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WEEKLY PASTURE GROWTH AND EVAPOTRANSPIRATION UPDATE

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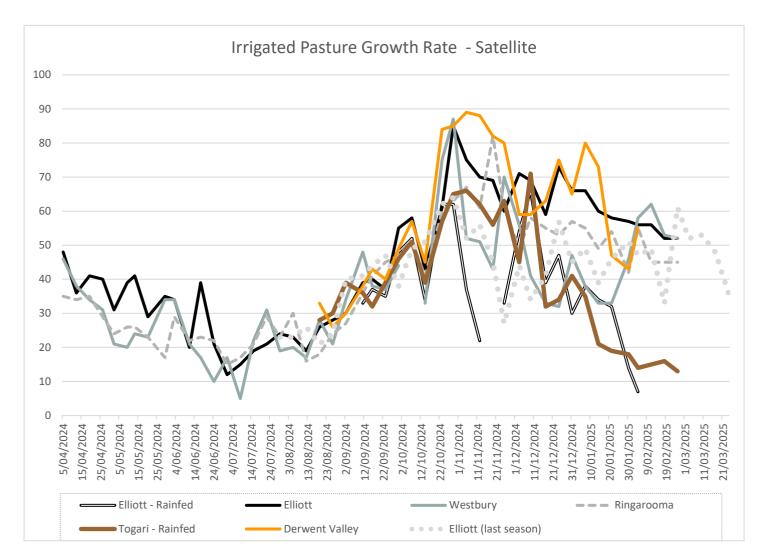
Regional Pasture Growth Rates

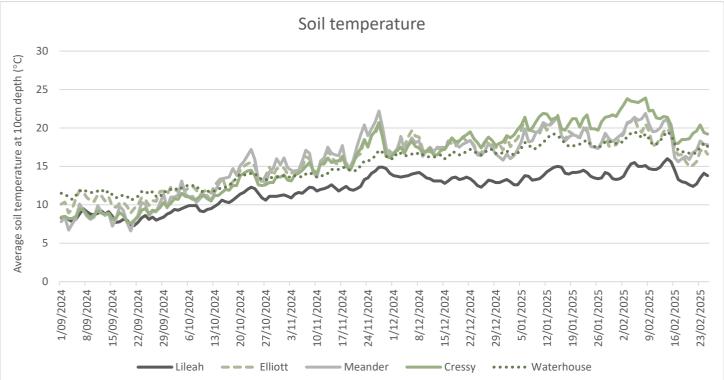
Decien	Pasture growth rate (kg DM/ha/day) - Satellite							
Region	Irrigated	Rainfed						
Togari	-	13						
Elliott	52	-						
Westbury	52	-						
Ringarooma	45	-						
Derwent Valley	-	-						

Pasture growth rates will vary between farms for many reasons including: climate, soil type, nutrient availability and management. Satellite pasture growth rates are sourced from Pasture.io (https://pasture.io/).

Leaf emergence rate at Elliott										
Leaf emerg (days per le		Days to 2 leaf stage	Days to 2.5 leaf stage	Days to 3 leaf stage						
Irrigated	8	16	20	24						

WHAT HAS HAPPENED OVER THE PAST WEEK





Weekly Evapotranspiration & Rainfall

Location	ET₀¹ (mm)	Rainfall (mm)	Rainfall (month-to- date; mm)	Soil temp (°C) 9:00 a.m. @ 10 cm
Pegarah (KI)	-	-	-	-
Lileah	10.4	8.6	16.4	13.8
Elliott	21.1	1.6	6.0	16.6
Meander	27.3	11.2	184	17.8
Cressy	28.3	8.0	15.0	19.2
Ringarooma	-	-	-	-
Waterhouse	29.3	4.8	12.0	17.6

Wednesday, 19 February to Tuesday, 25 February 2025

Data for this table is collected from the <u>UNITAS Weathermation weather stations</u> at Lileah, Elliott (Elliott Research), Meander (Clear Springs) and Waterhouse (Forester Lodge). These weather stations have been installed on <u>Smarter</u> <u>Irrigation for Profit II</u> optimised irrigation farms. Data for Pegarah (King Island) and Ringarooma is sourced from the Ag Logic Weather Station and Probe Network (<u>https://www.aglogic.com.au/</u>)

¹ET₀ is the reference evapotranspiration, an estimation of the evapotranspiration from the "reference surface" – grass with an assumed height of 0.12m.

