

# Australian climate and agricultural monthly update

**June 2010** 



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## **Key issues**

Late autumn rainfall in many cropping areas, particularly in New South Wales and South Australia, improved soil moisture and provided favourable winter crop sowing conditions. Graziers are holding onto sheep and lambs because of a good price outlook, resulting in increased competition at markets and rising prices. Cattle graziers are sending stock to market, as colder conditions result in a decline in pasture quality, and beef exports have achieved a 14-month high. Inflows to the Murray-Darling Basin have increased since April with water storage levels across the Basin increasing slightly during May. Southern Australia is likely to be drier than average over the coming winter with reduced prospects for winter crops and pastures.

#### Summary

In May 2010, above average rainfall was received in most states and territories. Day-time and night-time temperatures were above the long-term average for the month.

Inflows to the Murray-Darling Basin have increased since April with water storage levels across the Basin increasing slightly during May.

Rainfall in late autumn has assisted further crop planting programs, particularly in southern areas of New South Wales and parts of South Australia.

Graziers have benefited from rainfall during late May in most parts of the country but cooler temperatures in southern areas have slowed pasture growth rates. Cattle graziers are sending stock to market, while lamb and sheep graziers hold onto stock given a favourable price outlook. Improved seasonal conditions, graziers holding onto sheep and limited supply of medium and heavyweight mutton categories at market have resulted in mutton prices reaching a record 423¢/kg carcase weight, in eastern states. Notably, Australian beef exports achieved a 14-month high during May 2010.

ENSO indicators across the equatorial Pacific are currently neutral. Computer models indicate that Pacific Ocean temperatures will continue to cool over the coming months, with La Niña conditions expected to develop later in the year. Southern Australia is likely to be dryer than average over the coming winter with reduced prospects for winter crops and pastures.

#### Kim Ritman

Acting Executive Director Bureau of Rural Sciences

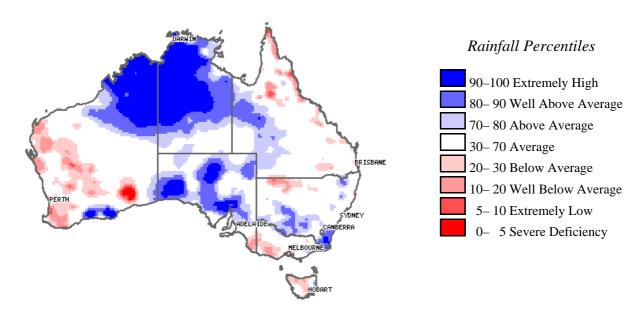
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## 1.0 Climate

## 1.1 Rainfall

## Rainfall over the last month (May 2010)



Rainfall percentiles for May 2010

Rainfall for Australia during May 2010 was above the long-term average across most of the Northern Territory and South Australia. Rainfall in these areas should provide favourable conditions for pasture production and winter crop sowing programs in South Australia.

Rainfall in Western Australia was above average across the northern areas and below average in the state's west and south-west. Below average rainfall in these areas may affect the sowing of winter crops.

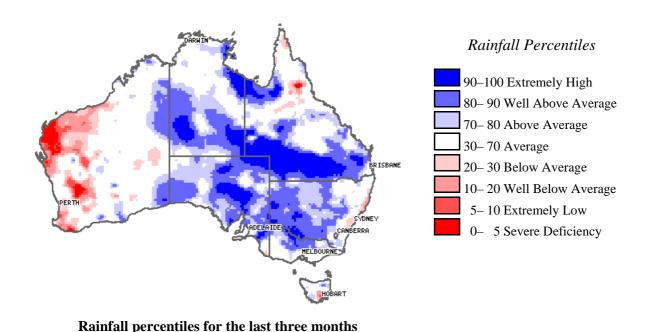
Rainfall in May 2010 was average over most of Queensland, New South Wales, and Victoria. Above average rainfall in southern areas of New South Wales will assist winter crop sowing programs.

Rainfall was below average in most of Tasmania.

Rainfall varied across the Murray-Darling Basin during May 2010. A slight increase in water storages across the Basin occurred during the month.

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## Ongoing or emerging rainfall situations



Above average rainfall was recorded from March to May 2010 across large areas of central and eastern Australia.

