairyTas Board Director and in 2018 was nominated as the Deputy Chair. Being a DairyTas Board member requires a lot of commitment as there is a lot to learn but Angelique is driven by a desire to give back to the industry that has provided her with so many opportunities.

While the DairyTas board is a well-established organisation, Angelique says there is still a lot to do.

“The industry is well supported, but it is important we are delivering the right programs, at the right time, engaging with as many farmers and as many people in the community as we can.

We need to be visible.”

Angelique is interested in the role DairyTas provides in developing programs that will help facilitate a sustainable dairy industry. Her key areas of interest are:
- education and training to build greater capacity in the dairy workforce
- social licence to operate
- animal welfare

Angelique is keen to make a difference in her role as a board member, “the industry is continually evolving, women make up half of the agricultural workforce in Australia, it’s not why I applied for the board position, but women do need to value themselves and the contribution they make to their respective field. We often see things differently and providing a balanced view can only be a good thing.”

Angelique continues to be inspired and motivated by her growing family, working in a busy vet practice and by the dairy industry she is a part of. She hopes that her tenure on the DairyTas Board provides the opportunity to promote DairyTas programs to the advantage of everyone engaged in the dairy industry.
Is your drying-off strategy costing you?

Lesley Irvine, TIA

It is estimated the total cost of a clinical case of mastitis is $277 (Dairy Focus, 2013). Your dry-off strategy will have a big impact on the number of clinical cases of mastitis occurring at the start of the next lactation (or even during the dry period). Get your dry-off strategy right and it can save you a lot of money.

What is drying-off?

At the end of lactation, cows need a dry (not lactating) period to allow their udder to repair damaged tissue and rejuvenate. A dry period of a minimum of six weeks (42 days) is recommended. A dry period of eight weeks (56 days) is preferred. The length of the dry period will impact on the daily milk yields achieved during the following lactation.

Dry-off procedure

The Countdown Farm Guidelines for Mastitis Control (2018) recommend the following strategies for drying off:

• Cows should be dried of when their production is between 5 and 12 litres per day. If production is higher than 12 litres per day, take steps (such as decreasing feed intake) to reduce milk production.

• Dry off abruptly; do not skip days and preferably do not skip milkings – milk out as usual at each milking until drying-off.

• Don’t leave cows in laneways or yards immediately after drying-off.

• Continue the ‘maintenance only’ diet for another 3-4 days for cows that were producing 12 litres/day or more in the week before drying-off.

It is important to be realistic about how many cows can be dried-off at one time. To do a good job with Dry Cow Treatment, one person can only effectively handle 20 cows per hour.

Blanket vs Selective

Decide if you are treating the whole herd (Blanket Dry Cow Treatment) or part of the herd (Selective Dry Cow Treatment).
Treatment). If only treating part of the herd, Countdown recommends treating all cows with any individual cell counts above 250,000 cells/ml during the lactation, and any cow having had a clinical case of mastitis.

**Managing risk**

Hygiene is critical during Dry Cow Treatment – if care is not taken to make sure the teats, and particularly the teat opening, are clean, there is increased risk of infection. Treat all quarters of cows receiving Dry Cow Treatment, except quarters that have been dried-off for some time in any cows milked as ‘3-teaters’.

If a quarter is dry, absorption of the Dry Cow Treatment will be affected increasing the risk of antibiotic residue.

Speak to your vet about possible options for these cows. Once you have finished treating the cow, make sure teat spray (or dip) is applied thoroughly to all teats.

Clearly mark cows that have been treated with antibiotics in case they make their way back into the milking herd. Create permanent records of cow ID, date and product details of all Dry Cow Treatments.

**Internal Teat Sealant**

Many farmers are now using teat sealant as part of their drying-off strategy. Teat sealant doesn’t contain antibiotics so will not cure existing infections. The role of a teat sealant is to prevent new infections occurring, especially in the early dry period and just prior to calving.

Research has shown teat sealant, either alone or used in conjunction with antibiotic Dry Cow Treatment, reduced the risk of clinical mastitis after calving by 29% when compared to cows only treated with antibiotic Dry Cow Treatment (Countdown Technote 14).

When cows treated with teat sealant only were compared to those who received no treatment, the use of teat sealant reduced clinical mastitis by 48% (Countdown Technote 14).

