



WEEKLY PASTURE GROWTH AND EVAPOTRANSPIRATION UPDATE

utas.edu.au/tia

Author: Leah Davies & Lesley Irvine

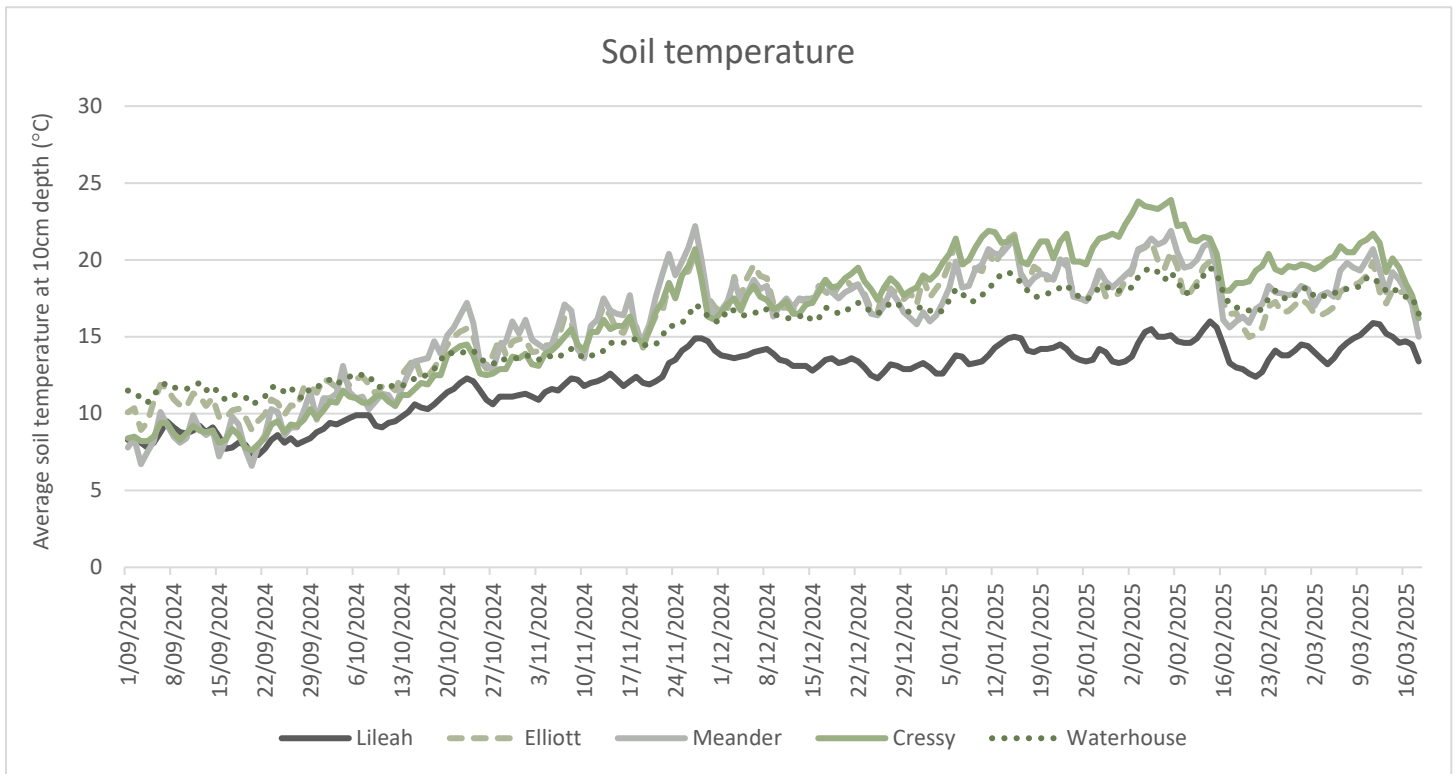
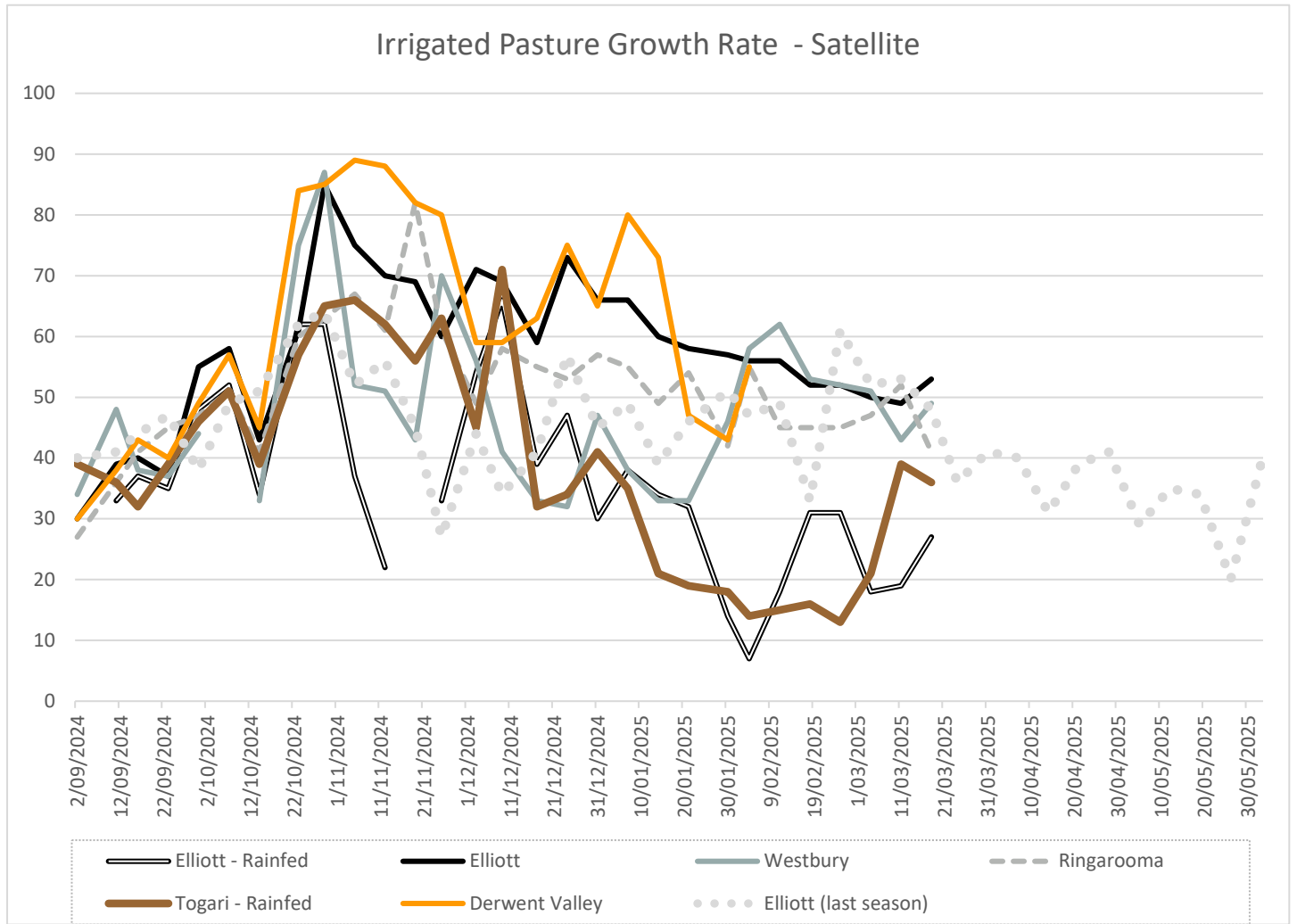
Regional Pasture Growth Rates