Monday, 17 February to Sunday, 23 February 2025

Location	ET₀¹ (mm)	Rainfall (mm)	Rainfall (month-to- date; mm)	Soil temp (°C) 9:00 a.m. @ 10 cm
Ouse	29.5	2.0	4.4	-

Climate data for Ouse is collated from <u>www.bom.gov.au</u>. It is displayed in a different table because the date that data is available is different to the UNITAS Weathermation stations.

* This soil temp information is from Bushy Park <u>http://www.bom.gov.au/products/IDT65176.shtml</u>

 1 ET₀ is the reference evapotranspiration, an estimation of the evapotranspiration from the "reference surface" – grass with an assumed height of 0.12m.

Soil Moisture Budgets

The soil moisture budgets below have been produced using IrriPasture

(<u>https://irripasture.com/</u>). This is a free budgeting tool that can help you make decisions about your irrigation scheduling. This report has budgets for Bushy Park/Ouse, Scottsdale, Meander, Sheffield, Elliott and Lileah. The graphs show the available soil moisture (green line). The aim is to keep this green line between the red line (refill point) and the yellow line (field capacity). The distance between the yellow and red line is how much Readily Available Water (RAW) the soil holds. The amount of RAW your soil can hold will depend on your soil type. As a guide, the amount of Readily Available Water that is held in the top 30 cm for common soil types is:

- Sand = 9 mm
- Loamy sand = 15 mm
- Sandy loam = 21 mm
- Loam = 27 mm
- Clay = 15 mm
- Clay loam = 24 mm

The soil moisture budgets in this report have used an 'average' RAW value of 21 mm. If your soil holds less soil moisture than this, you will need to irrigate earlier than the water budget indicates. If your soil holds more moisture than this, you probably don't need to irrigate as soon. **THESE SOIL MOISTURE BUDGETS ARE A GUIDE ONLY**. Please do a physical check of the soil moisture on your farm to help make the decision when to start irrigating.

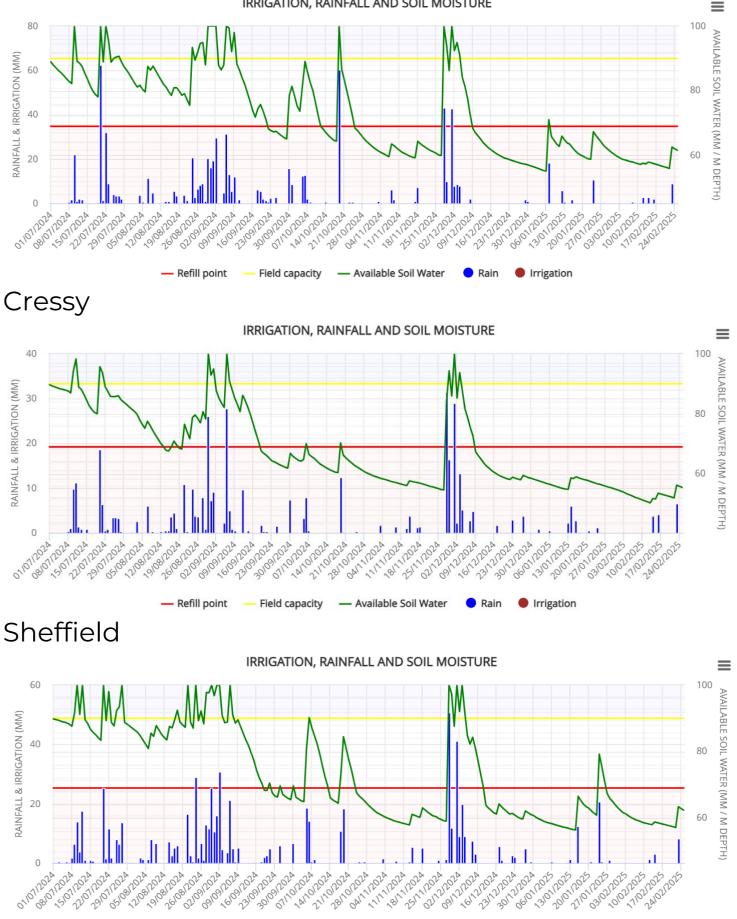
IRRIGATION, RAINFALL AND SOIL MOISTURE 30 100 RAINFALL & IRRIGATION (MM) 20 80 10 60 0 210712024 2910712024 05108/2024 21081202A 26/08/2024 0210912024 091092024 1610912024 23109/2024 21102024 28/10/2024 04/11/2024 18/11/2024 25/11/2024 09/12/2024 16/12/2024 23/12/2024 30122024 2010112025 27/01/2025 1010212025 1710212025 0810712024 15/07/2024 19/08/2024 301092024 01102024 14/10/2024 11112024 0211212024 06/01/2025 13/01/2025 03/02/2025 2410212025 0110712024 — Available Soil Water Refill point Field capacity 😑 Rain Irrigation

