2014 Annual Report on the Commercial Harvest of Kangaroos in Western Australia



This report is provided to the Australian Government as a requirement of the *Management Plan for the Commercial Harvest of Kangaroos in Western Australia 2014–2018* under Aim 6, Action 17, Performance Indicator 30.

March 2015





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1. HARVEST STATISTICS

Table 1.1. Commercial harvest figures for red kangaroos for the 2014 calendar year.

Population Monitoring Zone	Number harvested	Sex ratio (% male)	Average male carcass weight (kg)	Average female carcass weight (kg)
Central	12,842	56.3	22.5	15.0
Northern	9,295	66.0	26.4	17.8
South East	18,544	55.5	25.9	15.3
South West	0	-	-	-
Totals (WA)	40,681	58.2	25.0	15.7
State quota	85,000			
Proportion state quota harvested	47.9%			

Table 1.2. Commercial harvest figures for western grey kangaroos for the 2014 calendar year.

Population Monitoring Zone	Number harvested	Sex ratio (% male)	Average male carcass weight (kg)	Average female carcass weight (kg)
Central	5,504	60.1	24.0	16.8
Northern	0	-	-	-
South East	19,707	63.1	25.9	16.1
South West	72,237	60.1	29.7	17.4
Totals (WA)	97,448	60.7	28.6	17.1
State quota	197,600			
Proportion state quota harvested	49.3%			

2. INDUSTRY COMPLIANCE

Table 2.1. Summary of compliance monitoring of the commercial kangaroo industry in Western Australia for the 2014 calendar year.

Catagory		Commore	ial Activity	
Category	Regulation 6: Licence to Take Kangaroos for Sale	Regulation 7: Licence to Process	ial Activity Regulation 8: Active Chiller Units*	Regulation 10: Licence to Deal in Skins
Valid licences	434	16	127	6
Inspections	7	13	20	2
Alleged offences	9	1	0	0
Type of alleged offence	 Dumping of offal in Nature Reserve Failing to submit monthly return Shot on property not approved on licence 	Breach of licence conditions		
Letters of warning	0	0	0	0
Caution notices	10	0	0	0
Prosecutions initiated	1	0	0	0
Convictions	0	0	0	0
Dismissals	0	0	0	0
Prosecutions pending	1	0	0	0

^{*} Active chiller units are those chillers identified on shooter returns where there is at least one shooting day of effort assigned to that chiller during the year.

3. UNUSUAL CIRCUMSTANCES

3.1 Rainfall and Drought

The following information is taken from the annual climate summary for Western Australia published by the Bureau of Meteorology (product code IDCKGC51R0) and available from http://www.bom.gov.au/climate/current/annual/wa/summary.shtml (accessed 19 March 2015).

Averaged across the State, 2014 was WA's warmest year since comparable records commenced in 1910, with the statewide average maximum temperature 1.17°C above the historical mean. Almost all of the State recorded above average mean annual maximum temperatures in 2014, and sites in the Pilbara, Gascoyne, Central Wheatbelt, Lower Southwest, Great Southern and Southeast Coastal registered their warmest or equal-warmest year on record. The highest temperature recorded in WA in 2014 was 49.2°C at Emu Creek Station in the Pilbara on 10 January.

Very high temperatures occurred in western parts of the State from 10-12 January, with a number of sites in the South West Land Division experiencing their hottest January days and nights on record. Carnarvon Airport experienced an extraordinarily warm winter in 2014 exceeding the previous winter mean maximum temperature by over 1°C. The mean maximum temperature of 28.2°C for August at Carnarvon Airport was 2.8°C higher than its previous August monthly record, and also exceeded the September record. Bidyadanga recorded a maximum temperature of 45.2°C on 9 October, the earliest day in spring with a temperature over 45°C on record in Australia.

The annual mean minimum temperature averaged across the State for 2014 was the tenth-highest on record. Most of WA saw above to very much above average mean minimum temperatures, with a few sites in the eastern Central Wheatbelt and Goldfields recording their warmest or equal-warmest year on record. In contrast, much of the Kimberley, the eastern Northern Interior, and far northeast Southern Interior recorded near average or below average mean minima for 2014. High minimum temperatures were reported in the west Kimberley in the second half of November and Broome Airport had three nights that exceeded the previous record high minimum temperature for November.

