tia TASMANIAN INSTITUTE OF AGRICULTURE
Dairy Australia Your Levy at Work

Tassie Dairy News

www.utas.edu.au/tia/dairy | March 2018

Inside the newsletter

Must be something in the water!

Lesley Irvine, TIA

Three of the four finalists in the 2018 ANZ Dairy Business of the Year (DBOY) Award are located within ten minutes' drive of each other, just west of Wynyard. The fourth finalist, Agrilac's Oxberry Dairy, is located in Tasmania's North East.

These four finalists were selected from 40 participants in the Tasmanian benchmarking program based on their Return on Assets Managed (RoA) and Earnings Before Interest and Tax (EBIT) per hectare.

Agrilac's Oxberry Dairy

Located 25 minutes northeast of Scottsdale, Oxberry Dairy was converted to a dairy farm four seasons ago, and is managed by David Risbey-Pearn. This is the second year the farm has been a finalist in the Award.

The farm is currently utilising a milking area of 245 ha (in the future some of this area will be used for another dairy under development) which is irrigated with two pivots and a solid-set system. 1000 cows are milked on the farm with a team of three full-time staff and one casual. The herd is crossbred with the target cow a 500 kg black crossbred animal.

David is very proud of what he and the team have been able to achieve on the farm since the conversion and he rates the team as one of the key drivers of the farm's profitability. Animal health, pasture quality and milk production are also a focus for this farm.

Currajong Dairy

Currajong Dairy is owned in partnership by Duncan and Sally Sadler, Wayne and Linda Hansen and Nathan and Cassidy Lawrence. The farm is located at Flowerdale.

500 cows are milked on the 124 hectare milking area. 120 hectares of the farm is irrigated with either the long lateral irrigation system or the recently installed solid-set irrigation system. The herd is predominantly Friesian.

The focus of the farm's profitability is growing pasture and using it effectively for feeding.

Glenwood Dairy

Glenwood Dairy is located at Sisters Creek and is owned by Richard and Melissa Duniam who purchased the farm from Richard's parents in 2004. Since purchasing the farm, pivot irrigators have been installed to irrigate 150 hectares of the 170 hectare milking area and a new rotary dairy was built in 2015. 550 crossbred cows are milked on the farm. The target is a 500 kg cow which is able to produce 500 kg MS per year and is fed up to one tonne concentrate.

Important to profitability are controlling costs and making sure that processes on the farm are both efficient and effective. Production is another focus, with the Duniams aiming to get the most out of their pasture and concentrate feeding.

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Remlap

Remlap is owned by Rhys and Cecile Palmer and sharefarmed by Michael Palmer and Eliza Anderson. The farm is located at Sisters Creek. 220 hectares of the 300 hectare milking area is irrigated, mainly with pivots. The milking herd of 925 cows is predominantly Friesian, with an average cow size of 600 kg. The Palmers aim to fully feed their cows and they get advice from a consultant on balancing the diet for the milking herd. Cows are individually fed based on their peak milk production, with an average of 2.3 tonnes concentrate fed per cow each season.

DBOY winner announced at the Tasmanian Dairy Awards Dinner

These finalists were selected from a pool of entrants based on their financial performance. Judging was undertaken by Gerard Mulder (winner of the 2017 DBOY Award) and Lesley Irvine, TIA Dairy Extension Team Leader.

The winner of the 2018 Dairy Business of the Year Award was Remlap. This was announced at the Tasmanian Dairy Awards Dinner held at the Country Club Casino in Launceston on March 15. A field day will be held at the farm on April 11.

Other Award winners were:

Share Dairy Farmer of the Year, sponsored by Fonterra
Wayne and Caroline Saward

Dairy Safety Award, sponsored by Moon Lake Investments
Clear Springs Operations, managed by Tim and Fiona Salter

Dairy Employer of Choice Award, sponsored by WFI
Compass Agribusiness

Dairy Environmental Award, sponsored by Veolia
AgCAP Pty Ltd

Dairy Services Award, sponsored by Elphinstone Stevens Pty Ltd
Bob Bush

Young Farmer Encouragement Award, sponsored by Cadbury
Luke Day

Congratulations to all of the nominees, finalists and winners.