March to May 2010

Autumn rainfall deficiencies across northern Western Australia have cleared as a result of the recent rainfall but new deficiencies have emerged in the south-west of Western Australia.

Spatial rainfall analyses are based on historical monthly rainfall data provided by the Bureau of Meteorology. For further information on rainfall data and the interpretation of percentile analyses go to <a href="http://www.bom.gov.au/climate/austmaps/">http://www.bom.gov.au/climate/austmaps/</a>.

## 1.2 Temperature

## Mean maximum temperature

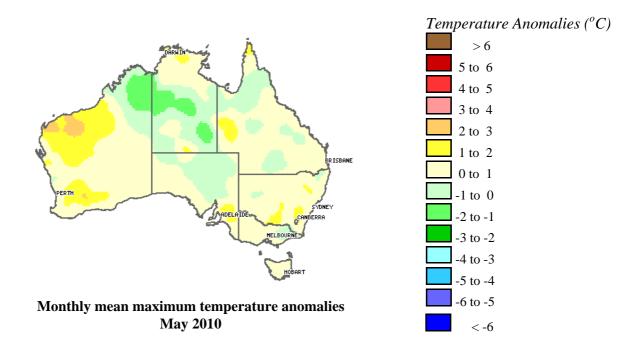
The mean maximum temperature in May 2010 for Australia was 0.9°C above average (twenty-fifth highest of 61 years). Maxima were above average for all states, with the exception of the Northern Territory (0.7°C below average).

Below average maxima were recorded in the north of Western Australia, the south of the Northern Territory, the north of South Australia and in areas of Queensland.

Notable anomalies included maxima 1 to  $3^{\circ}$ C above average across coastal areas of west Western Australia and 1 to  $2^{\circ}$ C below average in northern Western Australia and southern parts of the Northern Territory.

Higher daytime temperatures in the central-west of Western Australia will assist pasture growth rates.

Cooler weather across the north of Western Australia, the Northern Territory and northern parts of South Australia will have reduced pasture growth rates.

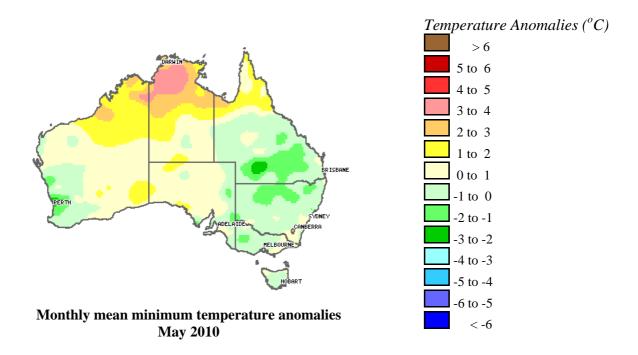


#### Mean minimum temperature

The overnight mean minimum temperature in May 2010 was 0.2°C above the May long-term average for Australia (twenty-first highest of 61 years). Minima were above average for Western Australia, South Australia and the Northern Territory. In contrast, the eastern States recorded below average minima during May 2010.

Minima of at least 2°C above average were recorded across northern Australia. Notable anomalies include 3 to 4°C above average in northern parts of the Northern Territory.

Below average minima were experienced across much of eastern Australia and south-west Western Australia. Notable anomalies include 1 to 3°C below average in northern New South Wales and southern Oueensland.



Spatial temperature analyses are based on historical monthly temperature data provided by the Bureau of Meteorology. These temperature anomaly maps show the departure of the maximum and the minimum temperature from the long-term average. Temperature anomalies are calculated with respect to the reference period 1961 to 1990. For further information on temperature anomalies go to <a href="http://www.bom.gov.au/climate/austmaps/">http://www.bom.gov.au/climate/austmaps/</a>.

