



Weekly Australian Climate, Water and Agricultural Update

No. 43/2024

7 November 2024

Summary of key issues

- In the week ending 6 November 2024, low-pressure systems and troughs brought rainfall to northern and eastern parts of the country.
 - Across cropping regions, little to no rainfall was recorded across most areas this week. Rainfall totals of between 5 and 50 millimetres were recorded across parts of northern and central Queensland.
- Over coming days, low-pressure systems are expected to bring showers over parts of northern, central and eastern Australia. High-pressure systems are expected to keep remaining areas largely dry.
 - Across cropping regions, some rainfall is expected across north-eastern growing regions. If realised, high rainfall totals in the east could interrupt the harvest of winter crops.
 - Little to no rainfall forecast across southern Australia will provide for an uninterrupted harvest of winter crops for grain and hay where harvest has commenced. Areas which did not receive rainfall last week may see further declines in grain yields for later sown crops and farmers will be making decisions on whether to cut these crops for hay or turn them over for livestock grazing as grain yield and relative returns for grain compared to hay continue to decline.
- Nationally, October rainfall was well above average in the west and north, with much of the remainder of the country recording average to below average rainfall.
- For the 3 months to October 2024, above average rainfall totals resulted in average to extremely high pasture production across large parts of eastern, western, and central Australia. Below average to extremely low pasture growth was recorded in some southern areas and isolated regions in the east.
- Soil moisture models continue to indicate low soil moisture levels in southern Australia, with above average soil moisture modelled in eastern Queensland, northern New South Wales, and large parts of Western Australia and the Northern Territory.
- Water storage levels in the Murray-Darling Basin (MDB) decreased between 31 October 2024 and 07 November 2024 by 282 gegalitres (GL). Current volume of water held in storage is 16 677 GL, equivalent to 75% of total storage capacity. This is 15 percent or 3,341GL less than at the same time last year. Water storage data is sourced from the BOM.
- Allocation prices in the Victorian Murray below the Barmah Choke increased from \$139 on 31 October 2024 to \$150 on 07 November 2024. Prices are the same in the Murrumbidgee and Victorian Murray Below Choke due to IVT (intervalley trade) being permitted between the regions.

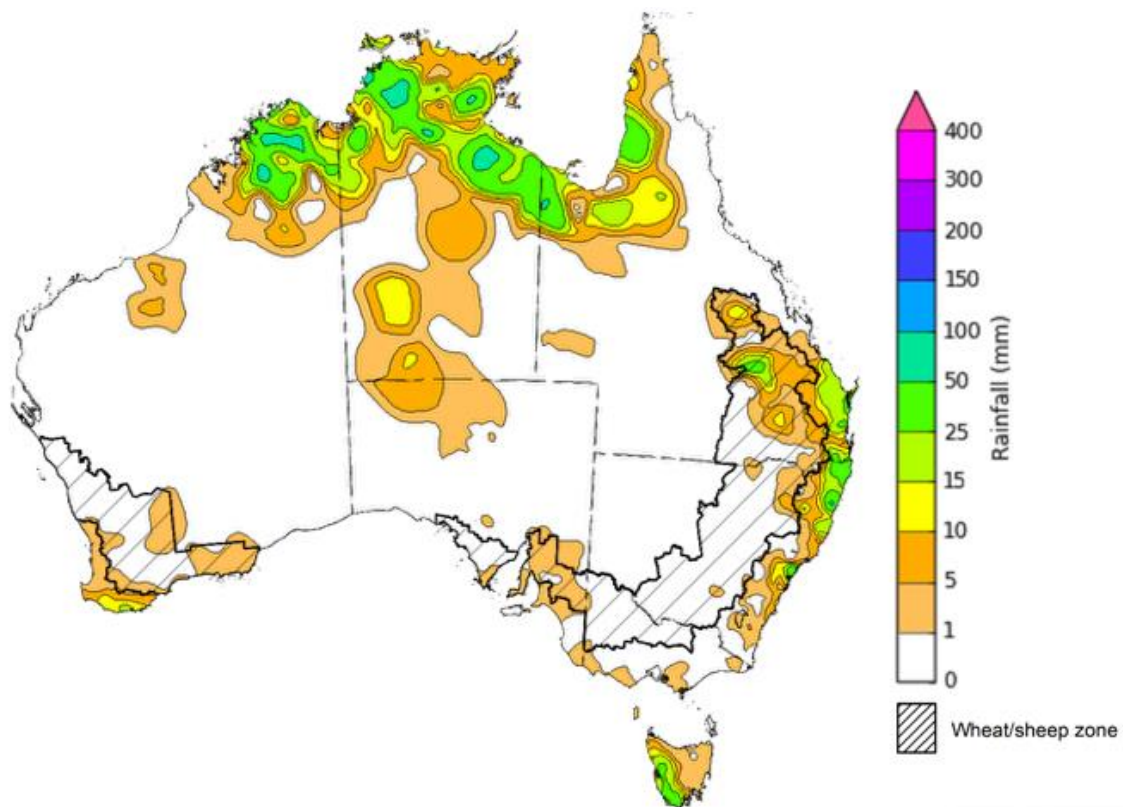
1. Climate

1.1. Rainfall this week

For the week ending 6 November 2024, low pressure systems brought rainfall to parts of northern and eastern Australia. Rainfall totals of up to 100 millimetres were recorded in scattered areas of northern Western Australia, Queensland, and the Northern Territory. Across the east coast parts of south-eastern Queensland and north-eastern New South Wales recorded rainfall totals of between 5 and 50 millimetres. In Tasmania, a cold front brought a maximum of 50 millimetre of rainfall to the west coast.

Across cropping regions, little to no rainfall was recorded across most areas this week. The exception being parts of northern and central Queensland, which saw isolated falls of between 5 and 50 millimetres. With the harvest of winter crops underway, wet conditions across parts of Queensland may have interrupted harvest in some areas. Little to no rainfall across southern and western cropping regions would have allowed for a largely uninterrupted harvest of winter crops.

Rainfall for the week ending 6 November 2024



©Commonwealth of Australia 2024, Australian Bureau of Meteorology

Issued: 6/11/2024

Note: The rainfall analyses and associated maps utilise data contained in the Bureau of Meteorology climate database, the Australian Data Archive for Meteorology (ADAM). The analyses are initially produced automatically from real-time data with limited quality control. They are intended to provide a general overview of rainfall across Australia as quickly as possible after the observations are received. For further information go to <http://www.bom.gov.au/climate/rainfall/>

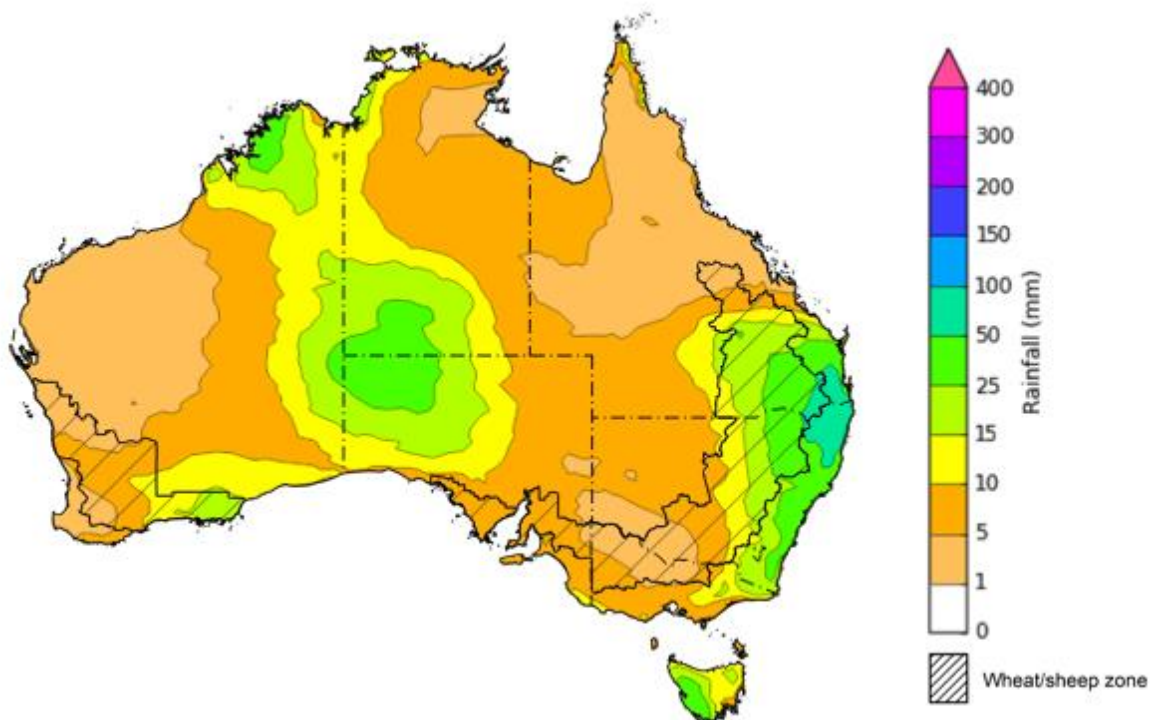
1.2. Rainfall forecast for the next eight days

Over the 8 days to 14 November 2024, low-pressure systems and troughs are expected to bring showers and storms across parts of northern Australia, extending into central and eastern parts of the country. Falls of between 5 and 50 millimetres of rainfall is forecast in eastern and southern Western Australia, the Northern Territory, South Australia and Tasmania. Lighter falls of between 5 and 25 millimetres are forecast for southern Victoria. Meanwhile, heavier falls of between 10 and 100 millimetres are forecast for the south-eastern Queensland and across eastern New South Wales. High pressure systems are expected to keep the remainder of the country largely dry.

Across cropping regions, rainfall totals are forecast to be relatively low across most southern growing regions. Much of southern New South Wales, Victoria, South Australia, and Western Australia are forecast to see rainfall totals of between 1 and 10 millimetres. In contrast, much of Queensland and northern New South Wales, are likely to see rainfall totals of between 10 and 50 millimetres.

If realised, high rainfall totals in the east could interrupt the harvest of winter crops. Little to no rainfall forecast across southern Australia will provide for an uninterrupted harvest of winter crops for grain and hay where harvest has commenced. In areas which did not receive rainfall last week, another dry week may see further declines in grain yields in later sown crops and farmers will be making decisions on whether to cut these crops for hay or turn them over for livestock grazing as grain yield and relative returns for grain compared to hay continue to decline.