Good fiscal management gives improved returns despite low milk price

Lesley Irvine, TIA

The Tasmanian Dairy Farm Monitor Project (DFMP) report for 2016-17 has just been released online. Thirty-six Tasmanian dairy farmers participated in the benchmarking project, providing their financial and physical farming data for the season. This was the fourth year of the Dairy Australia funded project in Tasmania.

The report shows average Earnings Before Interest and Tax (EBIT) in 2016-17 increased by 12% compared to the previous year, even though the milk price of $5.03/kg MS was lower than the previous year. The average herd size in the Tasmanian DFMP is 542 cows, which is higher than the actual State average.

Compare your farm's performance with the State

While the ideal process would be to randomly select farms across the State to give a true average, this is not possible, as farmers need to both agree to participate and have kept the records required to provide accurate data. While the report may not provide the true State average, the data represents a range of farms – small to large – and a range of production systems and locations. Therefore, the data is very useful for tracking industry trends and analysing differences between the average and top 25% of participants.

Even if you haven't participated in TIA's free benchmarking program, you can still benchmark your business against either the average or top 25% (or both). Just enter your data into DairyBase.com.au and request a comparison report with all the Tasmanian data available.

Australia-wide dairy farm performance

Each of the other Australian dairy states produces a DFMP report each year. The table provides a summary of the 2016-17 results for Victoria, South Australia and New South Wales, and a comparison with Tasmanian data for 2016-17 and the two previous seasons.

Despite Tasmania having the lowest milk price, Tasmanian dairy farmers managed to manipulate their cost of production to achieve higher EBIT per hectare and Return on Assets (RoA) than Victoria, South Australia and New South Wales (Queensland achieved slightly higher RoA at 4.4%; and Western Australia data has not yet been released).

Reduced milk production costs for Tasmania

The average cost of production for the 2016-17 Tasmanian participants was $4.84/kg MS, an 8% decline from the previous year.

One cost saving involved increasing the percentage of home-grown feed provided in the cow's diet up from 69% to 74%, with an average 10.4 t DM/ha consumed. The top 25% of dairy farmers participating in the project had average pasture consumption of 12.3 t DM/ha. Concentrates, the largest feed cost category, cost an average of $1.07/kg MS, which was a 21% decline on the previous year.

Another key area where farmers reduced costs was with employed labour expenditure at $0.71/kg MS, a 19% reduction from the previous year. Correspondingly, there was a 77% increase in imputed (unpaid) labour from $0.31/kg MS to $0.55/kg MS.

Download the report or request a print copy

DFMP reports for the last four years are available on the TIA website: utas.edu.au/tia/dairy-centre/benchmarking. Printed copies of the 2016-17 report are available from DairyTas.

	Tas Average 2014-15	Tas Average 2015-16	Tas Average 2016-17	Tas Top 25% 2016-17	Victoria Average 2016-17	South Australia Average 2016-17	NSW Average 2016-17
Herd size	545	580	542	817	342	394	326
Annual rainfall (mm)	924	1044	1288	1148	779	780	1019
Water used (irrigation+rainfall) (mm/ha)	1084	1250	1620	1555	1017	1143	1302
Total usable area (ha)	280	302	268	368	268	565	263
Milking area (ha)	191	198	190	266	168		121
Stocking rate (cows/Mha)	2.9	2.9	2.9	3.1	2.0		2.7
Milk sold (kg MS/cow)	447	444	432	475	503	539	498
Pasture consumed (t DM/Mha)	10.0	10.7	10.4	12.3	8.1	9.1	8.5
Home grown feed as % of ME consumed	69%	69%	74%	74%	65%	64%	59%
Labour efficiency (milking cows/FTE)	140	141	143	172	105	90	75
Labour efficiency (kg MS/FTE)	61,600	62,053	61,111	79,234	52,500	47,861	36,928
Milk income (net) ($/kg MS)	$6.19	$5.55	$5.03	$5.15	$5.07	$5.78	$6.89
Total variable costs ($/kg MS)	$3.13	$3.27	$2.87	$2.75	$2.89	$3.30	$3.91
Total overhead costs ($/kg MS)	$1.94	$1.91	$1.98	$1.56	$2.16	$2.71	$3.11
Earnings before interest and tax ($/kg MS)	$1.84	$0.92	$0.99	$1.68	$0.75	$0.88	$0.92
Return on Assets	7.8%	3.9%	3.7%	6.6%	2.5%	3.1%	2.2%