## 1.3 Climate outlook

## El Niño Southern Oscillation (ENSO)

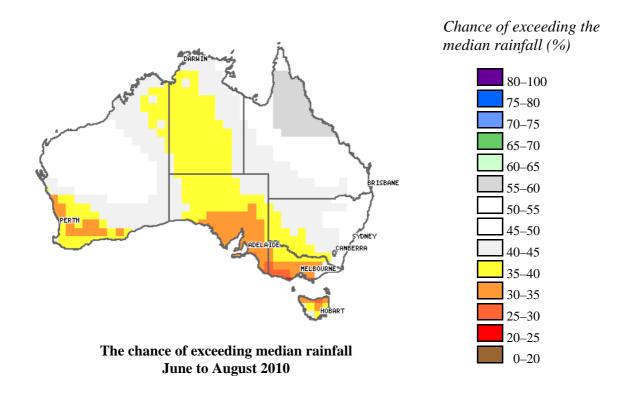
ENSO indicators across the equatorial Pacific are currently neutral. Equatorial Pacific Ocean temperatures, trade winds, the Southern Oscillation Index (SOI) and cloudiness over the Pacific are all at levels considered typical of neutral conditions. Computer models predict that Pacific Ocean temperatures will continue to cool over the coming months, with La Niña conditions expected to develop later in the year. Wetter conditions from a La Niña event would assist production of summer crops and pastures.

For further information on the Bureau of Meteorology interpretation of the El Niño–Southern Oscillation, go to http://www.bom.gov.au/climate/enso/.

#### Rainfall outlook

The likelihood of exceeding median rainfall during June to August 2010 is low (20 to 40 per cent) across south-western Western Australia and a band extending from north-west Australia through South Australia to southern New South Wales, Victoria and Tasmania. Dry conditions during this period could affect winter crop production in southern areas of Australia.

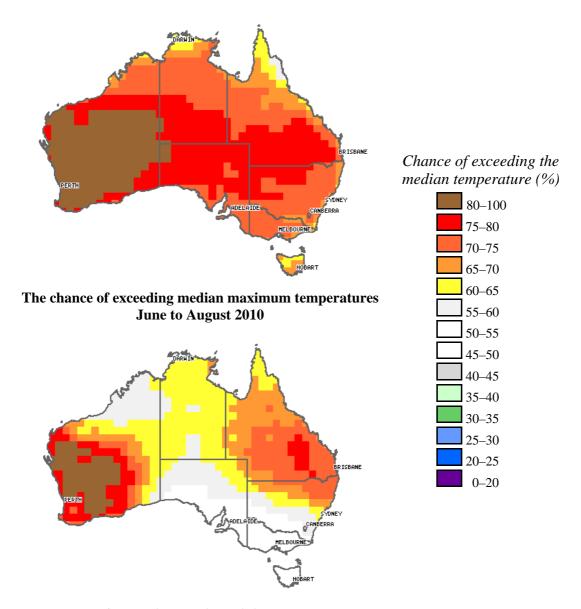
Across the rest of the country there is an equal chance of receiving either above or below the median rainfall between June and August 2010.



## **Temperature outlook**

There is a 60 to 80 per cent chance of warmer day time temperatures across most of Australia. Central and southern Western Australia has a higher than 80 per cent chance of warmer day time temperatures. Forecasts indicate that most of northern and western Australia is expecting a 60 per cent chance or higher of warmer night time temperatures during June to August 2010. Some areas of central and southern Western Australia have an 80 per cent chance or greater of exceeding the median minimum temperature.

Warmer temperatures may assist pasture and crop growth rates, depending on rainfall during June to August 2010 in these areas.



The chance of exceeding median minimum temperatures
June to August 2010

These outlooks are based on the statistics of chance (the odds) and are not categorical predictions. For further information on these seasonal outlooks and their interpretation go to <a href="http://www.bom.gov.au/climate/ahead/">http://www.bom.gov.au/climate/ahead/</a>

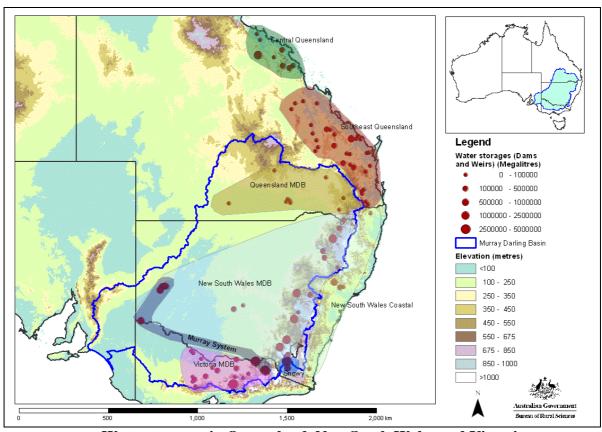
## 2.0 Water

## 2.1 Water storages

Water storage changes for May 2010 and the previous 12 months are summarised in the table and graphs below (current at 3 June 2010).