Total forecast rainfall for the period 7 November to 14 November 2024



©Commonwealth of Australia 2024, Australian Bureau of Meteorology

Issued 7/11/2024

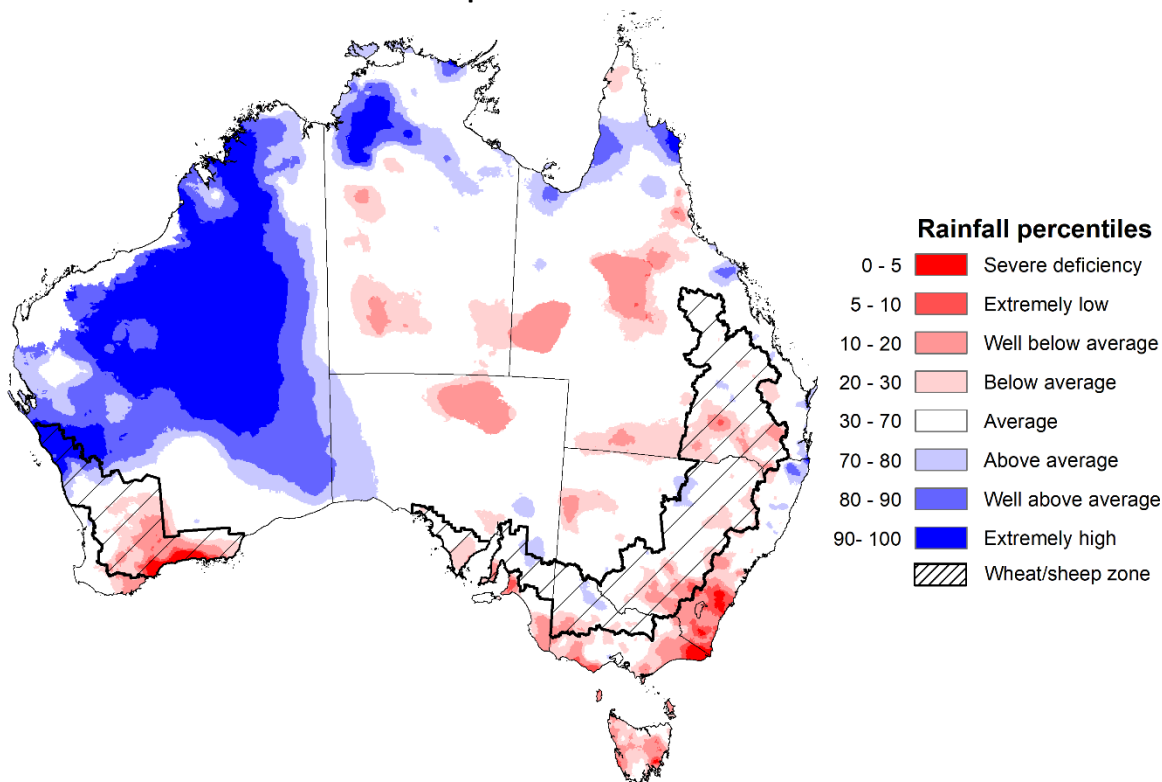
Note: This rainfall forecast is produced from computer models. As the model outputs are not altered by weather forecasters, it is important to check local forecasts and warnings issued by the Bureau of Meteorology.

1.3. Monthly rainfall

During October 2024, rainfall was well above average to extremely high across much of Western Australia and isolated areas of the northern tropics. Above average rainfall was also observed across scattered areas of south-eastern Australia. In contrast, large areas of southern and central saw extremely low to below average rainfall. The remainder of Australia saw generally average October rainfall.

In cropping regions, October 2024 rainfall was generally below average to average, with parts of southern Western Australia and southern New South Wales see well below average rainfall. In contrast, northern Western Australian cropping regions experienced well above average rainfall. In Queensland and New South Wales, lower rainfall totals would have supported the harvest of winter crops in the second half of the month. Following extremely low to below average rainfall in previous months across much of Victoria and South Australia, late October rainfall was likely to have been sufficient to arrest further reduction in the yield potential of winter crops.

Rainfall percentiles for October 2024



Note: Rainfall for October 2024 is compared with rainfall recorded for that period during the historical record (1900 to present). For further information, go to <http://www.bom.gov.au/climate/austmaps/about-rain-maps.shtml>
 Source: Bureau of Meteorology

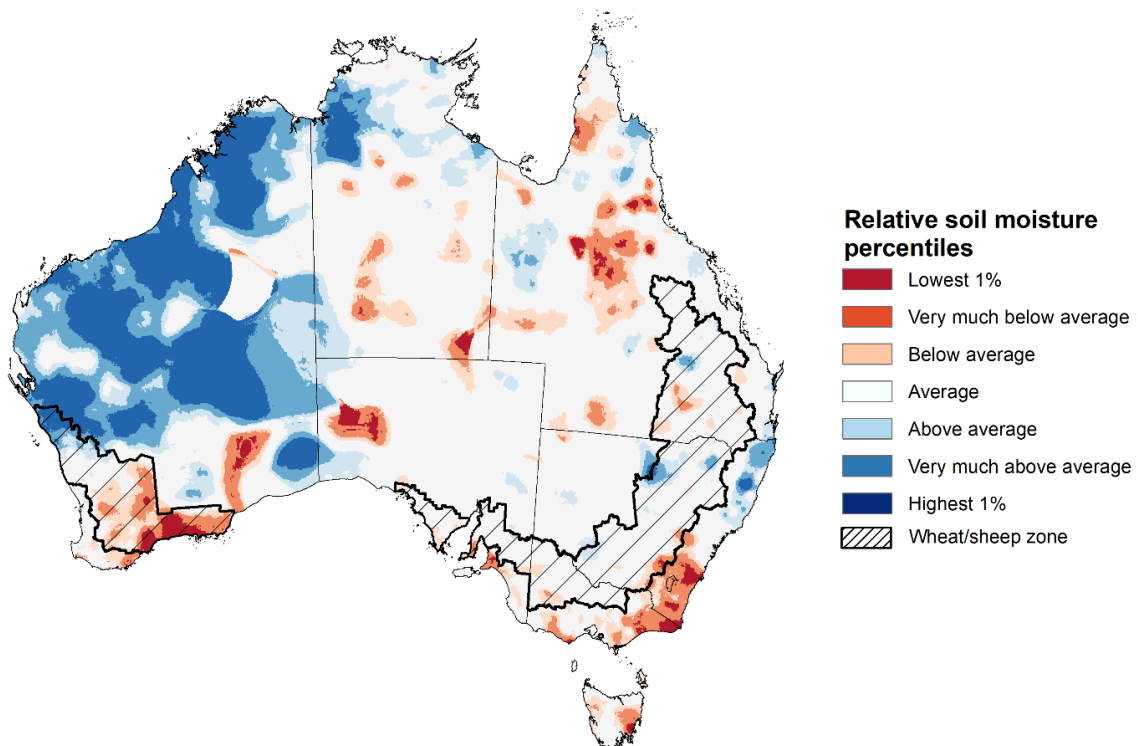
1.4 Monthly Soil Moisture

Modelled **upper layer soil moisture** varied considerably between the eastern and western parts of the country. Much of Western Australia saw very much above average soil moisture for the period, with the exception of some southern areas with below average soil moisture. Much of the eastern two-thirds of the country saw close to average upper layer soil moisture for this year. In contrast, parts of eastern Victoria, south-eastern New South Wales, Tasmania, and isolated areas of central South Australia and Queensland were modelled with below average or very much below average upper layer soil moisture.

At this time of year, upper layer soil moisture is less critical for well-established winter crops. However, upper layer soil moisture will be critical for supporting the germination and establishment of summer crops in the coming months.

Across cropping regions, **upper layer soil moisture** in October was modelled to be generally average across much of Queensland, New South Wales, Victoria, and South Australia. Some areas of central Queensland and northern New South Wales were modelled to have above average soil moisture. In Western Australia, upper layer soil moisture varied considerably between northern and southern cropping regions, with very much above average upper layer soil moisture modelled in the north, and very much below average in the south. Timely rainfall in the coming weeks will be critical to support the development and arrest sliding yield prospects of winter crops across southern growing regions and boost upper lower soil moisture for the planting of summer crops in northern growing regions.

Modelled upper layer soil moisture for October 2024



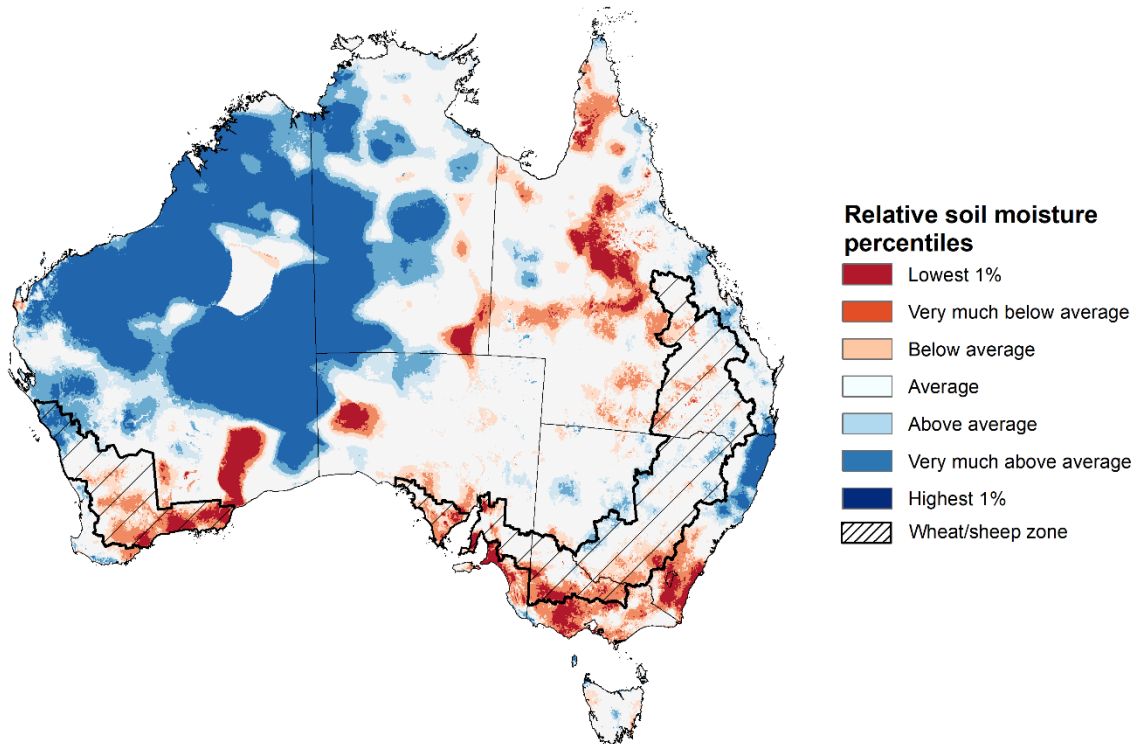
Note: This map shows the levels of modelled upper layer soil moisture (0 to 10 centimetres) during October 2024. This map shows how modelled soil conditions during October 2024 compare with June conditions modelled over the reference period (1911 to 2016). Dark blue areas on the maps were much wetter in October 2024 than during the reference period. The bulk of plant roots occur in the top 20 centimetres of the soil profile. Soil moisture in the upper layer of the soil profile is therefore useful indicator of the availability of water, particularly for germinating seed.
 Source: Bureau of Meteorology (<https://awo.bom.gov.au/about/overview>)