The statewide average rainfall for 2014 was 406mm, 19 per cent above the historical average. Rainfall was generally above average across northern, central, and eastern WA in 2014. However, western parts of the State generally recorded below average rainfall and some sites near the west and south-west coasts saw their driest year for at least 20 years. No tropical cyclones impacted the WA coastline in 2014, the first year this has occurred since 1951. However, there were some significant rainfall events:

- 16-23 January: an intense tropical low and associated cloudband produced widespread showers, thunderstorms, and heavy rain over northern, central, and south-eastern WA, leading to several sites in the Gascoyne, Goldfields, and Eucla recording their highest daily rainfall.
- 7-14 February: a slow moving, tropical low tracked through northern, central, and southeast WA causing widespread heavy rainfall. Kununurra Aerodrome (163.8mm) and Cygnet Bay (269.4mm), both in the Kimberley, recorded their highest daily falls for any month.
- 12-13 July: a deep middle level trough combined with a surface trough to produce extremely heavy rainfall on the Dampier Peninsula in the Kimberley. A daily rainfall

- of 215mm at Cape Leveque on 13 July was WA's wettest July day on record, and a two-day rainfall total of 242mm at Cygnet Bay was more than double its previous highest July monthly rainfall total.
- 18-20 October: a low pressure system brought widespread thunderstorms and heavy rainfall across central and southern WA. Many sites in the South West Land Division, as well as Laverton Aerodrome in the Goldfields, recorded their wettest October day on record, whilst a couple of sites in the South Coastal and Great Southern recorded their highest daily fall for any month.

A record 105 consecutive rainless days was reported at Mandurah in the Lower West, whilst Kalbarri in the Central West had a record dry spell of 186 days from 21 October 2013 to 24 April 2014. Denmark and Albany, both on the south coast, recorded their lowest annual rainfall since 1940 and 1972, respectively.

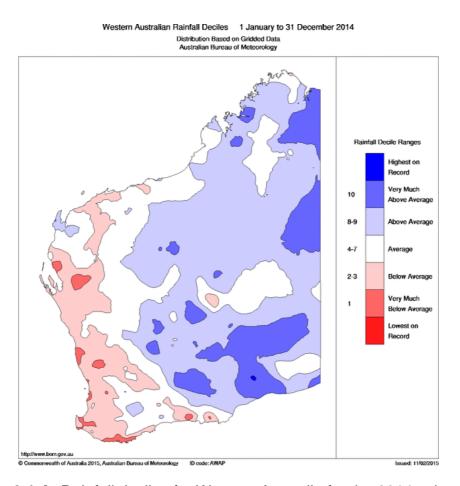


Figure 3.1.A: Rainfall deciles for Western Australia for the 2014 calendar year.

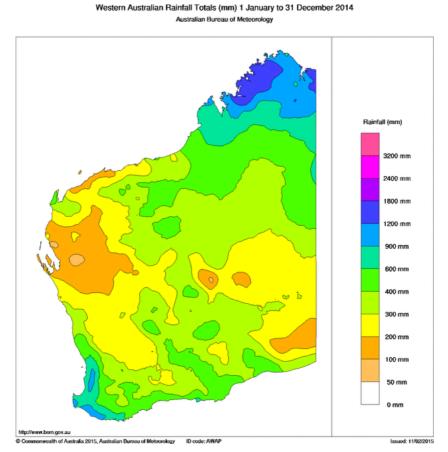


Figure 3.1.B: Rainfall totals for Western Australia for the 2014 calendar year.

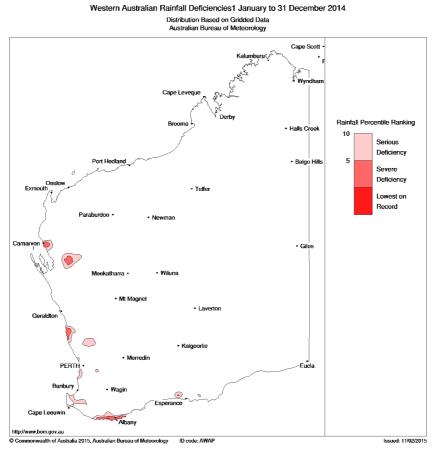


Figure 3.1.C: Drought map for Western Australia for the 2014 calendar year.