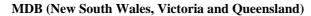
Region	Total capacity (GL)	Current volume (GL)	Current volume (%)	Monthly change (GL)	Monthly change (%)	Annual change (GL)
Murray-Darling Basin (MDB)	23020	6031	26	+230	+1.0	+1947
Snowy Scheme*	5744	1440	25	-102	-1.8	+225
Murray-Darling Basin Authority (MDBA)	7621	2054	24	+82	+1.1	+1073
Queensland MDB	185	115	62	-5	-2.5	+3
Central Queensland	3155	3030	96	-14	-0.4	-6
South-east Queensland	3517	2794	79	-46	-1.3	+743
<b>New South Wales MDB</b>	13884	3410	25	+204	+1.5	+901
<b>Coastal New South Wales</b>	1073	745	69	-13	-1.2	-52
Victoria MDB	8903	2491	28	+29	+0.3	+1040

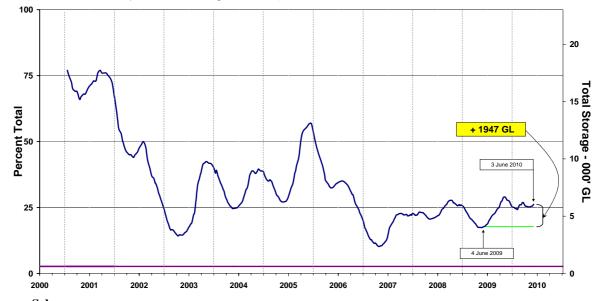
<sup>\*</sup> Current at 27 May 2010



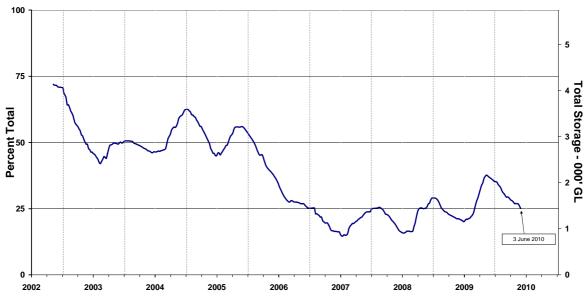
Water storages in Queensland, New South Wales and Victoria:

The blue line indicates the extent of the Murray-Darling Basin and the shaded areas denote the coverage of the individual reporting regions.