Make the right decisions every day

Sam Flight, TIA

The latest discussion group meetings were attended by over 25 people and were held in the Deloraine area at Grant and Kim Archer's, Active Dairies and at Jordan Palmer's Rocky Cape farm in the Yolla/Wynyard area.

John Mulvany from OMJ Consulting in Victoria led discussions on what makes for a profitable dairy business. His advice was:

"Pasture should always be a focus on the farm, with the aim to reduce total feed costs and be a profitable dairy business."

John painted a picture of how the key components that make a profitable dairy business all fit and work together. He described the key decision-making tools and key performance indicators that are required to maximise both a farm's physical and financial business performance as a pyramid (shown at right).

The tools to measure and monitor pre-grazing pasture cover, growth rates, leaf stage, post grazing residuals and rotation length are otherwise known as "*THE BODY OF EVIDENCE*".

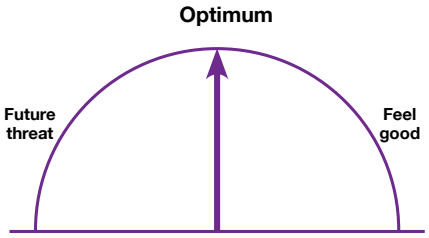
While farm-monitoring tools underpin our understanding and development of farm and pasture management, John advised to not underestimate the power that good observational skills and attention to detail add to successful farm business management decisions.

The ability to react in a timely manner, based on good observation, optimises your daily position because this kind of decision making considers the marginal response, risk as well as return.

Optimum daily position

The body of evidence and looking for signs of under feeding or over feeding will help you get every day right.

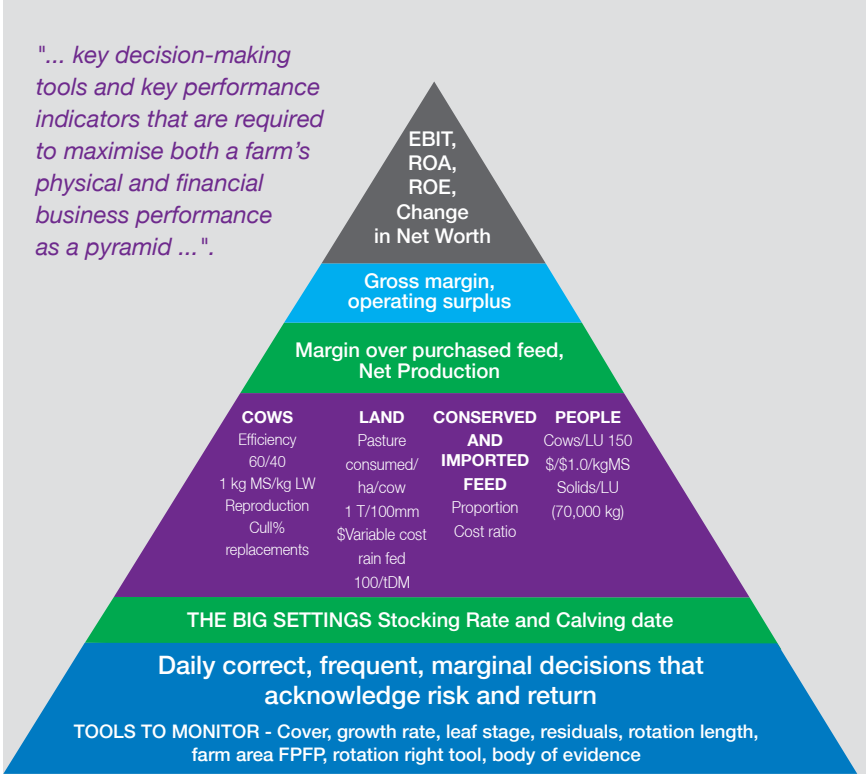
In the diagram above right, 'future threat' refers to possible overgrazing and skinny cows, and 'feel good' refers to high residuals and fat cows, and potentially poses the greatest risk to the business. You can't get back the dollars already spent on fattening the cows on the right!



