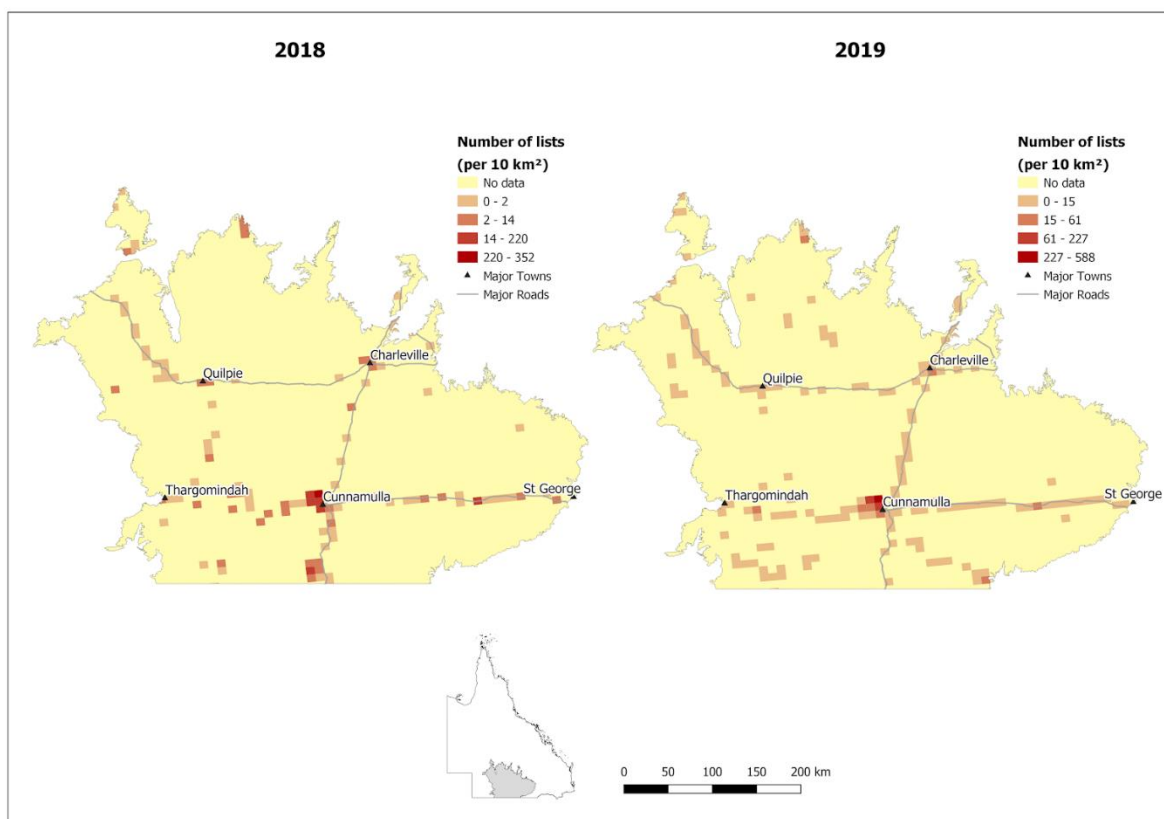


## 12. Mulga Lands

David Niland



Map of Mulga Country Bioregion, showing eBird survey effort

### Geography

The Mulga Lands Bioregion (MUL) constitutes the fifth largest bioregion in the State. It covers 12.6% (186,000 km<sup>2</sup>) of Queensland and extends south into adjacent New South Wales. The dominant topography is flat to undulating plains and low ranges, and the soils are generally infertile, sandy earths. Mulga is the main vegetation community in shrubland and woodland, while Poplar Box is dominant in the tall woodlands of the wetter, eastern half (Sattler & Williams 1999). MUL includes desert, grasslands, and subtropical climate zones (BOM 2016), and the climate is semi-arid with mean annual rainfall varying from 300 to 450mm across the bioregion and has high variability of rain events. Mean temperatures ranges are 8°– 22°C in winter and 18° to 32°C in summer (BoM 2018).