Region	Pasture growth rate (kg DM/ha/day) - Satellite	
	Irrigated	Rainfed
Togari	-	36
Elliott	53	27
Westbury	49	-
Ringarooma	41	-
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 emergence rate (days per leaf)	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

Wednesday, 12 March to Tuesday, 18 March 2025

Location	ET ₀ ¹ (mm)	Rainfall (mm)	Rainfall (month-to-date; mm)	Soil temp (°C) 9:00 a.m. @ 10 cm
Pegarah (KI)	-	-	-	-
Lileah	5.5	30.2	31.4	13.4
Elliott	12.2	24.0	24.0	15.3
Meander	15.0	26.4	26.4	15.0
Cressy	15.5	23.2	23.2	16.2
Ringarooma	-	-	-	-
Waterhouse	16.2	32.6	32.6	16.5

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

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

Monday, 10 March to Sunday, 16 March 2025

Location	ET ₀ ¹ (mm)	Rainfall (mm)	Rainfall (month-to-date; mm)	Soil temp (°C) 9:00 a.m. @ 10 cm
Ouse	12.0	6.0	6.0	-

Climate data for Ouse is collated from www.bom.gov.au. 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 <http://www.bom.gov.au/products/IDT65176.shtml>

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

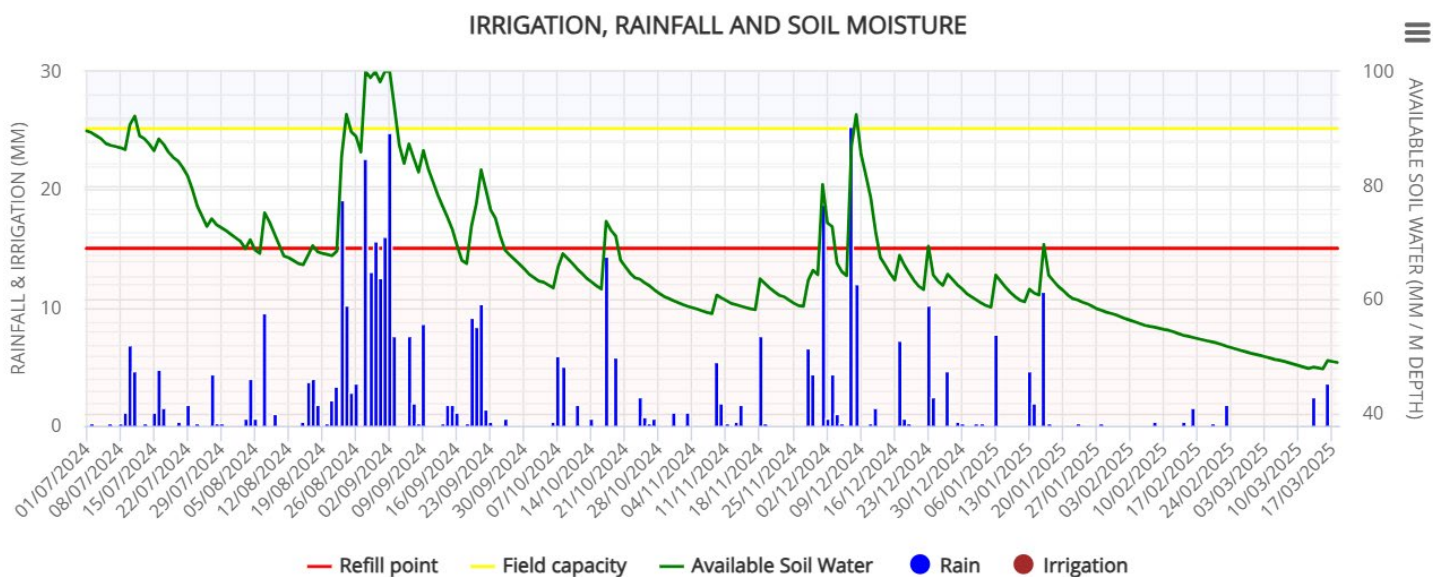
Soil Moisture Budgets

The soil moisture budgets below have been produced using IrriPasture (<https://irripasture.com/>). 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:

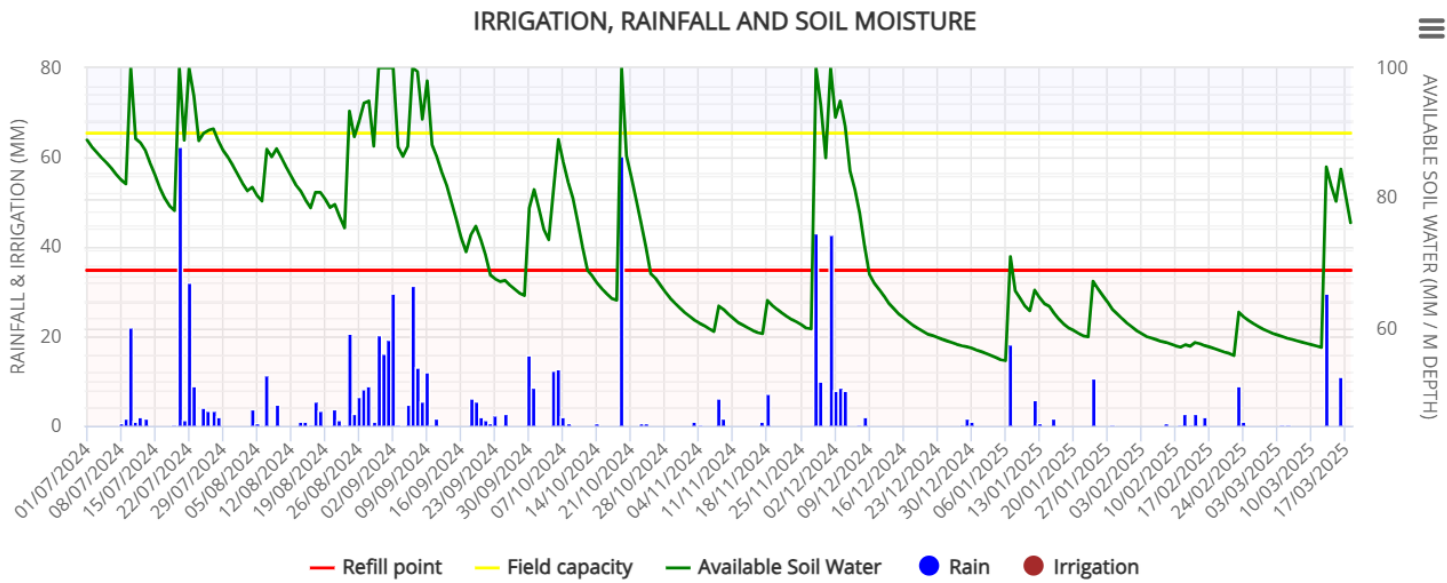
- Sand = 9 mm
- Loamy sand = 15 mm
- Sandy loam = 21 mm
- Loam = 27 mm
- Clay = 15 mm
- Clay loam = 24 mm

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.