The aim is to get every day right, or as close to right as you can. Assess (observe) your optimum daily position. Are your cows to the right or the left of the optimum line?

Remember: Monitor your daily position by observing cow behaviour and pasture residuals to get optimal value from cheaper grass and avoid risks of over or under feeding.

"... key decision-making tools and key performance indicators that are required to maximise both a farm's physical and financial business performance as a pyramid ...".



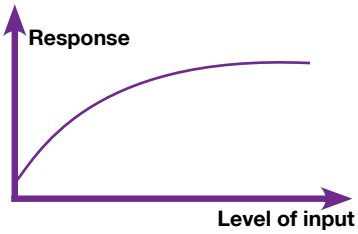
Calculations for the big decisions

According to John, the big farming decisions aim to match the right stocking rate and calving date with your farm's pasture production curve. John explained that dairy farmers need to make the most of their pasture base. He took us through some quick pasture consumption calculations to demonstrate the pasture growth and consumption trends of the day's discussion group host farm.

Marginal return

We also discussed the concept of marginal milk vs pasture milk (marginal return), which is a way of measuring the value of supplementary feeds and if the farm is getting value for money spent.

Marginal response curve



As a rule, the milk production response to concentrate feeding declines beyond a certain input level, depending on stage of lactation and quality and amount of available pasture. There is a point when the return achieved from additional supplementation will be less than the cost of the feed.

To generate a useful ratio which indicates a profitable response from grain concentrate feeding:

- Divide monthly milk price c/kg MS by the grain concentrate price $/tonne.
- If the ratio generated is below 1.5, review how much grain you feed, and how many cows you are milking.
- If the ratio is above 1.5, you will have a profitable margin, but be careful of over feeding.

It is best to do these ratio comparisons frequently to ensure you're making the right decisions along the way and reducing the impact of inaccurate decisions. You don't want to get to the end of the year and realise you've fed too much for the production achieved – it'll show that for lots of days, you weren't getting things right.

According to John, there are two types of farmers:

1. Those that use observation and gut feel to determine where they are sitting on a daily basis. They allocate pastures by focusing on quality and working to maintain the right pre-grazing heights and residuals that will grow quality pasture - focusing on residual, round length and the cows. These farmers use the body of evidence, whether they realise they are doing it or not.
2. Then there are those farmers who use production to back-calculate the pasture consumed and use these numbers to see if over feeding is occurring (over feeding can be costly to any business).

   These farmers also use production to determine their stocking rate and calving date.

Always ask: "Is it worth feeding the supplement?"

Looking at the net production achieved, after concentrate usage is costed, will determine if the costs of using concentrate are outweighed by production. Using both observation and calculations will ensure you are getting things right in your dairy business.