The major towns in MUL are St George, Cunnamulla, Thargomindah, Charleville, and Quilpie. Major drainage catchments comprise the Bulloo, Paroo, Warrego, and Balonne Rivers with the last forming the eastern boundary of the bioregion. The main access routes through the area include the Balonne Highway from St George to Cunnamulla that continues west as the Bulloo Development Road to Thargomindah, the Mitchell Highway radiating from Charleville and running south through Cunnamulla to the border, and the Diamantina Development Road running west through Quilpie.



**Banded Lapwing** (Mike Gilpin)



**Crimson Chat** (Ross Monks)



**White-winged Fairywren** (Ross Monks)



**Splendid Fairywren** (Vince Bugeja)

## **Birds of the bioregion and their conservation**

The Queensland Government lists 301 native species and six introduced species from historic data. This includes 14 species that are considered threatened or rare including the Major Mitchell's Cockatoo, Painted Honeyeater, and Grey Falcon (DES 2013).

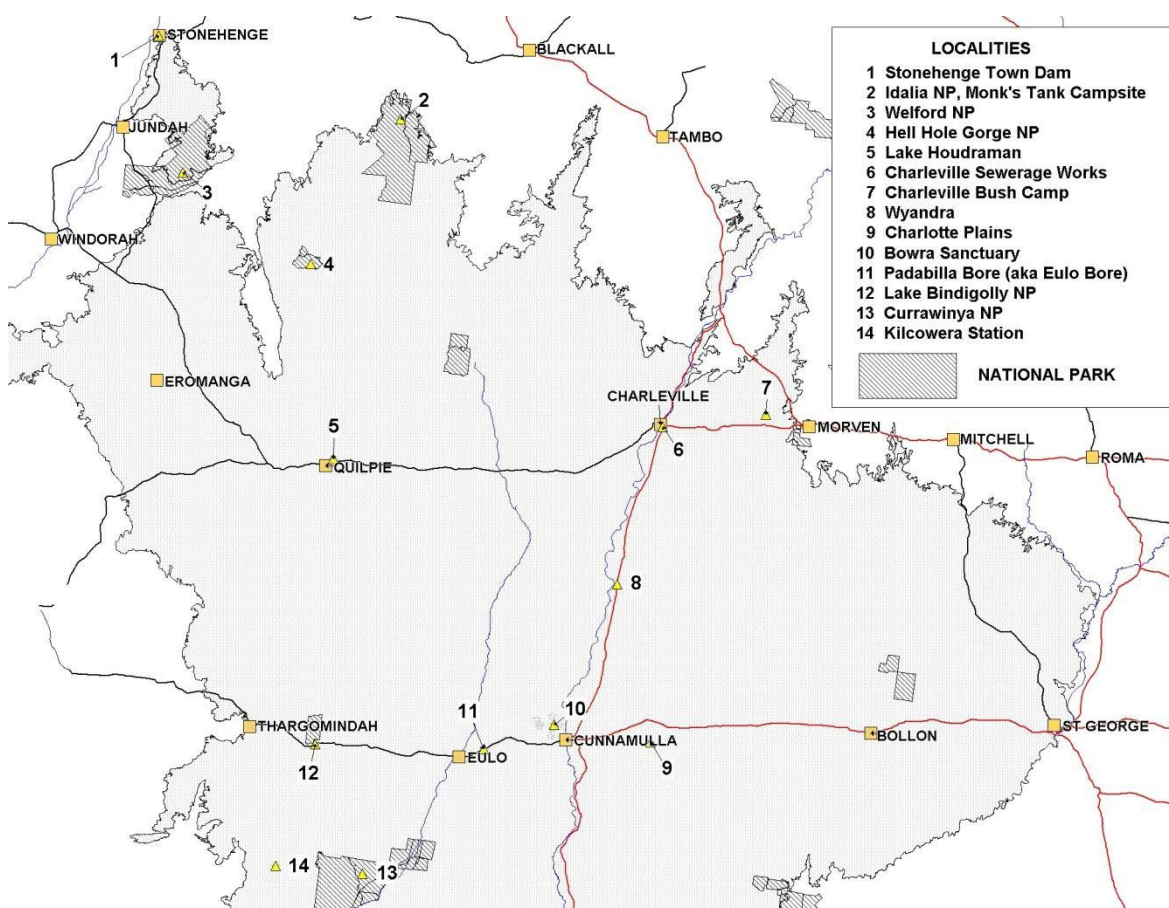
National parks (NP) in the bioregion are Currawinya, Hell Hole Gorge, Lake Bindegolly, Mariala, Thrushton and portions of Welford, Idalia, Culgoa Floodplain, and Tregole. Currawinya Lakes are an internationally important RAMSAR wetland. The Australian Wildlife Conservancy (AWC) owns and manages Bowra Sanctuary (Bowra), just northwest of Cunnamulla, and 11 other Nature Refuges are partially or wholly in MUL (DES 2013).