Across northern and central Australia, **lower layer soil moisture** was average to very much above average, with northern Western Australia, western Northern Territory and scattered parts of eastern Queensland seeing very high soil moisture levels for this time of year. In contrast, large areas of southern Australia and central Queensland were modelled to have extremely low to below average lower layer soil moisture.

Lower layer soil moisture plays a pivotal role in sustaining the growth of winter crops and pasture during their critical development stages.

Across cropping regions, **lower layer soil moisture** was generally average in Queensland and much of New South Wales, northern Victoria and eastern South Australia. In Western Australia, lower layer soil moisture varied between northern and southern cropping regions, with very much above average upper layer soil moisture modelled in the north, and very much below average in the south. In western South Australia, southern Victoria, and southern New South Wales, October lower layer soil moisture was modelled to be extremely low to below average for this time of year. Cropping regions in far southern Australia with extremely low levels of stored soil moisture will require sufficient and timely rainfall for the remainder of spring to arrest declining levels of crop and pasture production.

Modelled lower layer soil moisture for October 2024



Note: This map shows the levels of modelled lower layer soil moisture (10 to 100 centimetres) during October 2024. This map shows how modelled soil conditions during October 2024 compare with May conditions modelled over the reference period (1911 to 2016). Dark blue areas on the maps were much wetter in October 2024 than during the reference period. The dark red areas were much drier than during the reference period. The bulk of plant roots occur in the top 20 centimetres of the soil profile. The lower layer soil moisture is a larger, deeper store that is slower to respond to rainfall and tends to reflect accumulated rainfall events over longer time periods.

Source: Bureau of Meteorology (<https://awo.bom.gov.au/about/overview>)

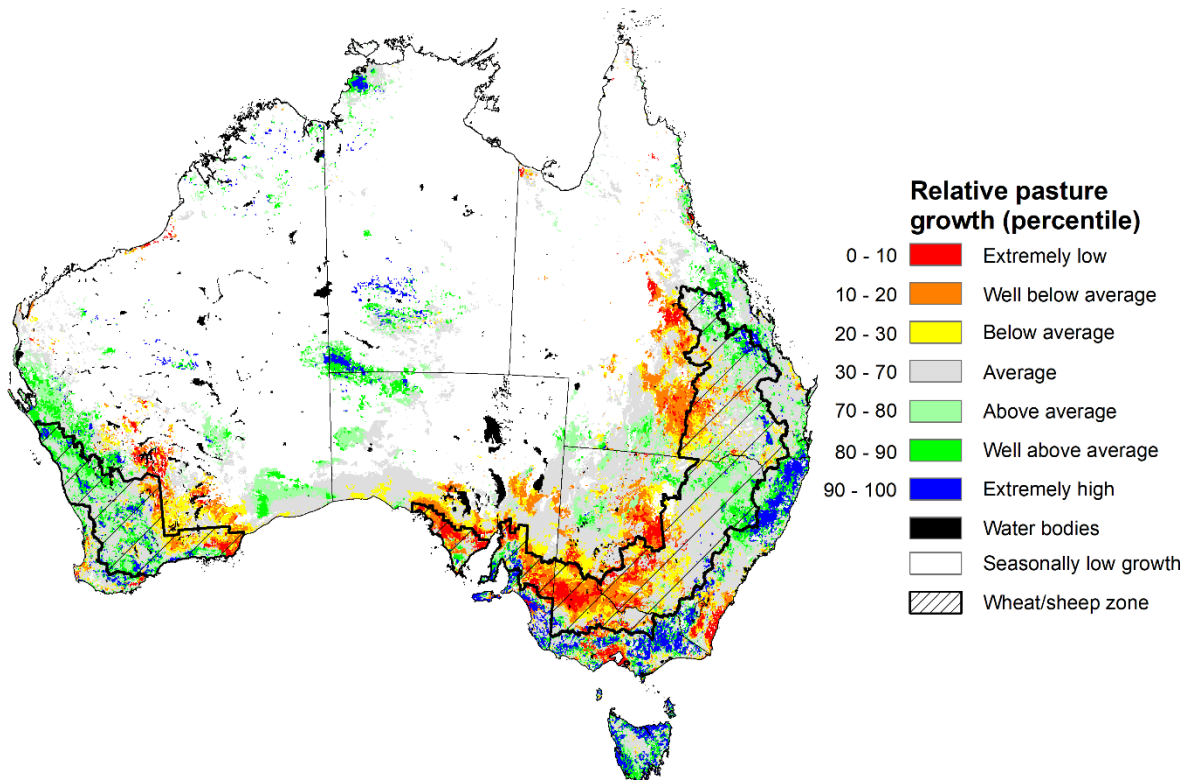
1.4 Pasture Growth

October typically sees the transition from the northern Australia dry season (May to September) to the wet season, with the northern rainfall onset occurring in several regions already. Pasture growth in the dry season typically declines significantly due to the reduction in water availability, with livestock relying on pasture grown throughout the previous wet season. Across southern Australia, July to September pasture growth influences the number of livestock than can be supported without supplementary feeding over winter and the level of reliance on hay and grain during this period. Pasture availability during this period influences the growth and branding and marking rates of lambs and calves, livestock turnoff and the production of meat, milk, and wool.

For the 3 months to October 2024, average to extremely high pasture growth relative to this time of year was modelled across much of north-eastern New South Wales, eastern Queensland, southern Victoria, the far south of South Australia, isolated areas of the central and north Northern Territory and much of south-west Western Australia. This growth is likely to enable farmers to continue to maintain stock numbers and provide opportunities to build standing dry matter availability and replenish fodder supplies during spring.

In contrast, below average to extremely low pasture growth rates were recorded across large areas of the south and east of the country. Large areas of southern South Australia and northern Victoria, central parts of Queensland, central New South Wales and parts of south-eastern Western Australia, all saw below average to well below average pasture growth. Graziers in regions where below average pasture growth was recorded will be more reliant on supplemental feed to maintain current stocking rates and production.

Relative pasture growth for 3-months ending October 2024 (1 August to 31 October 2024)



Notes: AussieGRASS pasture growth estimates are relative to the long-term record and shown in percentiles. Percentiles rank data on a scale of zero to 100. This analysis ranks pasture growth for the selected period against average pasture growth for the long-term record (1957 to 2016). Pasture growth is modelled at 5km2 grid cells.

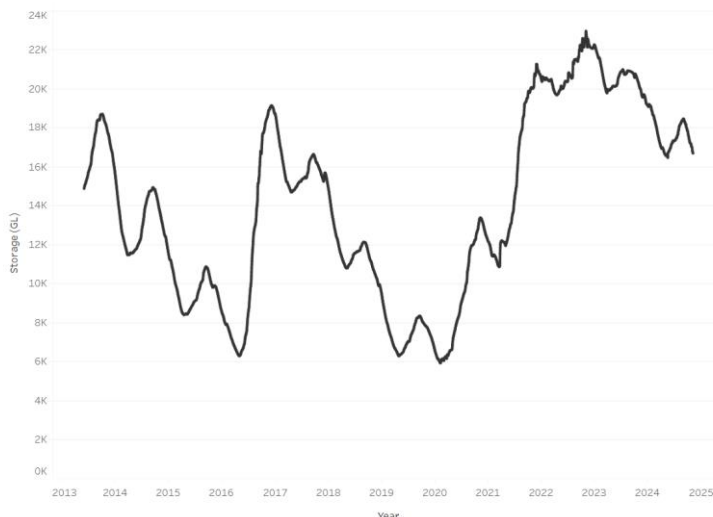
Source: Department of Environment, Science and Innovation

2. Water

2.1. Water markets – current week

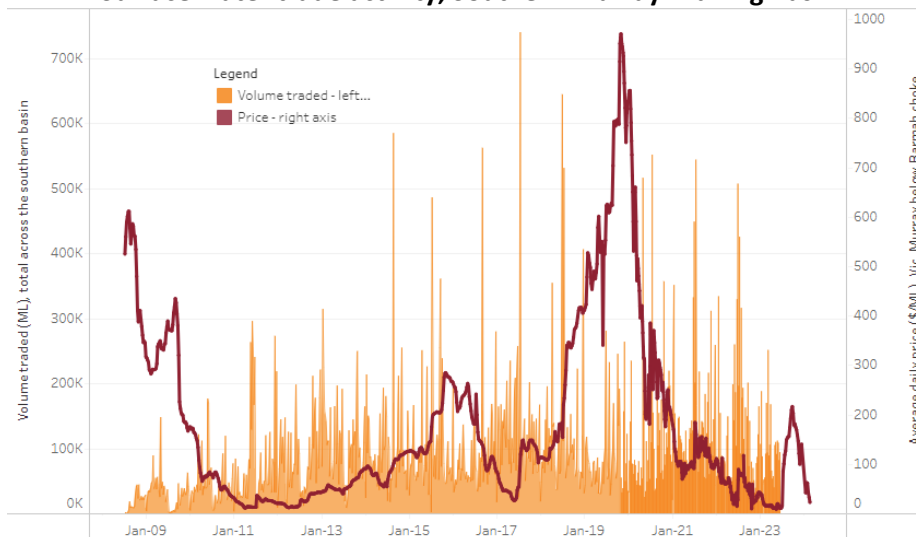
Water storage levels in the Murray-Darling Basin (MDB) decreased between 31 October 2024 and 07 November 2024 by 282 gigalitres (GL). Current volume of water held in storage is 16 677 GL, equivalent to 75% of total storage capacity. This is 15 percent or 3,341GL less than at the same time last year. Water storage data is sourced from the BOM.