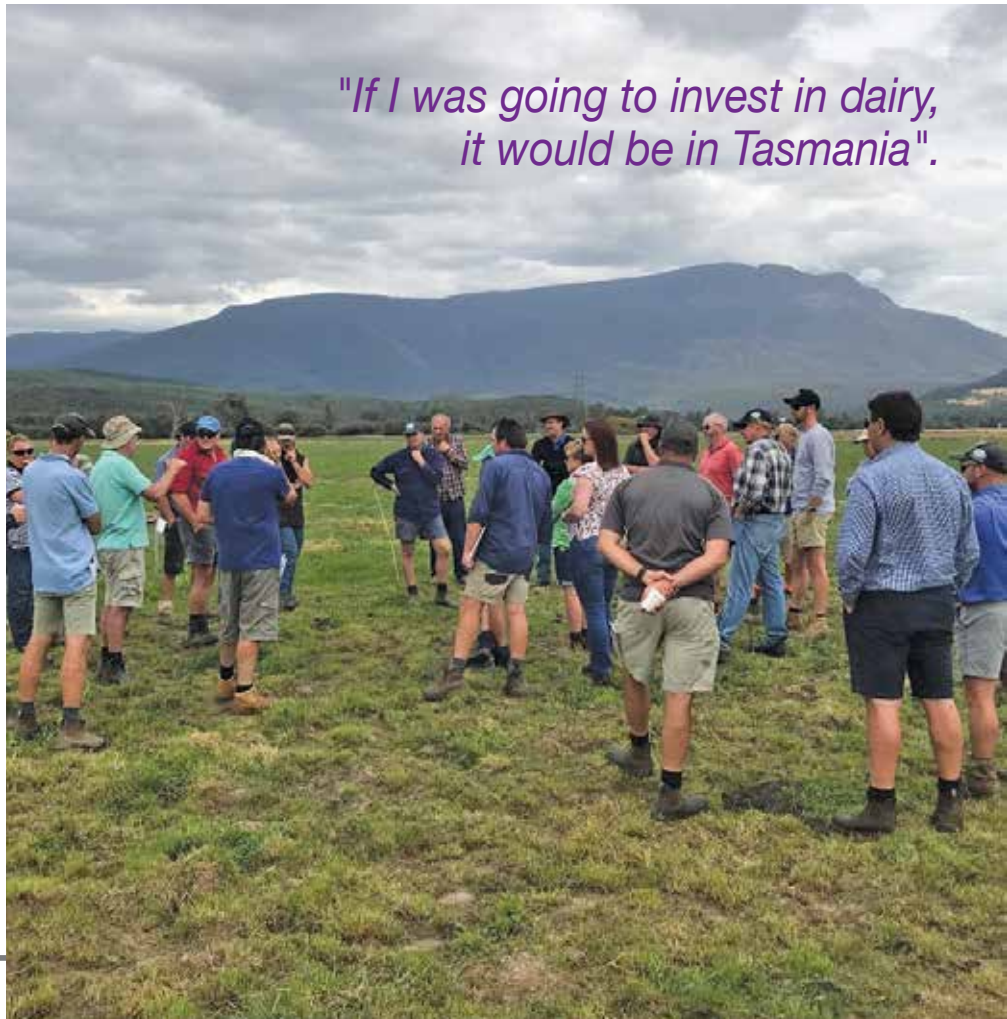
John's summary quotes:

If I was going to invest in dairy, it would be in Tasmania.

Every dollar you spend to secure milk production from pasture based milk, even if the figures look expensive, gives extreme flexibility within your business.

Get the stocking rate right; get the calving date right.

Get the body evidence right – look at the cows, look at the grass and work out where you are.



Dry-off decisions

Grant Rogers, Dairy Systems Ltd, BVSc

Body condition score (BCS) is a hot topic, because calving BCS is one of the key determinants of successful herd reproduction. So BCS is top of mind again this month.

It's all about calving BCS

Scoring cows individually right now is the way to go. This will allow you to preferentially manage those cows within your herd that are currently on the lighter side of the BCS scale. You're aiming for your 2 and 3 year olds to calve at BCS 5.5 and your mixed aged cows to calve at BCS 5. Remember, dry cows typically only gain about half a condition score a month, so a mature cow at BCS 3.5 will need to be dried off 4 months before calving to meet target.

We've had some rain now, so I can milk for longer, right?

With the rain most of the state has received, there will be the temptation to keep milking the herd longer. There will probably be some cows in your herd that you can milk for longer, but others may need to be dried-off sooner so they have time to reach their calving BCS target.

So who can I milk for longer?