Birds Queensland is responsible for maintaining a roster of volunteers and bird monitoring activities at Bowra Sanctuary. Volunteers from Birds Queensland conduct nearly daily monitoring of the diversity and relative abundance of birds at Bowra through the nightly "Bird Call" where the greatest number of birds seen at one time by a guest or volunteer observer(s) is recorded. This simple measure of abundance has been recorded almost every month since 2010.

The annual banding program, started in 2013, was held at Bowra over 27 March to 7 April in 2018. There was a reduced number of captures with honeyeater and finch numbers being particularly low compared to previous years. Mulga banding sites had the fewest captures, and waterhole adjacent sites had the

most. There was a lower proportion of juveniles in the population compared to the previous five years (Coleman et al., 2018).

In 2019 another banding expedition to Bowra was undertaken from 19 to 28 April, but a severe rain event limited access to some of the sites. Most of the waterholes were dry at the start of the trip but were all full by the end of the visit. Again, honeyeater captures and observations were much lower than expected, and finches were totally absent. The proportion of juveniles fell to only%, which was the lowest percentage recorded so far (Coleman et al., 2019).



Detailed map of Mulga Lands bioregion, showing localities mentioned in the text

## Major events in 2018-2019

The whole of the bioregion was drought-declared for all of 2018 and 2019 (QG 2022). Both years were mostly very much above average for the mean temperatures, and the rainfall was below to very much below the seasonal means (BoM 2019, 2020). The exception was autumn 2019 which had above average rainfall that did have some effect in reviving the vegetation for a few months. The annual total rainfall at Bowra for each year was around half of the normal average. There were only two years (2012 and 2016) in the last nine which had above average rainfall indicating the region has been experiencing a significant drought.

The daily "bird call" at Bowra saw the monthly total of species decline until March 2019, after which species numbers immediately rose to the general average figures for the rest of the year. Most of the dams on the sanctuary were initially dry but filled again. There was some extra rain in May.

Totals of 210 species in 2018 and 225 species in 2019 were recorded in this bioregion. The Blue-billed Duck, Flock Bronzewing, Spotless Crake, Orange Chat, Slaty-backed Thornbill, Horsfield's Bushlark were of special interest in 2018. The Freckled Duck, Inland Dotterel, Australian Pratincole, Grey Falcon, Blue-winged Parrot, Musk Lorikeet, Red-backed Fairywren, White-fronted Chat, Yellow-faced Honeyeater, White-browed Scrubwren, and Australian Golden Whistler were observations of special interest in 2019.

## 2018 Notable bird records

**Australasian Shoveler.** A count of 10 recorded at Cunnamulla STW (Sewage Treatment Works) ponds in September.

**Australian Crake.** One observed at the Thargomindah STW on 9 September.

**Australian Golden Whistler.** Observations include one record at Bollon, one 40 km west at Narkoola NP, and one at Idalia NP.