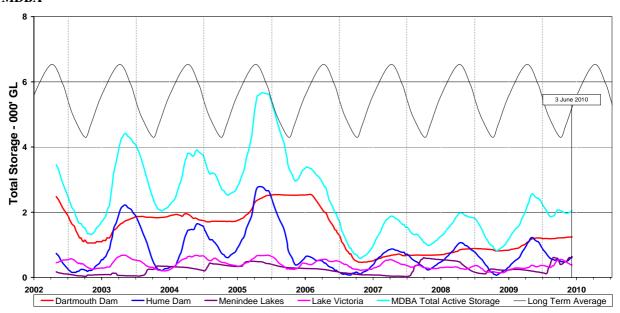


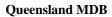


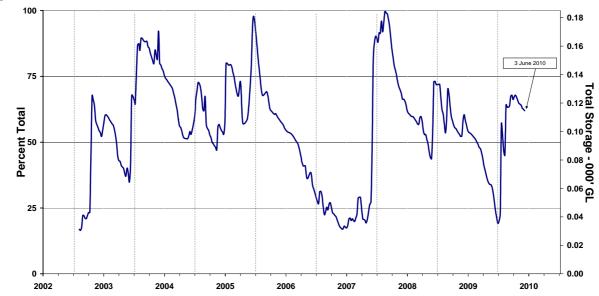
## **Snowy Scheme**



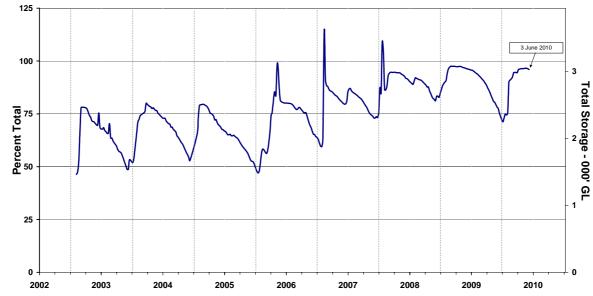




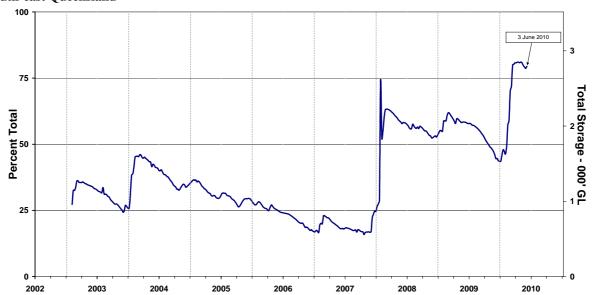




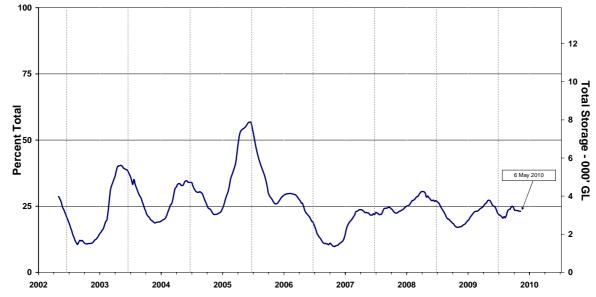
## **Central Queensland**



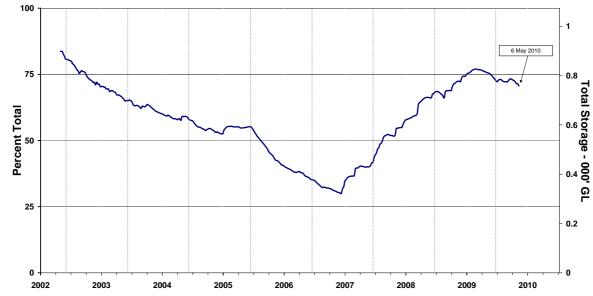
## South-east Queensland



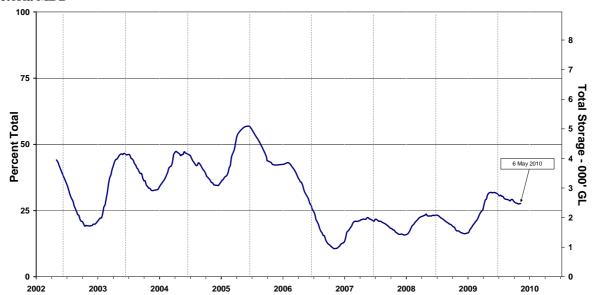




## **Coastal New South Wales**



## Victoria MDB



For further information on water storages, go to:

• Snowy Scheme:

http://www.snowyhydro.com.au/lakeLevels.asp?pageID=360&parentID=6

• Queensland:

http://www.sunwater.com.au/pdf/water/CurrentStorageSummary.pdf

• New South Wales:

http://www.waterinfo.nsw.gov.au/

• Northern Victoria:

http://www.g-mwater.com.au/water-resources/storage-levels/

• Murray-Darling Basin Authority:

http://www.mdba.gov.au/

## 2.2 Water allocations

The water allocations and changes over the past month for all licence holders in New South Wales, Victoria and South Australia water systems are summarised in the following table.

	Closing allocations 2008–09 (%)	Increase from 1 May 2010 (%)	Allocations 1 June 2010 (%) = closing allocations 2009-10 (%)
NSW Murray Valley			2009 10 (70)
High security	95	-	97
General security	9	=	27
NSW Murrumbidgee Valley			
High security	95	=	95
General security	21	=	27
NSW Lower Darling			
High security	100	-	100
General security	50	=	100
NSW Macquarie Valley			
High security	100	-	100
General security	10	=	0
NSW Hunter Valley			
High security	100	-	100
General security	100	=	100
NSW Lachlan Valley*			
High security	30	-	10
General security	0	=	0
NSW Border Rivers			
High security	100	=	100
General security	0	-	4.4
NSW Peel Valley			
High security	100	=	100
General security	80	-	100
Victoria Murray Valley			
High reliability	35	=	100
Victoria Goulburn			
High reliability	33	=	71
Victoria Campaspe			
High reliability	0	-	0
Victoria Loddon			
High reliability	0	-	3
Victoria Bullarook			
High reliability	0	-	19
Victoria Broken			
High reliability	0	-	17
South Australia Murray Valley	•		
High security	18	_	62

<sup>\*</sup>Water sharing plans remain suspended in NSW for the Lachlan River valley at 1 June 2010.