To identify the cows you can milk for longer, you'll need to know when your cows are expected to calve and what BCS they are at right now. Early aged pregnancy testing (tested between 35-122 days of pregnancy) will give you the most accurate expected calving dates. Cull cows, cows already at their calving BCS target, and those expected to calve late next season will be the best candidates for milking longer.

When do I need to dry her off?

To calculate the approximate date by which cows need to be dried-off:

01 Work out how much BCS a cow needs to gain to reach her calving BCS target.

e.g. a mature cow at BCS 3.5 now needs to gain a 1.5 condition score.

02 Divide the amount of BCS she needs to gain by 0.5 (assuming cows will gain half a condition score per month) to get the number of months it will take her to get to target BCS.

e.g. 1.5 BCS to gain divided by 0.5 = 3 months

03 Add 1 month to get the number of months dry that she will need to reach her BCS target (cows don't gain BCS in the last month of pregnancy).

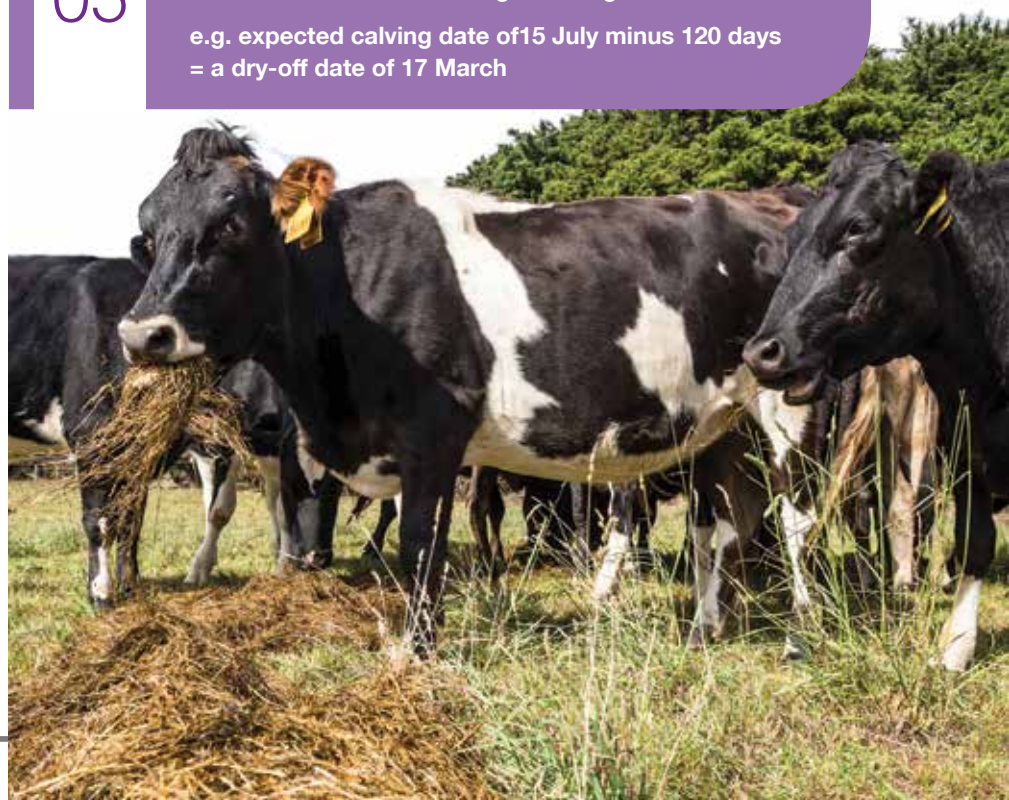
e.g. 3 months to get to BCS, plus 1 month not gaining BCS before calving = 4 months dry

04 Times the number of months by 30 to get the number of days she will need to be dry.

e.g. 4 x 30 days = 120 days dry

05 Take away the number of days dry from her expected calving date to calculate the date the cow needs to be dried-off to reach the calving BCS target.

e.g. expected calving date of15 July minus 120 days = a dry-off date of 17 March



DairyTas update

For more information contact DairyTas Executive Officer Jonathan Price, phone 6432 2233, email admin@dairytas.net.au, or go to the DairyTas website: www.dairytas.com.au.