Water storages in the Murray-Darling Basin, 2013–2024



Allocation prices in the Victorian Murray below the Barmah Choke increased from \$139 on 31 October 2024 to \$150 on 07 November 2024. Prices are the same in the Murrumbidgee and Victorian Murray Below Choke due to IVT (intervalley trade) being permitted between the regions.

Surface water trade activity, Southern Murray–Darling Basin



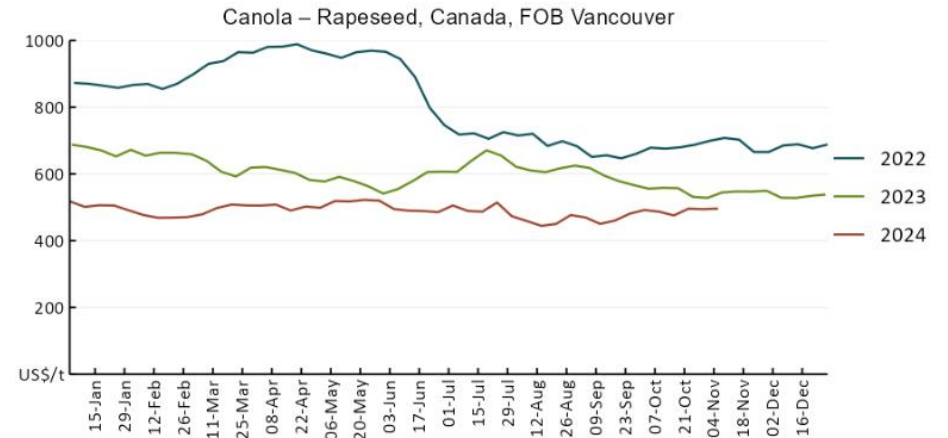
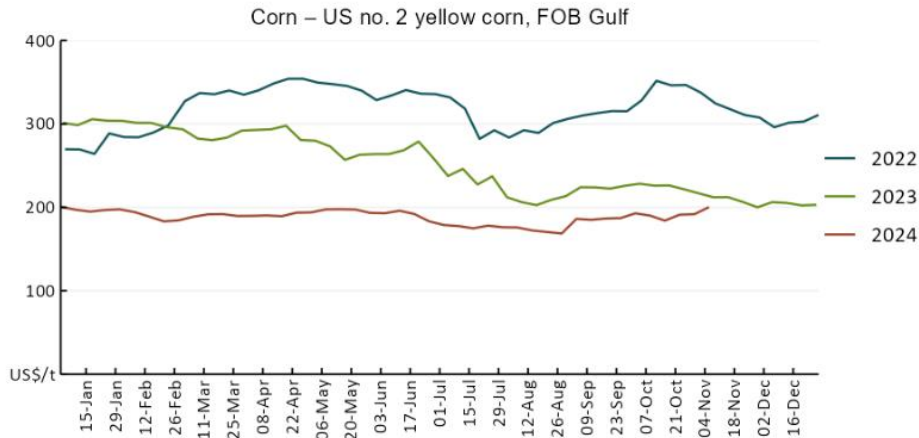
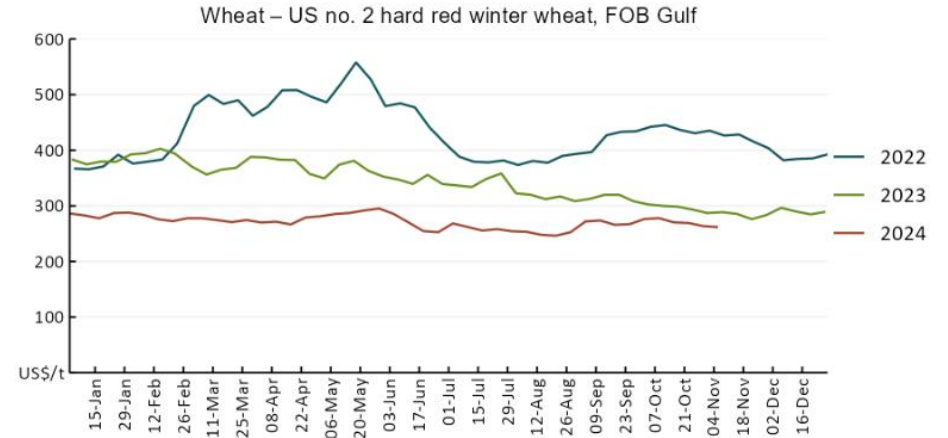
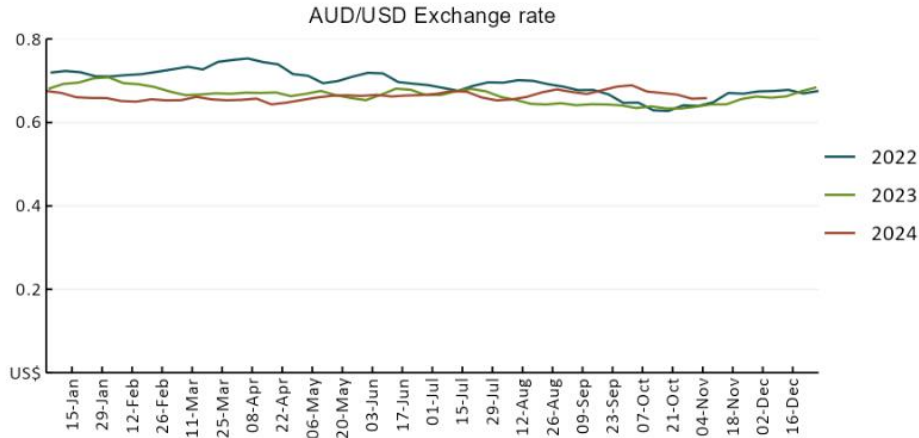
The trades shown reflect estimated market activity and do not encompass all register trades. The price is shown for the VIC Murray below the Barmah choke. Historical prices (before 1 July 2019) are ABARES estimates after removing outliers from BOM water register data. Prices after 1 July 2019 and prior to the 30 October 2019 reflect recorded transaction prices as sourced from Ruralco. Prices after the 30 October 2019 are sourced from Waterflow. Data for volume traded is sourced from the BOM water register. Only the price data shown is current on 17 October 2024.

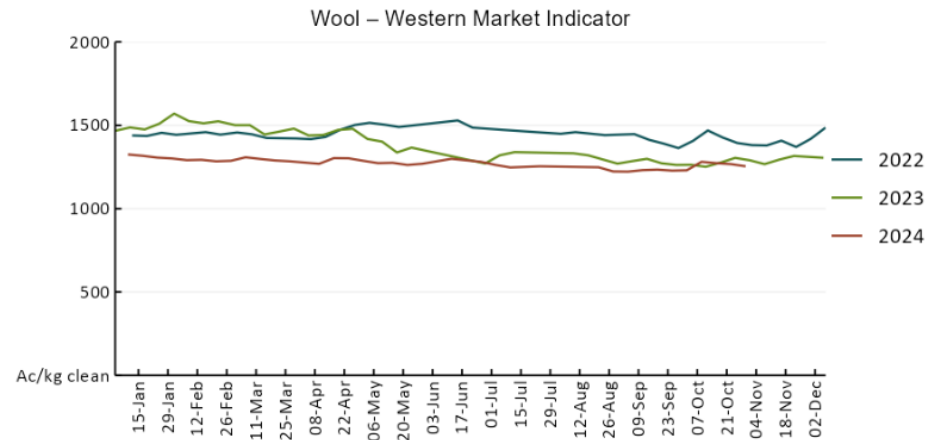
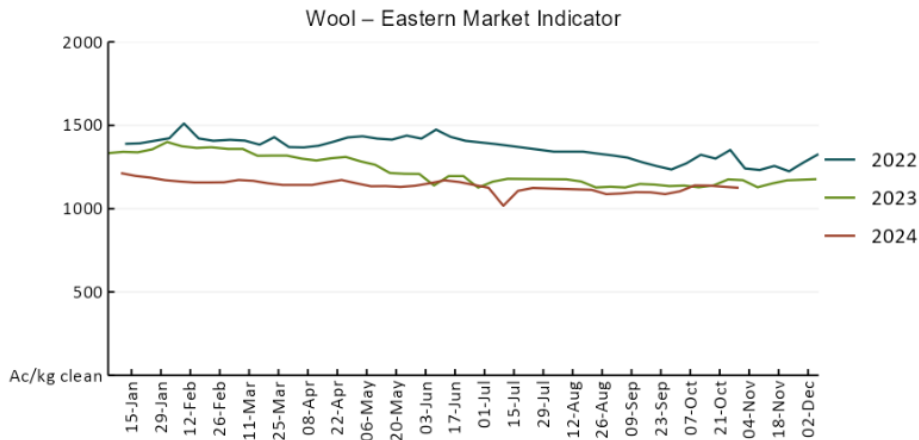
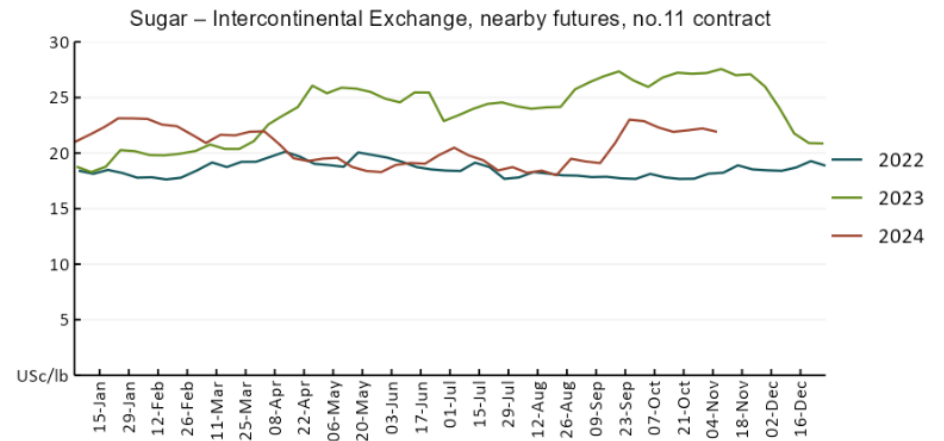
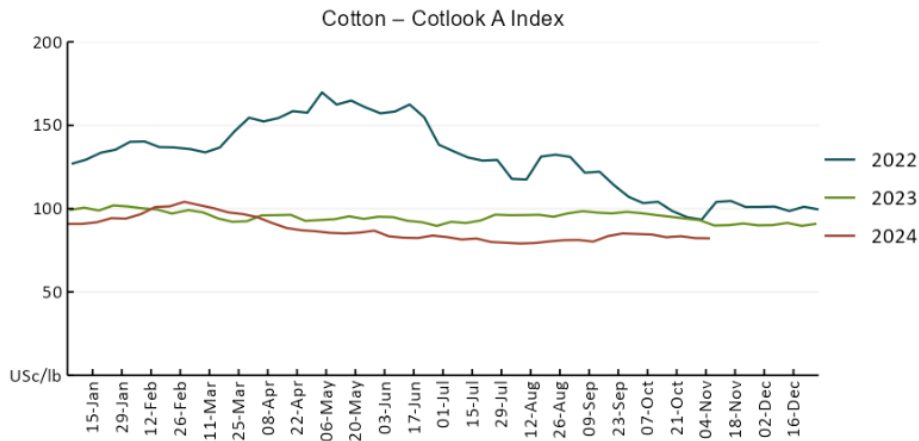
To access the full, interactive, weekly water dashboard, which contains the latest and historical water storage, water market and water allocation information, please visit https://www.agriculture.gov.au/abares/products/weekly_update/weekly-update-071124