For further information on water announcements, go to:

- New South Wales Office of Water, Department of Environment, Climate Change and Water:
   <a href="http://www.water.nsw.gov.au/About-Us/Media-Releases/default.aspx">http://www.water.nsw.gov.au/About-Us/Media-Releases/default.aspx</a>,
   <a href="http://www.water.nsw.gov.au/Water-Management/Water-availability/Available-water-determinations/default.aspx">http://www.water.nsw.gov.au/Water-Management/Water-availability/Available-water-determinations/default.aspx</a> and
   <a href="http://www.wix.nsw.gov.au/wma/DeterminationSearch.jsp?selectedRegister=Determination">http://www.wix.nsw.gov.au/wma/DeterminationSearch.jsp?selectedRegister=Determination</a>
- Goulburn-Murray Water: http://www.g-mwater.com.au/news/media-releases/
- South Australian Department of Water, Land and Biodiversity Conservation: http://www.dwlbc.sa.gov.au/media.html
- Murray-Darling Basin Authority: http://www.mdba.gov.au/

## 3.0 Production

## 3.1 Crops

## **Summer Crops**

#### New South Wales

Grain sorghum production for 2009–10 is forecast at 389 564 tonnes from an estimated 90 565 hectares (ha). This is about 42 per cent lower than in the previous season with an estimated 678 661 tonnes harvested from 156 005 ha sown. Harvest of the estimated 239 652 ha (excluding rice) summer crop is almost complete.

http://www.dpi.nsw.gov.au/\_\_data/assets/pdf\_file/0009/335547/nsw-grains-report-may2010.pdf

## Winter Crops

### New South Wales

Winter crop estimates of 5.04 million (Mha) comprise 4.23 Mha of winter cereals and 0.8 Mha of pulses and oilseeds. The majority of the estimated 304 050 ha of canola has been sown, with the remaining area to be sown over the next fortnight. Around 60 per cent of the estimated 2.91 Mha wheat crop has been sown, with recent rain in many areas providing enough moisture to complete sowing over the next few weeks. Favourable early seasonal conditions have led to increases in the areas planted to canola, chickpeas and lupins. Grazing cereals sown in February/March are providing good grazing in the tablelands, slopes and plains districts. Locusts have caused significant crop damage in some areas and a large proportion of damaged crops require re-sowing.

http://www.dpi.nsw.gov.au/ data/assets/pdf file/0009/335547/nsw-grains-report-may2010.pdf

#### Queensland

At the end of May, soil moisture conditions and the seasonal rainfall outlook indicated a moderate chance of a median wheat crop during the 2010 wheat-growing season across most of Queensland. Most areas received average rainfall during May. Some southern areas are showing an above average chance (>60 per cent) of exceeding the long-term median wheat yield, while the remainder are near or slightly below average. The likely range of yield outcomes is still wide as it is early in the season, but the forecast median yield for wheat at the end of May was 1.34 tonnes per hectare (t/ha), which is close to the long-term median of 1.41 t/ha.

 $\underline{http://www.dpi.qld.gov.au/documents/PlantIndustries} \ \ \underline{FieldCropsAndPasture/Wheat-report-May-2010.pdf}$ 

#### Victoria

In the Mallee region, pastures and self-sown cereals are in good condition. In some areas, sowing programs have been delayed by locusts, with some early sown pasture crops destroyed. Summer rainfall has reduced wine, table and dried grape quality due to increased disease levels. In the Wimmera, crop emergence has been rapid following warm and moist conditions. In the North Central region, sowing of winter crops is underway, with reports of the best start to the season in many years. The Northern Irrigation region has also had problems with locusts, and some croppers have delayed sowing. The apple harvest has begun with good sugar level and colour. In the North East, croppers are reporting their best start to the season in at least 30 years.