Your Levy at Work

What is happening at DairyTas?

National Farmer Survey

In the next few weeks you may be contacted to help with the National Dairy Farmer Survey (NDFS). The NDFS is done every year to gauge farmer sentiment and understand key trends and challenges facing farmers in all dairying regions. This survey is an important part of the Situation and Outlook report published in June each year and helps to obtain robust data about the state of the industry for decision makers to better support dairy farmers.

We appreciate that your time is valuable – the survey should take around 20 minutes, depending on your responses. You may be contacted around lunchtime or early evening but you can choose a time that is convenient for you to conduct the interview and the researcher will happily call you back. If you have any queries about the survey, please contact DairyTas/ Jonathan Price:
03 6432 2233 or
J.price@dairytas.net.au

Workforce on our Dairy Farms Discussion Groups

Workforce on our Dairy Farms Discussion Groups with Penny Williams will be run across the state in various locations. We encourage you to get along to these to learn about retaining staff, changes to the pastoral award, trainees and apprentices, and drug and alcohol policies. Sessions for the remainder of this month:

- 27 March at Togari
- 29 March at Christmas Hills

More information is available at **dairytas.com.au.**

Nutrition Fundamentals Workshop

A Nutrition Fundamentals Workshop will be coming to Circular Head in May. This new course will involve two days of learning about the basics of dairy cow nutrition and what you can do to help improve the nutritional intake of your herd. Details can be found at **dairytas.com.au.**

For further details go to:
www.dairytas.com.au

DAIRY DIARY 2018

March

27 Mar: Workforce on our Dairy Farms Discussion Group with Penny Williams, Togari (DairyTas)

28&29 Mar: Financial Literacy for Dairy Farmers course, Deloraine. Days 4 & 5 of 7.

29 Mar: Agribusiness Professional Breakfast meeting, Burnie. If you are an agribusiness professional working in the dairy industry and haven't received an invitation, email lesley.irvine@utas.edu.au (TIA)

29 Mar: Workforce on our Dairy Farms Discussion Group with Penny Williams, Christmas Hills (DairyTas)

April

5 Apr: Central North Women's Discussion Group, "Meeting the Bank" (DairyTas)

9&10 Apr: Dairy Farm Business Analysis workshop with John Mulvany, Smithton (DairyTas)

10&11 Apr: Cups On Cups Off, South (TasTAFE)

11 Apr: 2018 ANZ Dairy Business of the Year Award field day at Remlap, Rulla Road, Sisters Creek. 11 a.m. to 2:00 p.m. BBQ lunch provided. Please RSVP to Samantha.Flight@utas.edu.au or text/phone Sam on 0409 801 341.

11 Apr: YDN evening event with John Mulvany, Smithton (DairyTas)

12 Apr: Stepping Back workshop with John Mulvany, Smithton (DairyTas)

16-20 Apr: What disease is that? Workshops. (DairyTas & TIA)

17-19 Apr: Livestock handling, Burnie (TasTAFE)

19 Apr: Healthy Hooves workshop, TIA Dairy Research Facility, Elliott (DairyTas)

24 Apr: 2018 Fonterra Share Dairy Farmer of the Year Award field day with Wayne and Caroline Saward at Blythe Vale, South Riana. 11 a.m. to 2:00 p.m. BBQ lunch provided. Please RSVP to Symon.Jones@utas.edu.au or phone/text Symon on 0418 876 089.

May

3-5 May: Agfest. Come and visit DairyTas, TasTAFE and the TIA Dairy team in the Dairy Pavilion (site M98)

Contact us

Tassie Dairy News is provided free to all Tasmanian dairy farmers and is funded by TIA and Dairy Australia.

For more information, please contact a TIA Dairy extension officer, phone 6430 4953 or email tas.dairynews@utas.edu.au.

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

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