3. Commodities

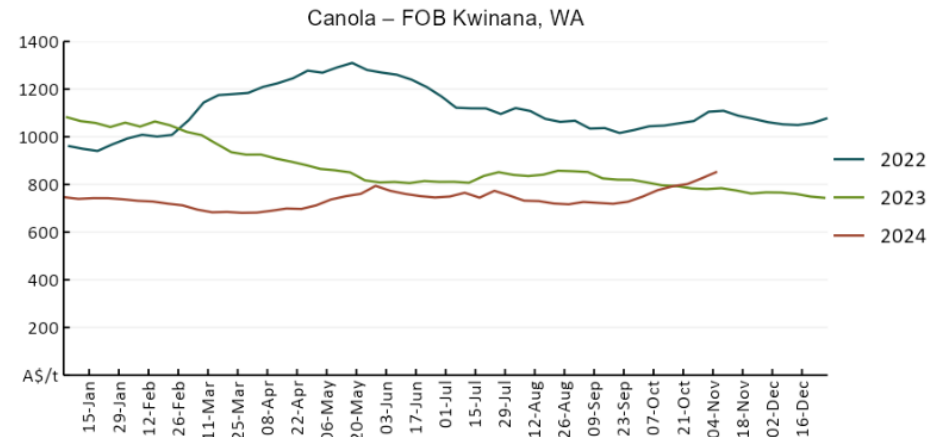
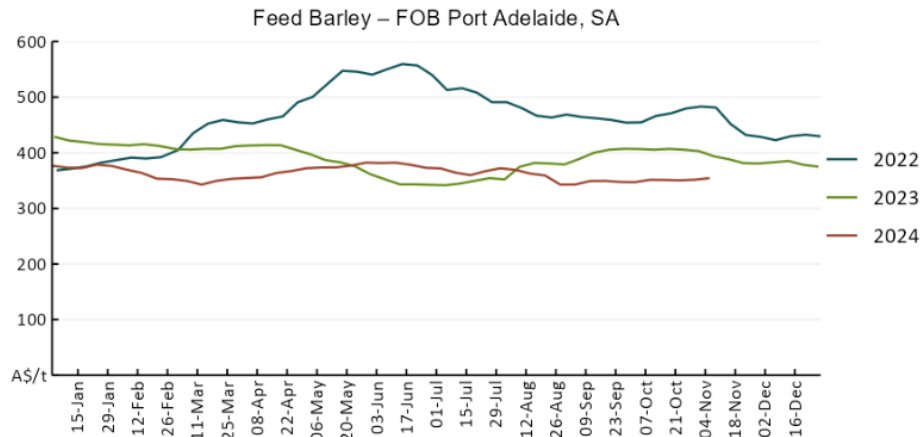
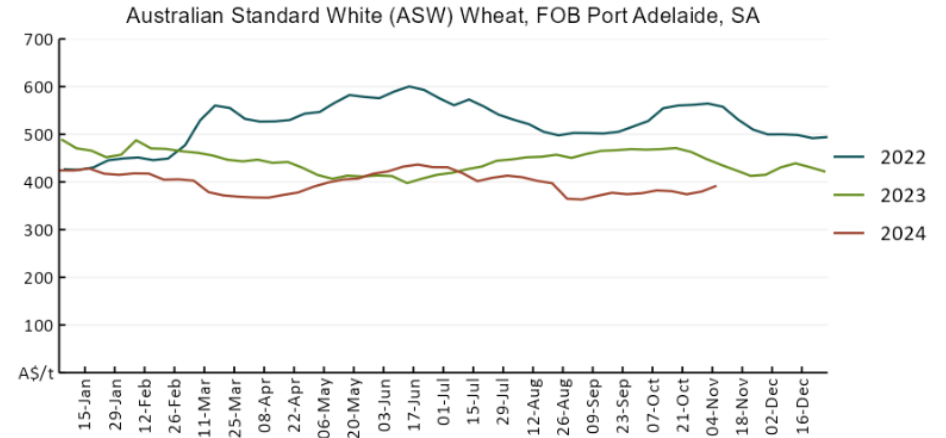
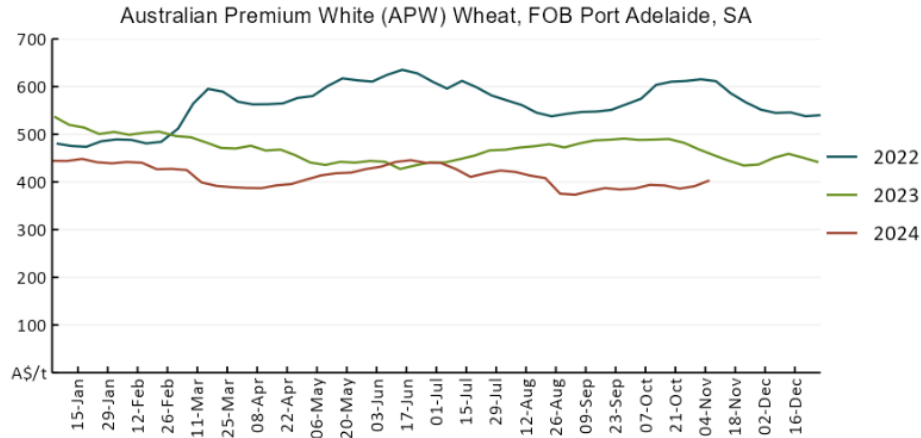
Indicator	Week average	Unit	Latest Price	Previous Week	Weekly change	Price 12 months ago	Annual change
Selected world indicator prices							
AUD/USD Exchange rate	06-Nov	A\$/US\$	0.66	0.66	0%	0.64	2%
Wheat – US no. 2 hard red winter wheat, FOB Gulf	06-Nov	US\$/t	262	264	-1%	286	-8%
Corn – US no. 2 yellow corn, FOB Gulf	06-Nov	US\$/t	200	192	4%	212	-6%
Canola – Rapeseed, Canada, FOB Vancouver	06-Nov	US\$/t	496	495	0%	548	-9%
Cotton – Cotlook 'A' Index	06-Nov	USc/lb	82	82	0%	90	-9%
Sugar – Intercontinental Exchange, nearby futures, no.11 contract	06-Nov	USc/lb	22	22	-1%	27	-19%
Wool – Eastern Market Indicator	30-Oct	Ac/kg clean	1,125	1,131	-1%	1,127	0%
Wool – Western Market Indicator	30-Oct	Ac/kg clean	1,254	1,267	-1%	1,332	-6%
Selected Australian grain export prices							
Aust. premium white wheat (APW), FOB Port Adelaide, South Australia	06-Nov	A\$/t	403	391	3%	445	-9%
Aust. standard white wheat (ASW), FOB Port Adelaide, South Australia	06-Nov	A\$/t	392	380	3%	425	-8%
Feed Barley – FOB Port Adelaide, South Australia	06-Nov	A\$/t	354	352	1%	388	-9%
Canola – FOB Kwinana, Western Australia	06-Nov	A\$/t	854	827	3%	775	10%
Grain Sorghum – FOB Brisbane, Queensland	06-Nov	A\$/t	400	393	2%	502	-20%
Selected domestic livestock indicator prices							
Beef – Eastern Young Cattle Indicator	06-Nov	Ac/kg cwt	627	630	-1%	382	64%
Mutton – Mutton indicator (18–24 kg fat score 2–3), Vic	06-Nov	Ac/kg cwt	340	334	2%	106	222%
Lamb – National Trade Lamb Indicator	06-Nov	Ac/kg cwt	809	818	-1%	454	78%
Pig – Eastern Seaboard (60.1–75 kg), average of buyers & sellers	23-Oct	Ac/kg cwt	436	432	1%	367	19%
Live cattle – Light steers to Indonesia	06-Nov	Ac/kg lwt	325	325	0%	270	20%
Global Dairy Trade (GDT) weighted average prices ^a							
Dairy – Whole milk powder	06-Nov	US\$/t	3,713	3,553	5%	3,733	-1%
Dairy – Skim milk powder	06-Nov	US\$/t	2,850	2,745	4%	3,547	-20%
Dairy – Cheddar cheese	06-Nov	US\$/t	4,973	4,702	6%	5,147	-3%
Dairy – Anhydrous milk fat	06-Nov	US\$/t	7,558	7,229	5%	5,901	28%