AVAILABLE SOIL WATER (MM / M DEPTH)

Ouse

Scottsdale

IRRIGATION, RAINFALL AND SOIL MOISTURE



Refill point

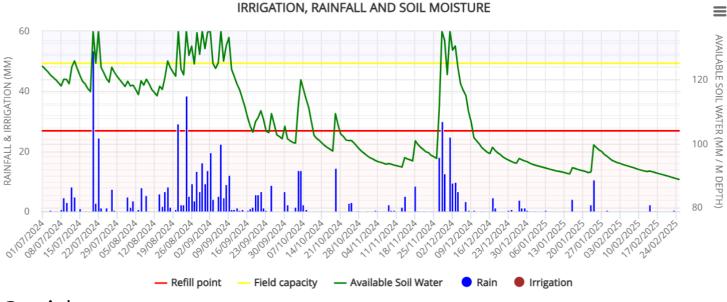
Field capacity

Available Soil Water

🔵 Rain

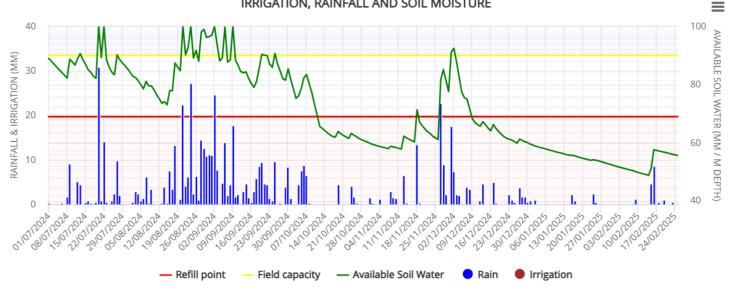
Irrigation

Wynyard



Smithton

IRRIGATION, RAINFALL AND SOIL MOISTURE



WHAT IS GOING TO HAPPEN OVER THE NEXT WEEK

7 Day Forecast

The following tables present the 7-day evapotranspiration, rainfall, temperature, humidity, and forecast for key dairy regions in Tasmania. The data is sourced from the Weatherwise Watering Swan Systems (<u>https://www.swansystems.com.au/irrigation-harnessing-power-of-data/</u>)

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	4.6	10	<]	0	9-27	62	9
Wed, 26-Feb	5.3	20	<]	0	9-30	58	11
Thu, 27-Feb	4.1	20	<]	0	11-26	62	9
Fri, 28-Feb	4.3	60	0-3	2.3	10-21	62	17
Sat, 01-Mar	4.2	25	<]	0	6-23	62	14
Sun, 02-Mar	3.9	40	0-1	1	10-22	56	14
Mon, 03-Mar	4.4	15	<]	0	7-26	56	10
TOTAL	30.8			3.3			

7 Day Forecast for Ouse

7 Day Forecast for Scottsdale

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	4.1	5	< 1	0	10-24	70	9
Wed, 26-Feb	3.7	15	< 1	0	13-25	81	10
Thu, 27-Feb	3.4	40	< 1	0	13-24	78	10
Fri, 28-Feb	4.2	45	0-1	1	13-23	69	15
Sat, 01-Mar	3.8	20	< 1	0	9-21	70	13
Sun, 02-Mar	3.8	30	< 1	0	11-23	65	11
Mon, 03-Mar	3.4	25	<]	0	12-21	66	13
TOTAL	26.4			1			