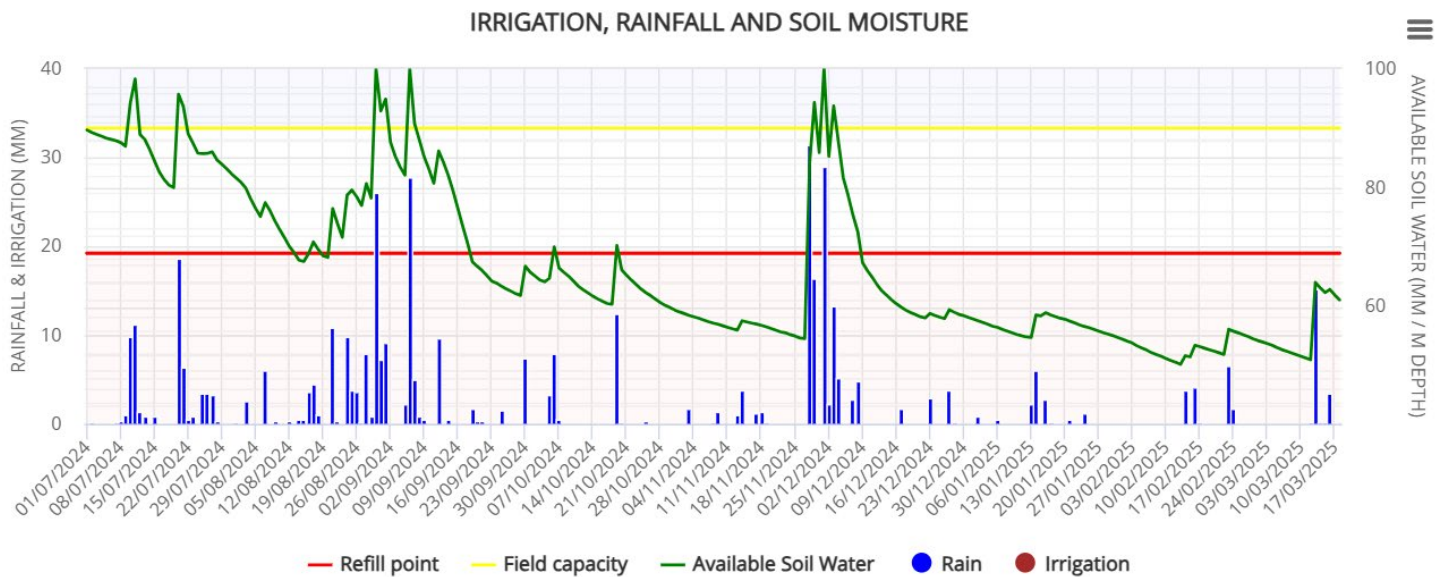
Ouse



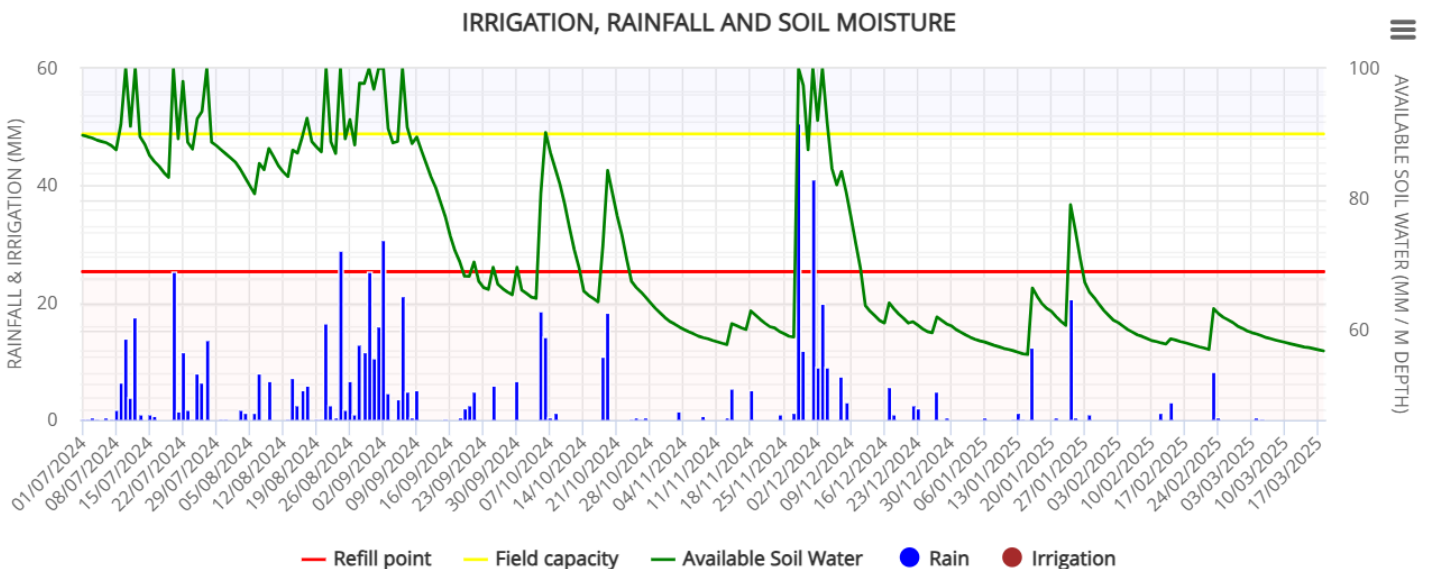
Scottsdale



Cressy

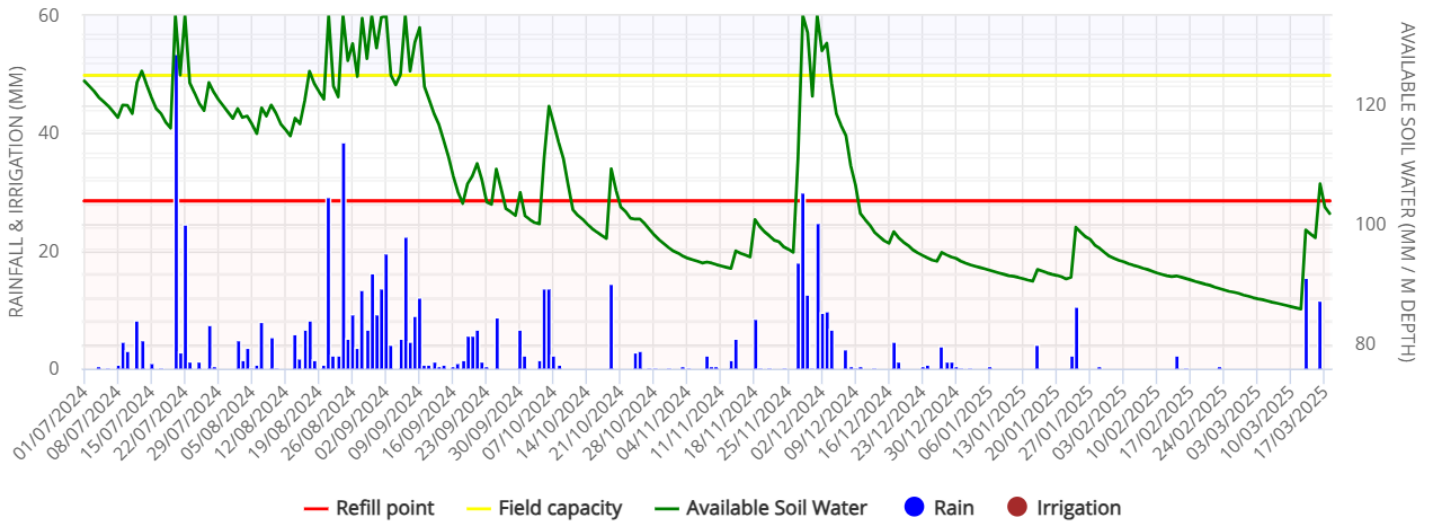


Sheffield



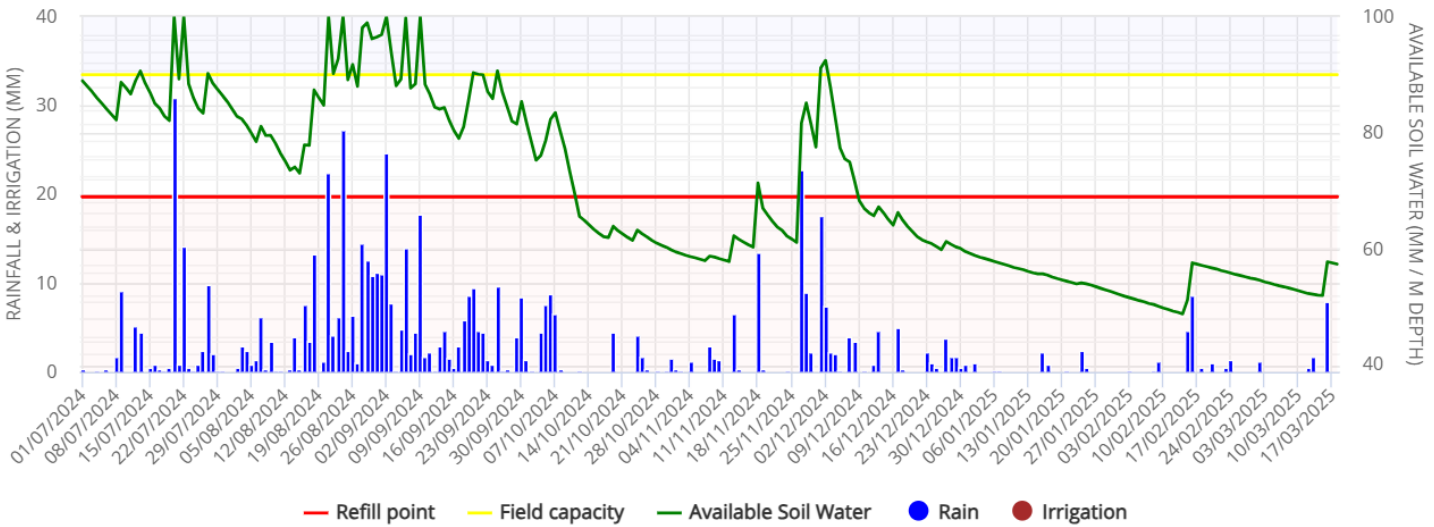
Wynyard

IRRIGATION, RAINFALL AND SOIL MOISTURE



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 (<https://www.swansystems.com.au/irrigation-harnessing-power-of-data/>)

7 Day Forecast for Ouse

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 18-Mar	3.6	15	< 1	0	9-23	67	14
Wed, 19-Mar	4.2	5	< 1	0	6-29	67	9
Thu, 20-Mar	4.6	75	2-4	2.9	11-27	62	15
Fri, 21-Mar	3.1	15	< 1	0	6-21	65	10
Sat, 22-Mar	2.9	45	0-1	1	7-21	70	14
Sun, 23-Mar	2.7	20	< 1	0	8-20	71	9