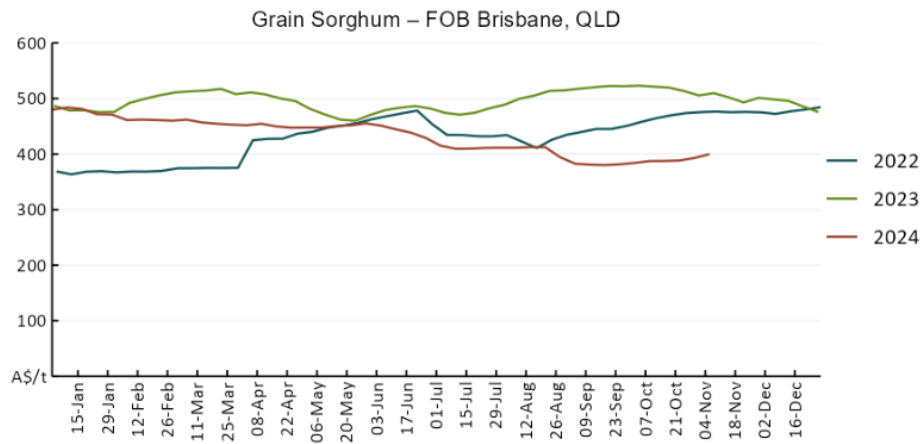
3.1. Selected world indicator prices



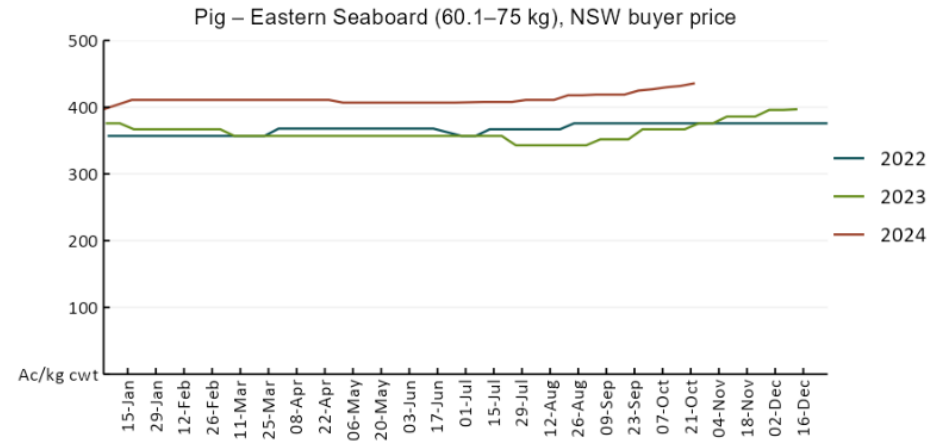
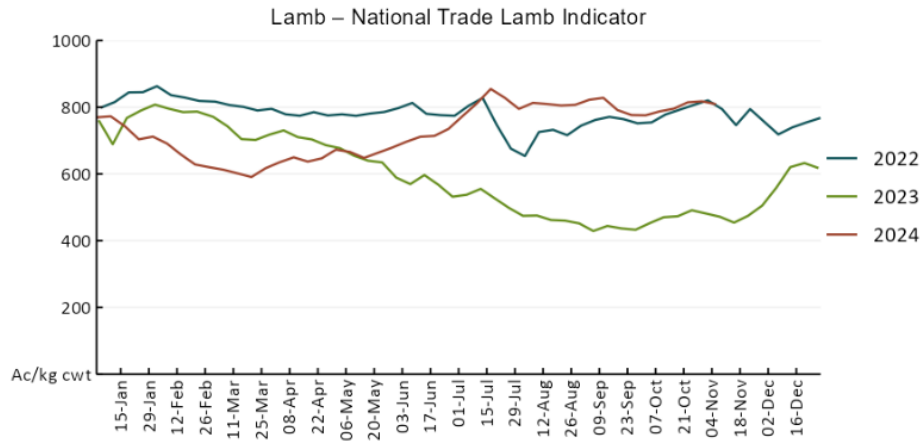
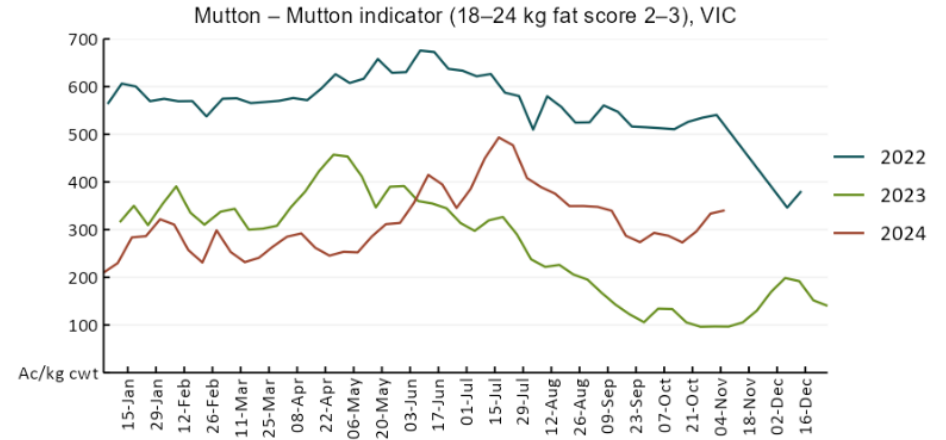
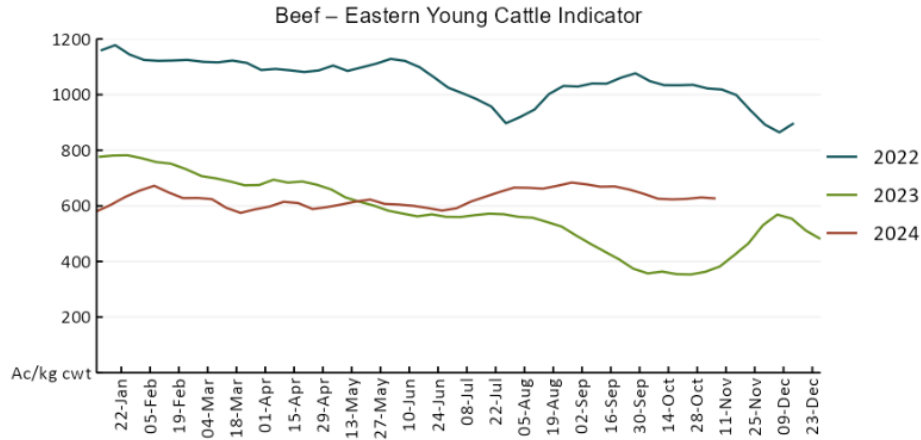


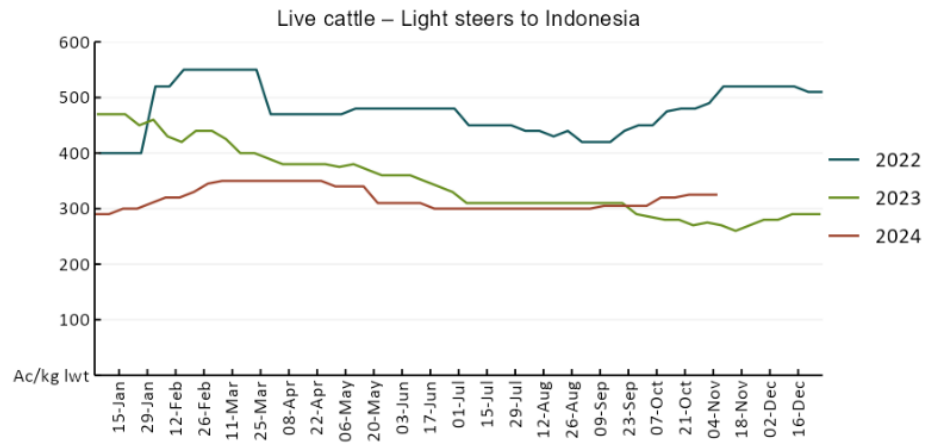
3.2 Selected domestic crop indicator prices



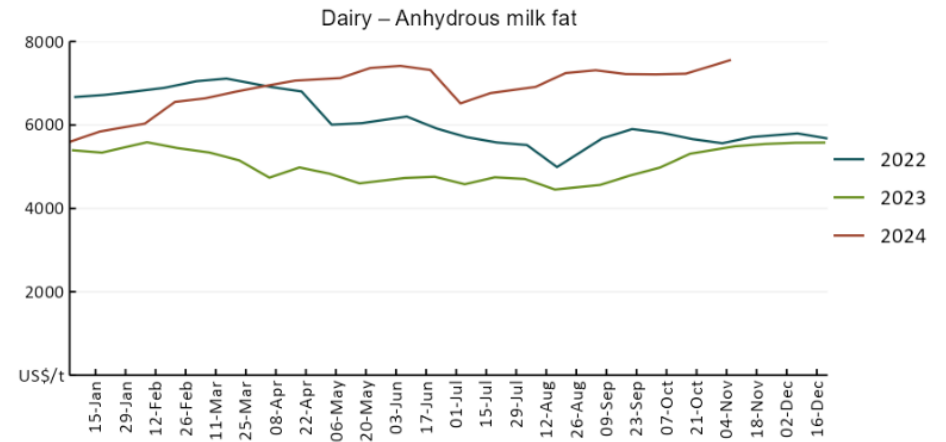
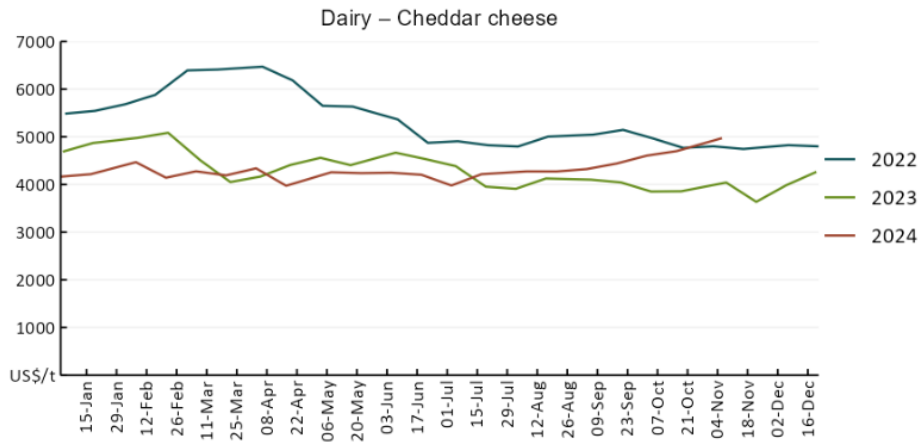
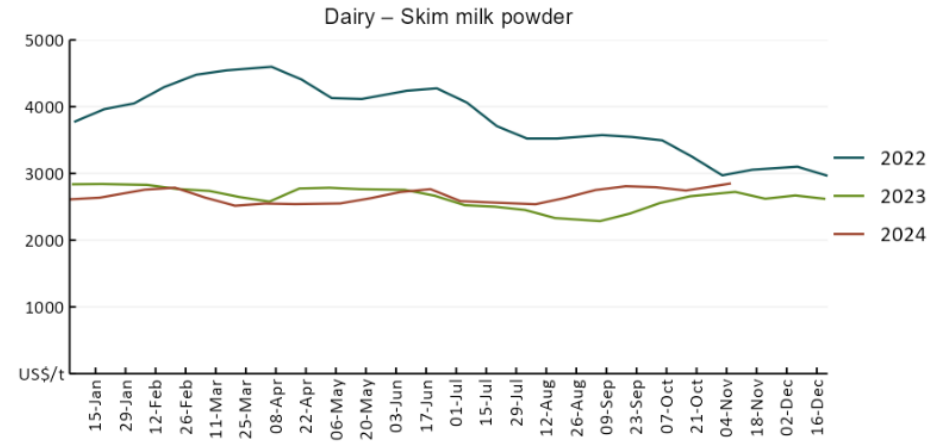
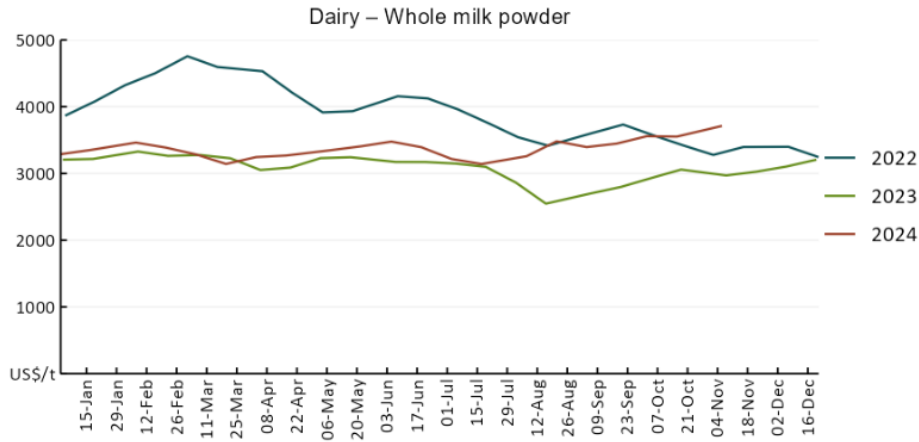