**Baillon's Crake.** Three observations recorded including one of three birds at Thargomindah in September.

**Black-breasted Buzzard.** An occupied nest observed at Binya NP in September.

**Black-shouldered Kite.** Single birds recorded at Bollon in April and Bowra in July.

**Blue-billed Duck.** Near-threatened. One bird observed at Nebine, west of Bollon, in April.

**Brolga.** Over 350 birds recorded on field beside Humeburn Road outside Cunnamulla on 7 November.

**Brush Cuckoo.** One observation recorded at Cunnamulla in January.

**Chestnut Teal.** Two observations recorded near Bollon in March and April.

**Cockatiel.** Large flocks totalling 300 recorded at area 70 km south of Mitchell on 20 July.

**Common Myna.** Introduced. Five observed at Bollon in March and 15 near Morven in September.

**Common Starling.** Introduced. A few observed at Quilpie, Cunnamulla, Eulo and outside of towns at Picarilli and near Morven.

**Dusky Woodswallow.** 10 birds observed in June and three in August at Idalia NP. One bird recorded at Bowra in November.

**Eastern Cattle Egret.** Four birds observed at Bowra on 30 July.

**Eastern Yellow Robin.** Observations recorded from Idalia NP and the Highway 30 km northwest of Morven.

**Emu.** A large group of 64 birds observed at Cudnapper Creek Stockroute facility on 9 September, trapped beside new road fence.

**Fan-tailed Cuckoo.** A single bird recorded at Bowra in late August through early September.

**Flock Bronzewing.** One observation of seven birds recorded at Stonehenge on 12 April.

**Grey Falcon.** Vulnerable. One observation recorded about 50 km north of Cunnamulla in August.

**Ground Cuckooshrike.** Two birds recorded in August at Clara Creek between Morven and Augathella.

**Hoary-headed Grebe.** One observed on lagoon at Bowra from 17 through 28 May.

**Horsfield's Bush Lark.** One bird observed at Bowra in May.

**Intermediate Egret.** One bird recorded at Bollon in April and September.

**Leaden Flycatcher.** One bird observed at Idalia NP on 30 September.

**Little Egret.** One bird recorded at Bollon on 6 October.

**Little Grassbird.** Odd birds observed mostly at Cunnamulla STW from August to November.

**Major Mitchell's Cockatoo.** Records of over 70 counted including 43 in one flock at Bowra.

**Mallard.** Introduced. Six observed at Bollon in November.

**Orange Chat.** Up to seven birds recorded at Bowra from May to July.

**Painted Honeyeater.** Vulnerable. Observations included a pair at Eulo in May, Bowra in July, and one at Cunnamulla in September.

**Peregrine Falcon.** One observed at Bowra on 8 October.

**Pied Currawong.** Single observations recorded from Bowra and Idalia NP, at the western edge of the species range.

**Plum-headed Finch.** Small numbers recorded at Idalia NP and Bollon, but a flock of about 200 observed at Cunnamulla on 1 September.

**Rainbow Lorikeet.** Six observations recorded at Charleville with one count of 55 birds.

**Red-capped Plover.** Four birds observed at Bowra on 17 May.

**Red-necked Avocet.** Up to eight recorded at Bowra during August-September.

**Sacred Kingfisher.** No observations recorded from mid-April until late September indicating the species migrates out of the bioregion during this time period.

**Sharp-tailed Sandpiper.** Three observations recorded at Bowra between 15 October and 11 November.

**Silvereye.** A few recorded at Cunnamulla STW on 30 August.

**Slaty-backed Thornbill.** Records include two observations at Paddabilla Bore: one bird in June and four in August.

**Speckled Warbler.** Three birds recorded at Idalia NP in June, and one observed in a mixed flock about 30km northwest of Morven.

**Spinifex Pigeon.** A pair recorded at Quilpie on 24 October.

**Spiny-cheeked Honeyeater.** A flock of 20 birds recorded flying over at Bowra in April.

**Spotless Crake.** Two birds observed at Charleville STW in June, and three recorded at Thargomindah in September.

**Spotted Harrier.** Two observations recorded in March: one at Bowra and one east of Bollon.

**Stubble Quail.** One recorded at Bowra in December.

**Superb Fairywren.** Observations recorded 20 km north of Augathella in April and at Bollon in August.

**Torresian Crow.** Observations recorded from throughout the area in most months, but difficulty in identification may put doubt on the validity of some of these.