Mon, 24-Mar	3	25	< 1	0	5-23	73	10
TOTAL	24.1			3.9			

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, 18-Mar	3.1	15	< 1	0	7-22	73	11
Wed, 19-Mar	3.5	20	< 1	0	12-25	71	8
Thu, 20-Mar	3.4	70	1-4	3.6	14-26	79	13
Fri, 21-Mar	2.8	35	< 1	0	11-20	75	9
Sat, 22-Mar	3.1	20	< 1	0	10-21	75	12
Sun, 23-Mar	2.6	25	< 1	0	9-21	81	9
Mon, 24-Mar	2.2	45	0-1	1	10-21	83	10
TOTAL	20.7			4.6			

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, 18-Mar	3.2	5	< 1	0	5-22	75	10
Wed, 19-Mar	3.2	15	< 1	0	7-22	75	10
Thu, 20-Mar	3.2	80	2-5	3.9	10-23	73	13
Fri, 21-Mar	2.7	20	< 1	0	5-19	73	9
Sat, 22-Mar	2.9	25	< 1	0	6-21	72	11
Sun, 23-Mar	2.4	30	< 1	0	6-19	77	9
Mon, 24-Mar	2.2	40	0-1	1	8-20	80	10
TOTAL	19.8			4.9			

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, 18-Mar	3.2	10	< 1	0	7-21	76	12
Wed, 19-Mar	3	15	< 1	0	8-22	80	9
Thu, 20-Mar	3.2	80	2-5	3.8	10-23	76	12
Fri, 21-Mar	3	15	< 1	0	7-19	70	11
Sat, 22-Mar	3.1	20	< 1	0	8-21	72	13
Sun, 23-Mar	2.7	25	< 1	0	8-20	78	11
Mon, 24-Mar	2.2	40	0-1	1	10-20	81	11
TOTAL	20.4			4.8			

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, 18-Mar	2.6	15	< 1	0	8-20	77	13
Wed, 19-Mar	2.9	10	< 1	0	9-21	84	11
Thu, 20-Mar	3.1	75	2-4	3.5	12-23	83	14
Fri, 21-Mar	3	15	< 1	0	7-20	72	13
Sat, 22-Mar	3	25	< 1	0	8-21	76	14
Sun, 23-Mar	2.7	30	< 1	0	8-20	82	13
Mon, 24-Mar	2.2	45	0-1	1	10-20	84	14
TOTAL	19.5			4.5			