3.3. Selected domestic livestock indicator prices

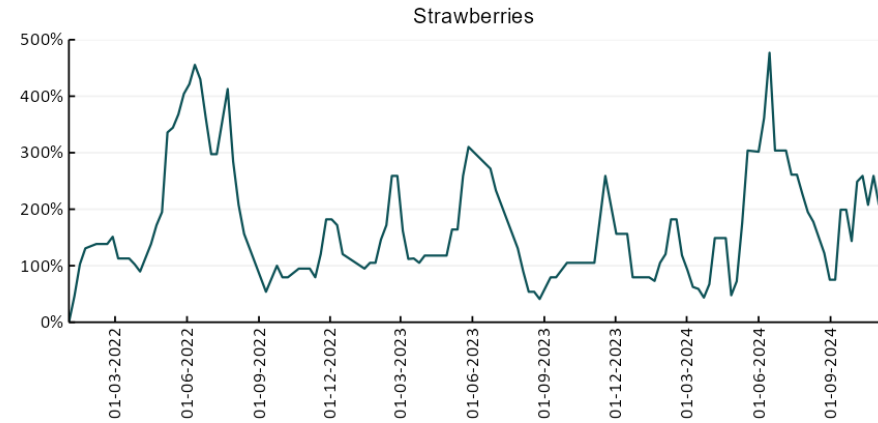
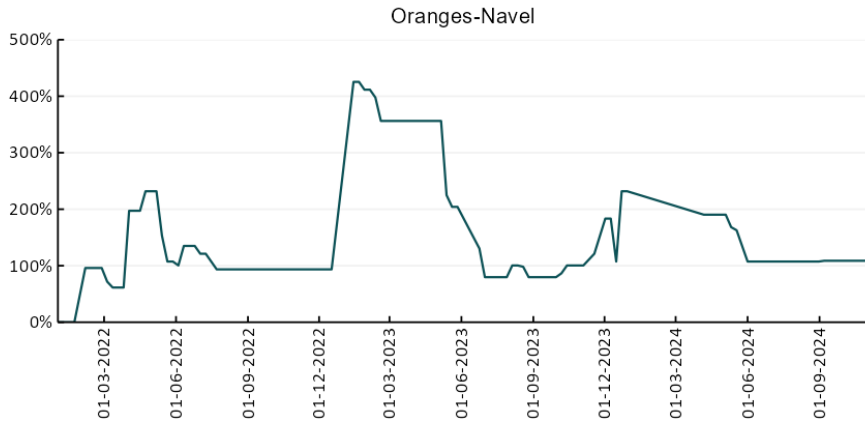
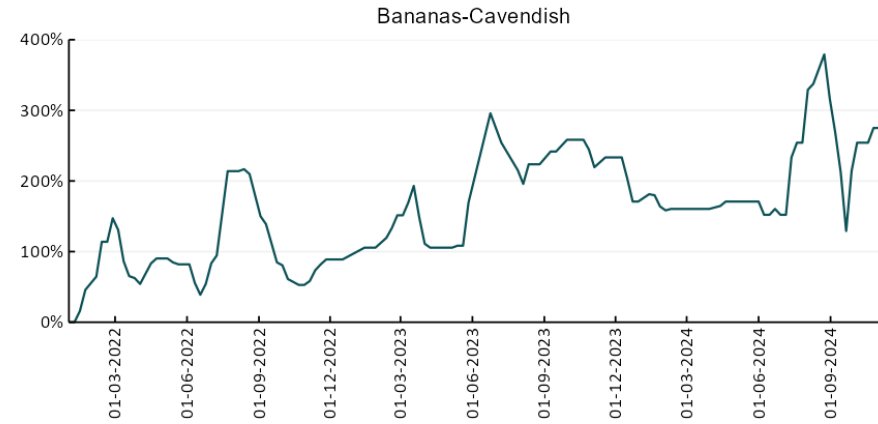
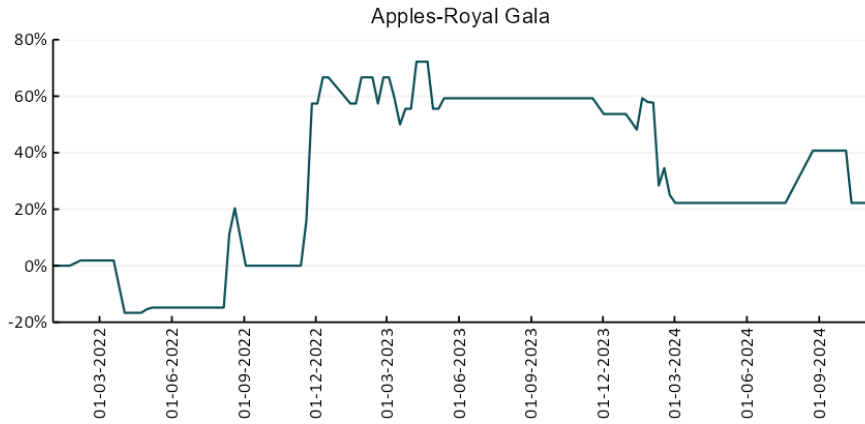


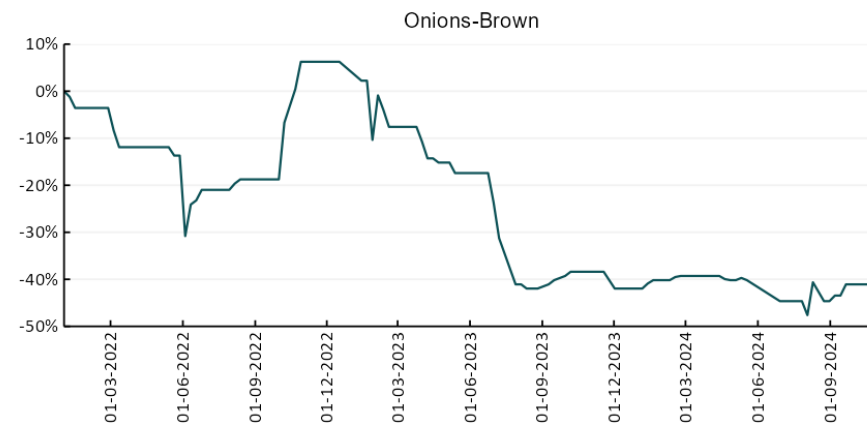
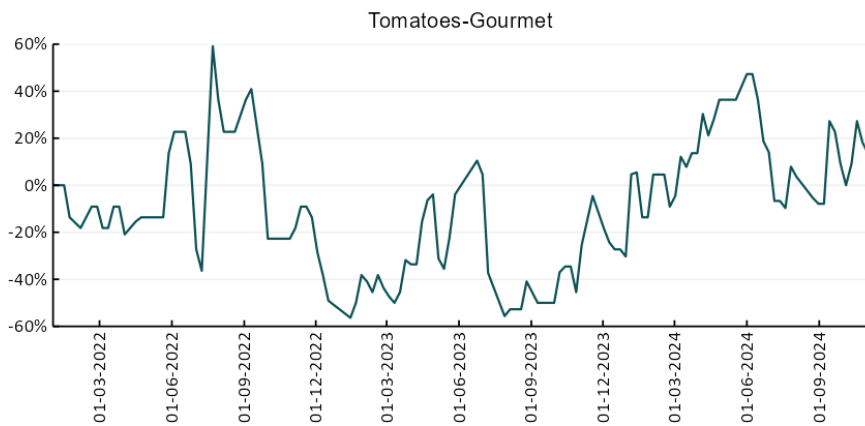
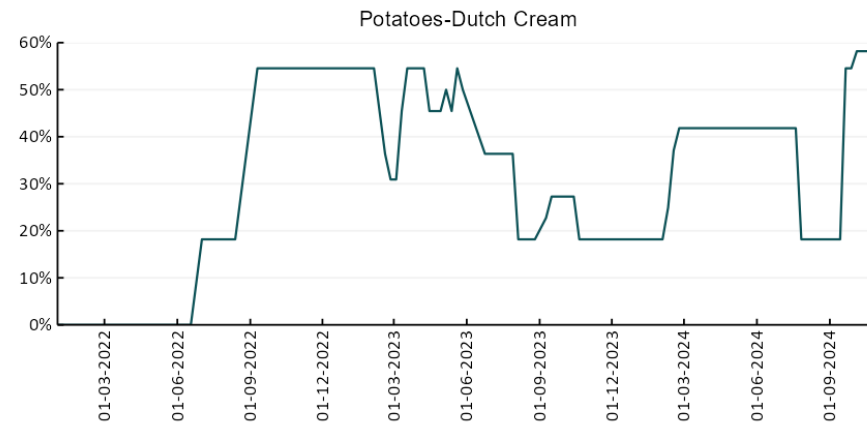
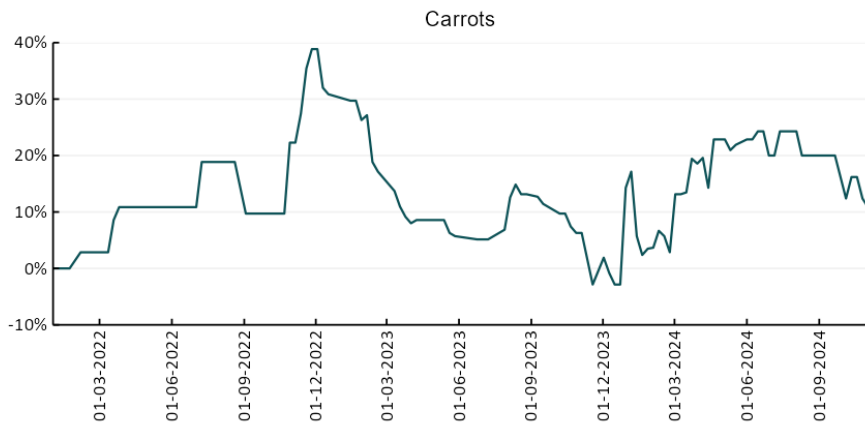