http://www.dpi.vic.gov.au/dpi/nrenfa.nsf/LinkView/4B40FC90BCD1740ECA25771C0023A43D987715D08D0205F9CA2573E100030E40/\$file/DSC%20%2399%20May%205%202010.pdf

#### South Australia

Interest in canola remains strong due to financial benefits over cereals and plantings are up slightly on last year. Recent rainfall will help plantings realise their potential. Some dry sowing was done on the Eyre Peninsula. In the Mallee, where adequate soil moisture levels saw early planting, many growers are now considering resowing following the impacts of locusts on the emerging crops.

http://www.australianoilseeds.com/\_\_data/assets/pdf\_file/0004/6655/AOF\_Crop\_Report\_May\_2010.pdf

#### Western Australia

Many Western Australia grain production areas have not had adequate rainfall to commence sowing. With the exception of Esperance/south coast and some northern areas, there have been too few rainfall events from February to April to build soil moisture. Dry sowing has commenced in some areas. Forecasts for wheat prices are not high enough to encourage a large cropping area. In south-west horticultural areas the wine grape harvest is nearing completion, with high quality grapes and a low incidence of disease. The apple harvest is underway with ideal weather conditions leading to optimum colour development.

http://www.agric.wa.gov.au/objtwr/imported\_assets/content/lwe/cli/seasonalupdatemay10.pdf

The above information and forecasts are summarised from State Government and industry sources and do not represent forecasts by the Bureau of Rural Sciences. On 16 June, the Australian Bureau of Agricultural and Resource Economics (ABARE) will be releasing its 2009-10 crop estimates and 2010-11 crop forecasts in the *Crop report*. ABARE will be releasing its latest forecasts across the commodity sectors in *Australian commodities* on 22 June.

## 3.2 Livestock

#### Beef cattle

Cattle numbers slaughtered at markets during May increased by 14 per cent on April numbers. Increased numbers were the result of late rainfall in May and colder conditions leading to a decline in feed quality. Prices remain strong due to a limited supply of prime trade cattle and ongoing demand from restockers, feeders and processors.

http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Cattle+market+wrap.htm

Australian beef exports during May 2010 reached 85 762 tonnes shipped weight, an increase of 4 per cent year-on-year and a 14-month high. Higher cattle slaughter during the month and a drop in the Australian dollar assisted exports.

 $\frac{http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Beef\% 20 exports\% 20 hit\% 2014-month\% 20 high.htm}{2014-month\% 20 high.htm}$ 

#### **Sheep and lambs**

Lamb slaughter for May 2010 was 14 per cent lower than the five year average for May, and 4 per cent higher on April 2010 numbers. These low numbers were a result of late autumn rainfall and a strong lamb price outlook. With the good competition for lamb, prices remain strong and lamb quality has reported to have been good to excellent at saleyards.

http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Lamb+and+sheep+market+wrap.htm

Sheep numbers to market also declined with rainfall at the end of the month, with medium and heavyweight mutton particularly limited in supply. This contributed to mutton prices in eastern states reaching a record of  $423\phi/kg$  carcase weight as competition increased.

http://www.mla.com.au/TopicHierarchy/News/MarketNews/2010/Sheep+and+lamb+market+alert.htm

The above information and forecasts are summarised from industry sources and do not represent forecasts by the Bureau of Rural Sciences. ABARE will be releasing its latest forecasts on livestock and across the commodity sectors in *Australian commodities* on 22 June.

For further information on crops and livestock, go to:

- Australian Bureau of Statistics:
  - http://www.abs.gov.au/
- Australian Bureau of Agricultural and Resource Economics:
  - http://abareconomics.com/
- Meat and Livestock Australia:
  - http://www.mla.com.au/
- Department of Agriculture and Food Western Australia:
  - http://www.agric.wa.gov.au/
- New South Wales Department of Primary Industries:
  - http://www.dpi.nsw.gov.au/aboutus/news/
  - http://www.dpi.nsw.gov.au/aboutus/resources/periodicals/newsletters/grains-report-nsw
- Primary Industries and Resources South Australia:
  - http://www.pir.sa.gov.au/grains/cpr/
- Queensland Drought Monitor
  - http://www.longpaddock.qld.gov.au/QueenslandDroughtMonitor/
- The Land Farmonline:
  - http://theland.farmonline.com.au/
- Victorian Department of Primary Industries:
  - http://www.dpi.vic.gov.au