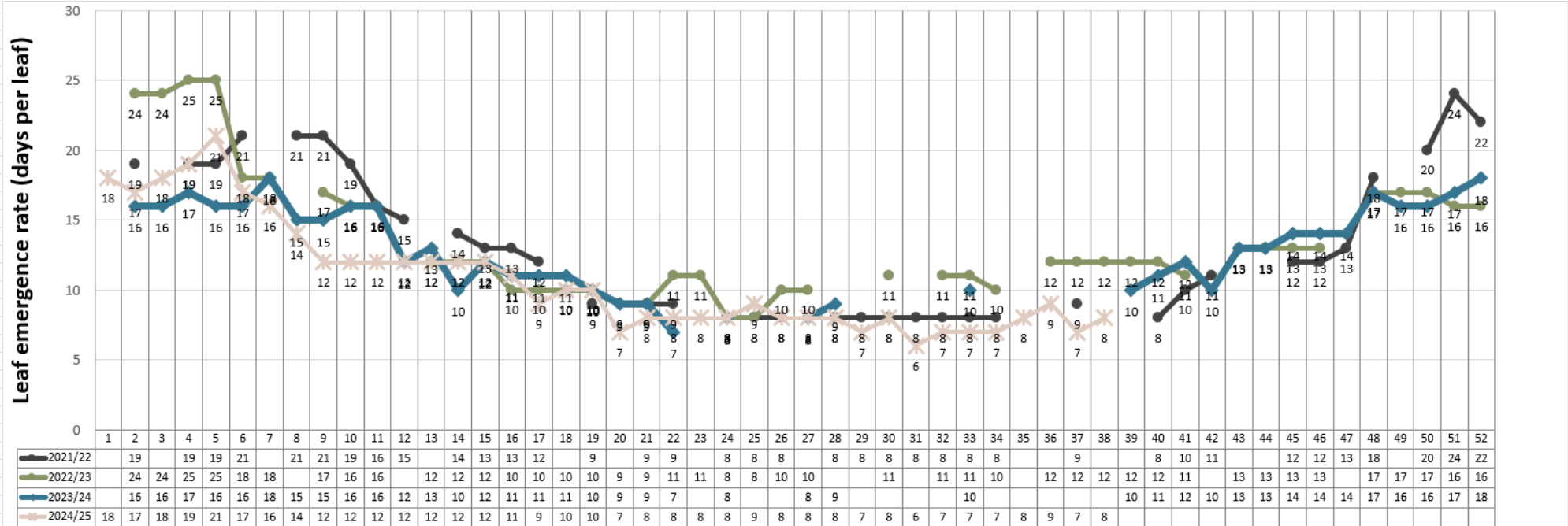
7 Day Forecast for Smithton

Date	ETo* mm	Chance of Rain %	Rain Range mm	Rain Estimate mm	Temp Range °C	Avg R. Humidity %	Avg Wind Speed km/hr
Tue, 18-Mar	2.5	30	< 1	0	9-20	82	15
Wed, 19-Mar	3.4	10	< 1	0	9-23	86	19
Thu, 20-Mar	2.9	85	2-5	4.3	13-24	87	20
Fri, 21-Mar	2.9	15	< 1	0	8-20	77	14
Sat, 22-Mar	2.9	35	< 1	0	9-21	80	18
Sun, 23-Mar	3.2	25	< 1	0	8-22	81	16
Mon, 24-Mar	2.4	40	0-1	1	10-21	85	18
TOTAL	20.2			5.3			

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, 18-Mar	2.8	15	< 1	0	13-20	72	11
Wed, 19-Mar	4.1	< 5	< 1	0	12-25	72	13
Thu, 20-Mar	3.3	80	2-4	3.5	16-23	75	17
Fri, 21-Mar	2.9	15	< 1	0	12-20	70	10
Sat, 22-Mar	3.1	25	< 1	0	13-21	72	13
Sun, 23-Mar	2.7	20	< 1	0	13-20	79	11
Mon, 24-Mar	2.8	30	< 1	0	12-22	82	14
TOTAL	21.7			3.5			

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.

For more information please contact: Lesley.Irvine@utas.edu.au 0428 880 287 utas.edu.au/tia

DISCLAIMER: While the Tasmanian Institute of Agriculture (TIA) takes reasonable steps to ensure that the information on its fact sheets is correct, it provides no warranty or guarantee that information is accurate, complete or up-to-date. TIA will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information contained in this publication. No person should act on the basis of the contents of this publication without first obtaining specific, independent, professional advice. TIA and contributors to this Fact Sheet may identify products by proprietary or trade names to help readers identify particular types of products. We do not endorse or recommend the products of any manufacturer referred to. Other products may perform as well or better than the products of the manufacturer referred to.