**After drying-off**

Keep dried-off cows away from the dairy and away from the milking herd moving to and from the dairy to avoid a milk let-down response. Observe dried-off cows daily for a week. Check for swollen quarters.

If a cow has a swollen quarter, the cow should be checked manually for mastitis. Only strip the swollen quarter, don’t remove milk from the normal quarters. If mastitis is detected, treat as normal (e.g. with a lactating cow intra-mammary antibiotic). Strip the quarter out completely twice daily for the course of the treatment.

For clinical cases that occur in the first week after drying-off, re-treatment with Dry Cow Treatment is advised (consult with your vet). If a cow is re-treated, make sure records are updated with the new withhold period.

For further information, the Countdown Farm Guidelines for Mastitis Control are a great resource and can be downloaded for free from [www.dairyaustralia.com.au/Countdown](http://www.dairyaustralia.com.au/Countdown).

Dairy farmers can also receive a free hard copy of the guidelines by filling in the online order form or contacting Dairy Australia on 1800 004 377.

**A snapshot of what some farmers are planning for drying-off this season:**

**Andy Jackman, milking 200 cows at Oldina (organic farm)**

Cows are dried-off once milk production declines to 6-10 litres. Cow condition and a dry period of 7-8 weeks is also factored in. No specific dry-off treatments are given – neither antibiotics or teat sealant are used. Cows are provided with apple cider vinegar and minerals all year-round to promote a healthy immune system. When cows are dried-off they are put in a clean paddock and fed hay and pasture. They have ad lib access to a dry cow lick.

**Gary Watson, milking 400 cows at Lileah (organic farm)**

Cows are dried-off once milk production declines to 6-10 litres. Cow condition and a dry period of 7-8 weeks is also factored in. No specific dry-off treatments are given – neither antibiotics or teat sealant are used. Cows are provided with apple cider vinegar and minerals all year-round to promote a healthy immune system. When cows are dried-off they are put in a clean paddock and fed hay and pasture. They have ad lib access to a dry cow lick.
production. They are milked once-a-day and fed hay for a week prior to dry-off. Apple cider vinegar is put in the water trough. No antibiotics or teat seal are used. After dry-off the cows are fed a dry cow diet of pasture and hay.

**Michael Palmer, milking 1000 cows at Sisters Creek**

Cows are dried-off in batches based on calving date. The protein supplement in the concentrate mix is removed three days prior to dry-off. Cows are fed hay and water during the day and a restricted pasture allowance of a night. All cows in the herd are dry cow treated with antibiotics and teat sealed. Teat seal is used because cows are calved on a calving pad. Cows are milked and immediately dry-cow treated and teat sealed whilst still on the platform. After being dried-off the cows are fed hay and silage for several days with minimal pasture. They are moved to a clean area each day. Any cows being trucked to a run-off are taken there straight away, while they don’t have full udders. Heifers aren’t teat sealed.

**Ronnie Mulder, milking 280 cows at Forest**

Cows are dried-off based on calving date to give them a minimum 6-week dry period. First calvers in lower condition are dried-off earlier to give them extra time to put on condition. All cows are dry cow treated with antibiotics. In the past, a part-herd (selective) dry cow treatment strategy was used but last season this practice changed to whole-herd dry cow treatment and saw a big reduction in mastitis at the start of the season. All cows are teat-sealed. Heifers are also teat-sealed. This was also done for the first-time last season and the Mulders are happy with the results so will continue this practice. Heifers are teat-sealed in the (herringbone) dairy.

**Stuart Burr, milking 400 cows at Ringarooma**

Cows are dried-off based on production (8 litres) or calving date to give a 60-day dry period. Intake is limited to hay and water for a few days prior to dry-off. All cows are dry cow treated with antibiotics and then teat-sealed. Typically, only a row (40 cows) a day is dried-off. This helps to make sure everyone is focussed on doing a good job for all the cows. Heifers are also teat-sealed. This is conducted in a tipper crush.

**Tim Salter, milking 1000 cows at Meander**

Tim gets their vet to visit each year before dry-off to conduct a refresher session on dry cow treatment. This is to emphasise the importance of making sure the teat is clean and the correct techniques are used.

Tim uses a part-herd dry-off strategy. This is based on the four herd tests that are conducted through the season. Any cows that had a cell count above 150,000 cells/ml or clinical mastitis are dry cow treated with antibiotics. All cows are teat sealed.