7 Day Forecast for Meander

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	4	5	<]	0	5-24	68	9
Wed, 26-Feb	3.7	15	<]	0	10-24	72	10
Thu, 27-Feb	3.2	60	0-2	1.8	9-22	75	10
Fri, 28-Feb	3.7	50	0-2	1.6	9-20	69	14
Sat, 01-Mar	4	15	< 1	0	5-22	64	12
Sun, 02-Mar	3.8	35	0-1	1	8-22	60	11
Mon, 03-Mar	3.1	40	0-1	1	8-21	66	11
TOTAL	25.5			5.4			

7 Day Forecast for Sheffield

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	4.1	5	<]	0	8-24	69	10
Wed, 26-Feb	3.5	20	<]	0	10-24	78	10
Thu, 27-Feb	3.2	65	0-2	2	10-22	78	11
Fri, 28-Feb	3.9	40	0-1	1	10-21	69	15
Sat, 01-Mar	4.2	15	<]	0	6-22	65	14
Sun, 02-Mar	4.3	30	<1	0	11-23	58	13
Mon, 03-Mar	3.3	35	<1	0	10-20	64	13
TOTAL	26.5			3			

7 Day Forecast for Elliott

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	4	5	< 1	0	9-22	74	12
Wed, 26-Feb	3.7	20	<]	0	12-24	79	15
Thu, 27-Feb	3.7	35	< 1	0	11-22	78	14
Fri, 28-Feb	4.2	45	0-1	1	10-22	70	18
Sat, 01-Mar	3.9	15	< 1	0	7-22	68	16
Sun, 02-Mar	4.6	25	< 1	0	11-22	60	17
Mon, 03-Mar	3.6	40	0-1	1	11-21	67	19
TOTAL	27.7			2			

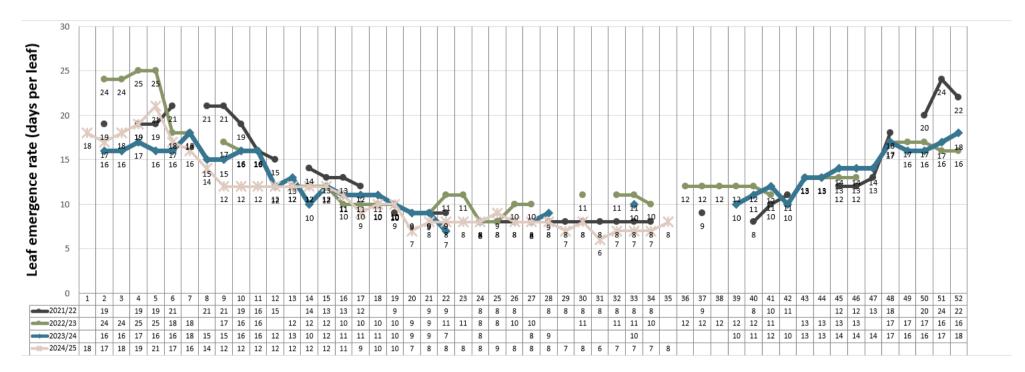
7 Day Forecast for Smithton

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	4.3	< 5	< 1	0	9-24	78	15
Wed, 26-Feb	4	20	< 1	0	12-25	82	23
Thu, 27-Feb	4.4	10	< 1	0	10-24	75	17
Fri, 28-Feb	4.1	60	0-2	2	10-22	76	23
Sat, 01-Mar	3.4	30	< 1	0	7-22	77	18
Sun, 02-Mar	4.7	25	<]	0	10-23	68	22
Mon, 03-Mar	4	30	<]	0	10-22	72	24
TOTAL	28.9			2			

7 Day Forecast for King Island

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 25-Feb	3.8	5	< 1	0	12-23	74	10
Wed, 26-Feb	4	25	<]	0	14-24	83	17
Thu, 27-Feb	3.8	15	<]	0	13-21	74	10
Fri, 28-Feb	4	50	0-1	1	13-21	73	19
Sat, 01-Mar	3.5	25	<]	0	11-21	72	14
Sun, 02-Mar	3.6	25	< 1	0	13-20	71	16
Mon, 03-Mar	4.6	15	<]	0	11-24	67	17
TOTAL	27.3			1			

Leaf emergence rate



This graph shows the leaf emergence rate in days per leaf for the past two seasons compared to the current season. The numbers directly below the graph (1-52) represent the weeks in the financial year. Week 1 is the first week in July, Week 52 is the last week in June.

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