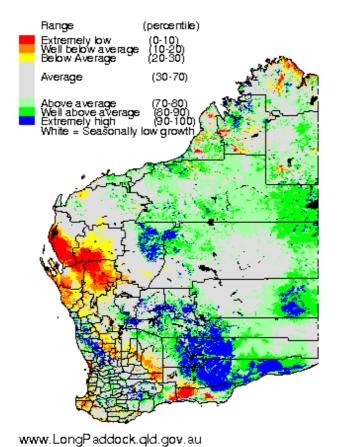


Figure 3.1.D: Pasture growth in Western Australia for the 2014 calendar year, relative to historical records from 1957.

3.2 Disease

No significant disease outbreaks were detected or reported in populations of commercially harvested kangaroo species in Western Australia in 2014.

3.3 Market factors

No unusual market factors impacted on the commercial kangaroo industry in Western Australia during 2014.

4. RESEARCH ACTIVITY

No research or adaptive management experiments related to the commercial harvesting of kangaroos were undertaken or sponsored by the Department in 2014.

5. ASSESSMENT OF PLAN ACTIONS AGAINST PERFORMANCE INDICATORS

Performance			Year	Comments			
Indicator		2013	2014	2015	2016	2017	
1	Random audits of licences issued for commercial activities are conducted annually to ensure licences are being issued in accordance with WA legislation and departmental policies.	√	✓				
2	Databases are maintained to ensure licensee information is current and accurate.	✓	✓				
3	Licence conditions are reviewed annually and where necessary amended.	✓	✓				
4	Licensees are advised in writing of any changes to licence conditions within one month of such changes being approved by the Director of Science and Conservation or delegate.	√	✓				
5	Licence conditions for professional shooters and processors will stipulate that kangaroos cannot be shot, sold or received unless they have been taken in accordance with the National COP.	√	✓				
6	Copies of the National COP will be made available from the department's website.	✓	✓				
7	The Department will participate and support any revisions to the current, nationally-endorsed code of practice.	n/a	n/a				No revisions were made to the COP during 2014.

Performance	Description			Year	Comments		
Indicator		2013	2014	2015	2016	2017	
8	All prospective professional shooters must have completed an accredited test of marksmanship and completed NSW TAFE Course 5725 (Australian Game Meat, Hygiene and Handling) as a pre-requisite before being issued with a professional shooters' licence.	√	✓				
9	All kangaroo processing works are inspected by authorised departmental officers at least annually during the life of the Management Plan to ensure compliance with Western Australian legislation.	×	×				81% of processing establishments were inspected in 2014. This performance criteria was not fully achieved due to a reduction in resources across the Department.
10	Twenty percent of active chillers are inspected by authorised departmental officers annually during the life of the Management Plan to ensure compliance with Western Australian legislation.	✓	×				15.8% of active chillers were inspected by authorised department officers in 2014. This performance criteria was not fully achieved due to a reduction in resources across the Department.
11	The vehicles of licensed professional shooters loaded with kangaroo carcasses are inspected opportunistically during the life of the Management Plan to ensure compliance with Western Australian legislation.	✓	✓				
12	Develop and implement improved procedures for reporting on actions included under Performance Indicators 9 to 11.	√	✓				

Performance	Description			Year			Comments
Indicator		2013	2014	2015	2016	2017	7
13	Reports of unlicensed activities and activities in breach of legislation are investigated to the fullest extent possible and, where sufficient evidence is available, offenders are issued with expiation notices or prosecuted as appropriate.	√	✓				
14	During the life of this plan, all incoming industry returns are scrutinised and discrepancies are investigated and resolved.	✓	✓				
15	A compliance database is maintained.	\checkmark	✓				
16	Aerial surveys are undertaken annually and population estimates are calculated in accordance with this management plan.	√	✓				
17	Commercial harvest quotas are set in accordance with the management plan.	✓	✓				
18	Regional quotas and the state-wide quotas are never exceeded.	×	✓				As a result of the South East Zone and South West Zone exceeding their annual quotas in 2013, the Department wrote to all shooters in 2014 reminding them of their obligations to submit their returns on time and has taken a sterner approach with shooters who submit late returns. No regional quotas were exceeded in 2014.
19	The Australian Government is advised of commercial harvest quotas for the following calendar year by 30 November.	√	✓				