Cows are dried-off in batches based on calving date to allow for a minimum dry-period of 60 days. No more than 200 cows are dried-off in a day to prevent operator fatigue. The amount of grain fed to cows about to be dried-off is reduced 5 days prior to dry-off. After dry-off, cows are fed a diet of just hay and water for two days and then pasture is gradually re-introduced.

Heifers are also teat-sealed. This is done on the rotary platform – they have used a tipper-crush but found it to be more labour intensive.

---

**The correct way to give intra-mammary treatments**
(adapted from Countdown 2020 Farm Guidelines for Mastitis Control Fact Sheet B)

1. Wear gloves.
2. Make sure each quarter is completely milked out.
3. Completely disinfect the end of the teats. This step is CRITICAL.
   a. Scrub the teats furthest away first. This reduces the risk of contaminating an already disinfected teat.
   b. Disinfect by vigorously scrubbing the teat opening with a cotton ball and 70% alcohol (seven parts methylated spirits and three parts water) or teat wipes for a minimum of 10 seconds.
   c. Check the cotton ball. If there is any dirty colour, repeat the scrub using a clean cotton ball until there is no more dirt to be seen.
4. Treat the teat nearest you first, followed by treatment of the more distant teats.
5. Insert the antibiotic tube into the teat canal
   a. Remove the cap of the tube and, without touching its tip with your hand, gently insert the nozzle into the teat canal.
   b. It is not necessary to insert the nozzle to its full depth – this can stretch the teat canal and increase the risk of the cow getting mastitis.
3. Squeeze the contents of the syringe into the teat. Massage it up the teat into the udder.
4. Teat dip treated quarters with fresh teat dip immediately after treatment.
5. Clearly mark the treated cow.
6. Record all treatments.

---

It is important to be realistic about how many cows can be dried-off at one time. To do a good job with Dry Cow Treatment, one person can only effectively handle 20 cows per hour.
The correct way to administer Internal Teat Sealants
(adapted from Countdown 2020 Farm Guidelines for Mastitis Control Fact Sheet M).

1. Administer Internal Teat Sealants last. If a cow is also being Dry Cow Treated, this should be done before the teat sealant is inserted.
2. Keep the tubes sterile. Cold temperature can make it hard to squeeze the teat sealant out of the tube but don’t put them directly in water to warm-up. Instead, place the tubes in a warm room prior to use or put them in another container which is placed in a larger container holding hot water (i.e. a bucket in a bucket).
3. Wear gloves.
4. Completely disinfect the teat ends.
5. Gently close off the top of the teat and insert the tube nozzle. You want the teat sealant to remain in the teat cistern and canal rather than move into the udder. Remove the tube cap (without touching the tip), gently insert the nozzle into the teat canal and squeeze in the teat sealant. Don’t insert the nozzle to its full depth as it can damage the teat end.
6. Do not massage the udder after inserting the teat sealant. Unlike antibiotic treatments, you want the teat sealant to stay in the lower part of the teat.

Guide to choice of Selective or Blanket Dry Cow Treatment (Countdown 2020 Farm Guidelines for Mastitis Control Fact Sheet C).
Note: if you have less than three Individual Cow Cell Counts for each cow, use Blanket Dry Cow Treatment.
Dairy farmers and the wider dairy community are being asked to have a say on the future of the industry and what matters most.

Farmers, processors, service providers and stakeholders of dairy are being called on to share their views through meetings in over 20 locations across the nation during May and June, 2019, as well as to contribute via online platforms.

The consultation will be a crucial input into the development of the Australian Dairy Plan, to identify key industry priorities for action to build on the opportunities and positively address the challenges faced.

The aim is to work together to help create an industry that can adapt to a changing operating environment, provide dairy farmers and processors with further profit potential, boost confidence across the industry and its ability to be united, and compete at a global level.

Dairy Australia, Australian Dairy Farmers, Australian Dairy Products Federation and the Gardiner Dairy Foundation are jointly supporting this opportunity for people in the industry to voice their thoughts on what matters most for dairy.

Find out more on how to have your say at meetings across the nation at: www.dairyplan.com.au

Electronic copies of this newsletter are available at www.utas.edu.au/tia/dairy.