**Weebill.** An observation of birds feeding young recorded at Binya NP in September.

**Whiskered Tern.** Two birds observed at Bowra on 31 August.

**White-backed Swallow.** Pairs recorded at Yowah, Paddabilla Bore, and Bowra.

**White-browed Babbler.** In May, 14 birds observed at Bowra and three at Paddabilla Bore.

**White-eared Honeyeater.** Four birds recorded at Idalia NP in August.

**White-throated Needle-tail.** A single bird recorded at Bollon in March.

**Wood Sandpiper.** A single bird recorded at Bowra between 19 and 27 August.

**Zebra Finch.** Very few observed at Bowra or Cunnamulla which is unusual, but flocks of up to 30 observed elsewhere in the bioregion.

### **2019 Notable bird records**

**Australasian Shoveler.** One bird observed at Lake Houdraman near Quilpie on 2 August.

**Australian Bustard.** Some breeding activity observed near Cunnamulla in August and September.

**Australian Crake.** One recorded at Bowra in late March, and one observed at Cunnamulla STW in late October.

**Australian Golden Whistler.** One recorded on the Highway about 80 km east of Cunnamulla on 3 October.

**Australian Pipit.** A large concentration of 30 birds recorded at Bowra in October.

**Australian Pratincole.** A group of 15 recorded about 15 km south of Quilpie on 2 September, and birds seen regularly on Diamantina Development Road west of Quilpie.

**Australian Raven.** Breeding activity noted in August and October at Bowra.

**Australian Ringneck.** Observations included five records of nesting activity in July through August.

**Baillon's Crake.** One recorded at Cunnamulla STW on 3 November.

**Banded Lapwing.** Nesting recorded during June through August, and 20 birds counted around Bowra in June.

**Barking Owl.** Observations recorded at Bowra in May, Welford NP in July, and Quilpie in August.

**Black Honeyeater.** Parents observed feeding two young at Eulo in July.

**Black Swan.** Observations included thirty at Lake Bindegolly in June, about five near Quilpie in July through August, and one at Bowra in December.

**Black-chinned Honeyeater.** Observations included one in Charleville and three in Cunnamulla both recorded in March.

**Black-faced Cuckoo-shrike.** An increase in numbers observed with up to 50 recorded at Bowra in July.

**Blue-winged Parrot.** Observations recorded in June through August at Bowra and Lake Bindegolly NP.

**Brown Songlark.** Up to 10 birds counted at Bowra in August.

**Budgerigar.** Greater numbers observed during May to October, and breeding activity recorded in July and August.

**Buff-rumped Thornbill.** One bird observed at Paddabilla Bore on 19 April.

**Caspian Tern.** Species recorded singly at Lake Bindegolly in June, Currawinya NP in September, and Cunnamulla in October.

**Channel-billed Cuckoo.** One bird heard at Bowra on 31 October.

**Chestnut Teal.** Three recorded at the weir at Cunnamulla on 4 September.

**Chestnut-breasted Quail-thrush.** As many as 10 counted at Bowra in one day during August.

**Chirruping Wedgebill.** Regularly found 20 km west of Cunnamulla on the Diamantina Development Road which is close to the eastern limit of the species' range.

**Common Myna.** Introduced. Some observations recorded in June as far west as the Cunnamulla area.

**Common Sandpiper.** One recorded at Cunnamulla STW on 3 November.

**Common Starling.** Introduced. Observations noted around Cunnamulla in June, and one recorded at Quilpie in July.

**Eastern Barn Owl.** A single bird regularly observed at Bowra in May and August, and a bird recorded at Eulo in July.

**Eastern Cattle Egret.** One recorded at Eulo on 10 June.

**Eastern Yellow Robin.** Up to four birds observed at Idalia NP.

**Freckled Duck.** Four recorded at Lake Bindegolly in June.

**Great Crested Grebe.** Two recorded at Cunnamulla STW on 31 October.

**Grey Falcon.** Vulnerable. Only 13 observations of single birds recorded at Bowra between June and October.

**Horsfield's Bush Lark.** Up to three birds recorded at Bowra from May to October.

**Inland Dotterel.** One observed at Bowra on 12 and 13 August and one at Adavale in October.

**Inland Thornbill.** An occupied nest found at Bowra in August.

**Leaden Flycatcher.** One observed at Bowra on 21 September.

**Major Mitchell's Cockatoo.** Observations recorded of large flocks of 50 to 100 around the Culgoa Floodplain NP area in June.