Performance	Description			Year		Comments	
Indicator		2013	2014	2015	2016	2017	
20	Following endorsement by the Australian government department responsible for administering the EPBC Act, the quota submission will be made available to the public via the department's website.	n/a	n/a				At the time of writing this report, DoTE had not endorsed the 2015 quota submission.
21	Sudden or acute changes in the average carcass weights are investigated to identify possible causes of the change.	n/a	n/a				There were no sudden or acute changes in average carcass weights for harvested kangaroos during 2014.
22	Sudden or acute changes in the sex ratios of harvested kangaroos are investigated to identify possible causes of the change.	n/a	n/a				There were no sudden or acute changes in sex ratios during 2014.
23	Commercial harvest rates will be reduced or the commercial kangaroo harvest suspended if density estimates reach the thresholds identified in the management plan and suspensions or reductions will remain in place until surveys indicate that kangaroo densities have increased above the density threshold.	√	√				Commercial harvest has been suspended throughout 2015 in the South East Zone due to density thresholds being reached based on 2014 aerial surveys. The zone will remain closed until surveys or other comparable information indicates that densities have increased above the threshold. Consideration may be give to opening part or parts of the zone if reanalysis of the population density data supports this.
24	As a minimum, trends in population estimates, harvest tallies, carcass weights and sex ratios will be analysed annually and published on the department's website in annual and quota reports.	✓	√				

Performance	Description			Year		Comments	
Indicator		2013	2014	2015	2016	2017	
25	All proposals to undertake active adaptive management experiments are reviewed and assessed by the Department in accordance with the criteria outlined in this management plan.	n/a	n/a				No active adaptive management experiments were undertaken in 2014.
26	All necessary approvals are obtained prior to the commencement of any experiments that test deliberate management interventions.	n/a	n/a				No experiments to test deliberate management interventions were undertaken in 2014.
27	All adaptive management experiments are continuously monitored and conducted according to approval conditions.	n/a	n/a				No adaptive management experiments were undertaken in 2014.
28	Results of all experiments testing deliberate management interventions are published in an appropriate forum.	n/a	n/a				No experiments to test deliberate management interventions were undertaken in 2014.
29	During the life of this plan, the Department will support research on the ecology of harvested species of kangaroos or commercial harvest management as appropriate.	n/a	n/a				No research into the ecology of harvested species of kangaroos was sponsored by the Department in 2014.
30	An annual report will be provided to the Commonwealth by 31 March of the following year.	✓	✓				
31	KMAC meets at least once per year to review the progress of the Management Plan for the Commercial Harvest of Kangaroos in Western Australia 2013–2014 in relation to the goal and aims of the plan.	√	√				KMAC met on 20 November 2014.
32	KMAC is provided with annual updates on commercial harvest and tag issue throughout the life of this plan.	✓	√				

Performance	Description			Year			Comments
Indicator	·	2013	2014	2015	2016	2017	7
33	KMAC is provided with other relevant information as required or as necessary throughout the life of this plan.	√	✓				
34	Throughout the life of this plan, the Department's website will contain the following information as a minimum standard: • the current management plan; • the current quota submission document; • the current annual report submitted to the Commonwealth; • information sheets on kangaroo biology and management; and • relevant contact information.	✓	✓				See: http://www.dpaw.wa.gov.au/plants- and-animals/animals/kangaroo- management-in-western-australia
35	Publicly available information on kangaroo management is provided to interested parties as soon as practicable on request.	✓	✓				
36	Relevant departmental staff will participate in interviews with the media where appropriate.	✓	✓				
37	Media releases are prepared for issues of interest to the community when appropriate.	✓	✓				

Performance	Description			Year			Comments
Indicator		2013	2014	2015	2016	2017	7
38	As a minimum, all prospective kangaroo shooters who are issued with a Licence to Take Kangaroos for Sale for the first time, or who have not held a valid licence during the term of the current management plan, will be provided with written information on the following: • pre-requisites for obtaining a licence • licence conditions; • regulations for taking kangaroos for damage mitigation; • open and close season areas for red and western grey kangaroos; • a copy of the National Code Of Practice; and • Fauna Notes 29 (western grey kangaroo) and 31 (red kangaroo) and any revisions thereof that are available on the department's website.	✓	√				