3.4. Global Dairy Trade (GDT) weighted average prices

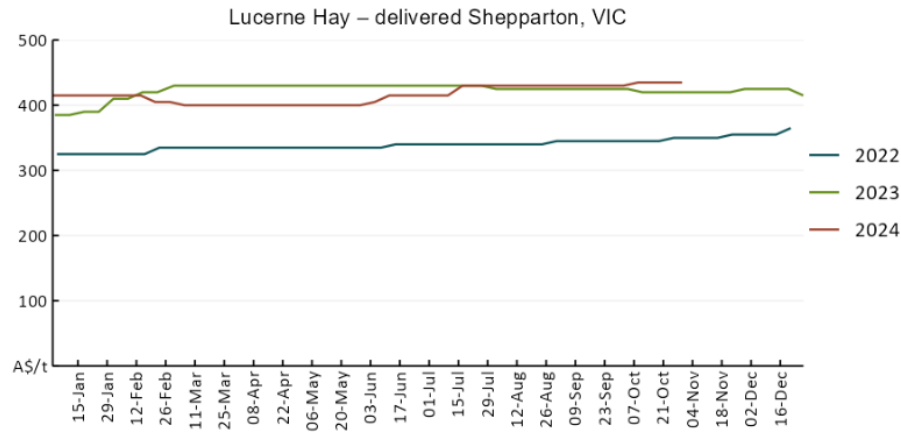
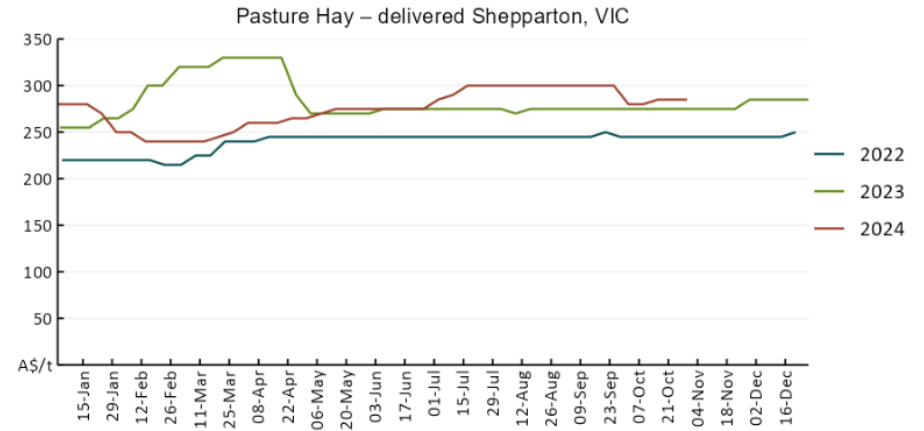
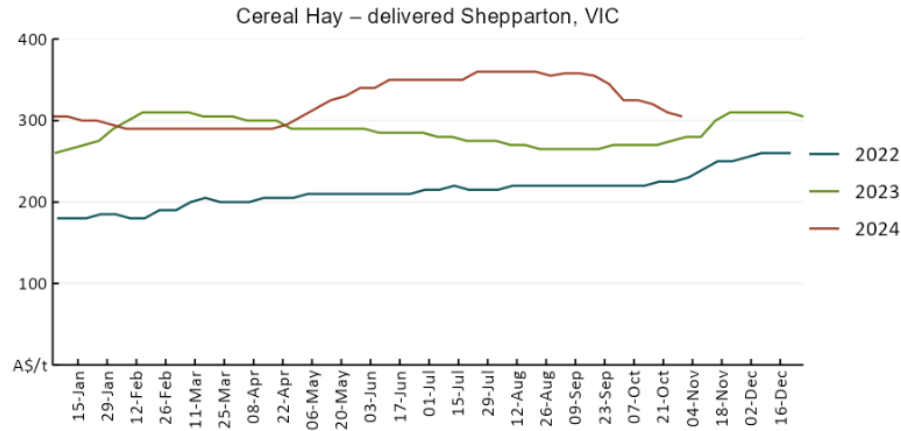


3.5. Selected fruit and vegetable prices





3.6 Selected domestic fodder indicator prices



4. Data attribution

Climate

- Bureau of Meteorology
- Weekly rainfall totals: www.bom.gov.au/climate/maps/rainfall/
- Monthly and last 3-month rainfall percentiles: www.bom.gov.au/water/landscape/
- Temperature anomalies: www.bom.gov.au/jsp/awap/temp/index.jsp
- Rainfall forecast: www.bom.gov.au/jsp/watl/rainfall/pme.jsp
- Seasonal outlook: www.bom.gov.au/climate/outlooks/#/overview/summary/
- Climate drivers: <http://www.bom.gov.au/climate/enso/>
- Soil moisture: www.bom.gov.au/water/landscape/
- Other
- Pasture growth: www.longpaddock.qld.gov.au/aussiegrass/
- 3-month global outlooks: [Environment and Climate Change Canada](#), [NOAA Climate Prediction Center](#), [EUROBRISA](#), [CPTEC/INPE](#), [European Centre for Medium-Range Weather Forecasts](#), [Hydrometcenter of Russia](#), [National Climate Center](#), [Climate System Diagnosis and Prediction Room \(NCC\)](#), [International Research Institute for Climate and Society](#)
- Global production: <https://ipad.fas.usda.gov/ogamaps/cropmapsandcalendars.aspx>
- Autumn break: Pook et al., 2009, <https://rmetsonline.wiley.com/doi/epdf/10.1002/joc.1833>

Water

Prices

- Waterflow: <https://www.waterflow.io/>
- Ruralco: <https://www.ruralcowater.com.au/>
- Bureau of Meteorology:
- Allocation trade: <http://www.bom.gov.au/water/dashboards/#/water-markets/mdb/at>
- Storage volumes: <http://www.bom.gov.au/water/dashboards/#/water-storages/summary/drainage>
- Trade constraints:
- Water NSW: <https://www.watarnsw.com.au/customer-service/ordering-trading-and-pricing/trading/murrumbidgee>
- Victorian Water Register: <https://www.waterregister.vic.gov.au/TradingRules2019/>

Commodities

- Fruit and vegetables
- Datafresh: www.freshstate.com.au
- Pigs
- Australian Pork Limited: www.australianpork.com.au
- Dairy
- Global Dairy Trade: www.globaldairytrade.info/en/product-results/
- World wheat, canola
- International Grains Council
- World coarse grains
- United States Department of Agriculture
- World cotton
- Cotlook: www.cotlook.com/
- World sugar
- New York Stock Exchange - Intercontinental Exchange
- Wool
- Australian Wool Exchange: www.awex.com.au/
- Domestic wheat, barley, sorghum, canola and fodder
 - Jumbuk Consulting Pty Ltd: <http://www.jumbukag.com.au/>
- Cattle, beef, mutton, lamb, goat and live export
- Meat and Livestock Australia: www.mla.com.au/Prices-and-market

© Commonwealth of Australia 2024

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights, if any) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](#) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to copyright@awe.gov.au.



Cataloguing data

This publication (and any material sourced from it) should be attributed as:

ABARES 2024, Weekly Australian Climate, Water and Agricultural Update, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, 24 October 2024. CC BY 4.0 DOI: <https://doi.org/10.25814/5f3e04e7d2503>

ISSN 2652-7561

This publication is available at https://www.agriculture.gov.au/abares/products/weekly_update

Department of Agriculture, Fisheries and Forestry

GPO Box 858 Canberra ACT 2601

Telephone 1800 900 090

Web agriculture.gov.au/abares

Disclaimer

The Australian Government acting through the Department of Agriculture, Fisheries and Forestry, represented by the Australian Bureau of Agricultural and Resource Economics and Sciences, has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Agriculture, Fisheries and Forestry, ABARES, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

Statement of Professional Independence

The views and analysis presented in ABARES publications, including this one, reflect ABARES professionally independent findings, based on scientific and economic concepts, principles, information and data. These views, analysis and findings may not reflect or be consistent with the views or positions of the Australian Government, or of organisations or groups who have commissioned ABARES reports or analysis. More information on [professional independence](#) is provided on the ABARES website.

Acknowledgements

This report was prepared by Holly Beale and Matthew Miller.