**Marsh Sandpiper.** One observed at Currawinya NP on 12 August.

**Masked Woodswallow.** An estimated flock of 1,800 observed 14 km east of Cunnamulla in August.

**Musk Lorikeet.** A pair observed in Charleville on 16 August.

**Nankeen Night Heron.** Two observed at Nebine Creek in Culgoa Floodplain NP on 30 June.

**Noisy Miner.** One observed in September at Eromanga which is at the western limit of its range.

**Orange Chat.** Birds recorded at Bowra, Lake Bindegolly NP, and Currawinya NP from January through September. A high total count of 20 birds observed at Lake Bindegolly on 27 June.

**Painted Buttonquail.** One recorded at Idalia NP on 13 and 14 September.

**Pied Currawong.** Observations recorded from Bollon, Charleville, and Idalia NP.

**Pied Honeyeater.** Species recorded from May through September at Bowra and Lake Bindegolly NP, and 10 counted at flowering bloodwood about 10 km north of Adavale in August.

**Plum-headed Finch.** Up to 20 birds recorded at Idalia NP in June, and nesting activity observed in Charleville in July.

**Rainbow Lorikeet.** Observations recorded at Charleville in four different months.

**Red-backed Fairywren.** Two observations recorded from Bowra including an observation in July for male and two females.

**Red-capped Plover.** Up to 25 recorded at Currawinya NP in August, and 15 observed at Lake Bindegolly in June.

**Red-capped Robin.** Breeding activity observed from July through October, including feeding a young Horsfield's Bronze-cuckoo in August.

**Red-chested Buttonquail.** One observed just south of Barringun on 30 June.

**Sharp-tailed Sandpiper.** Single birds observed at Bowra in September and October, and 11 recorded at Currawinya NP in early September.

**Shining Bronze Cuckoo.** Single birds observed at Bowra and Idalia NP in June through September.

**Silver Gull.** 60 to 70 birds recorded at Lake Bindegolly NP in June and July.

**Silvereye.** One bird observed at Bollon on 4 September.

**Slaty-backed Thornbill.** Three birds recorded at Kilcowera Station in July and August.

**Spinifex Pigeon.** Up to six birds observed at Welford NP, and observations recorded from Adavale and Quilpie–Eromanga.

**Spotless Crane.** Observations included one at Charleville STW on 19 June and two at Cunnamulla STW on 25 October.

**Squatter Pigeon.** One observed near Cooladdi on 26 June.

**Straw-necked Ibis.** Flocks totalling up to 350 recorded around Cunnamulla in July and August.

**Superb Fairywren.** Five birds including a full colour male observed in Bollon on 26 September.

**Whiskered Tern.** Four observed at Cunnamulla STW in November, and one recorded near Quilpie in June.

**Whistling Kite.** Nesting activity observed between July and September at Bowra and near Quilpie.

**White-bellied Sea Eagle.** A single bird regularly observed at Bowra between September and November.

**White-browed Babbler.** One observation recorded of 23 about 35 km west of St George on 22 April, and six recorded at Bowra on 21 April.

**White-browed Scrubwren.** One bird recorded at Thrushton NP on 5 June.



**White-browed Woodswallow.** Flocks up to 500 observed at Bowra in June and August, and breeding activity recorded in August and September.

**White-eared Honeyeater.** One bird recorded at Idalia NP on 13 September.

**White-fronted Chat.** Species recorded from May until August, and the largest observation of 25 counted at Lake Bindegolly NP. Breeding activity noted at various places over this period.

**White-winged Triller.** Breeding activity observed in July and August at Bowra with counts of up to 100 observed at this time.

**Wood Sandpiper.** One recorded at Bowra on 26 and 27 October.

**Yellow-faced Honeyeater.** An unusual record of one bird observed at Quilpie on 16 July.

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