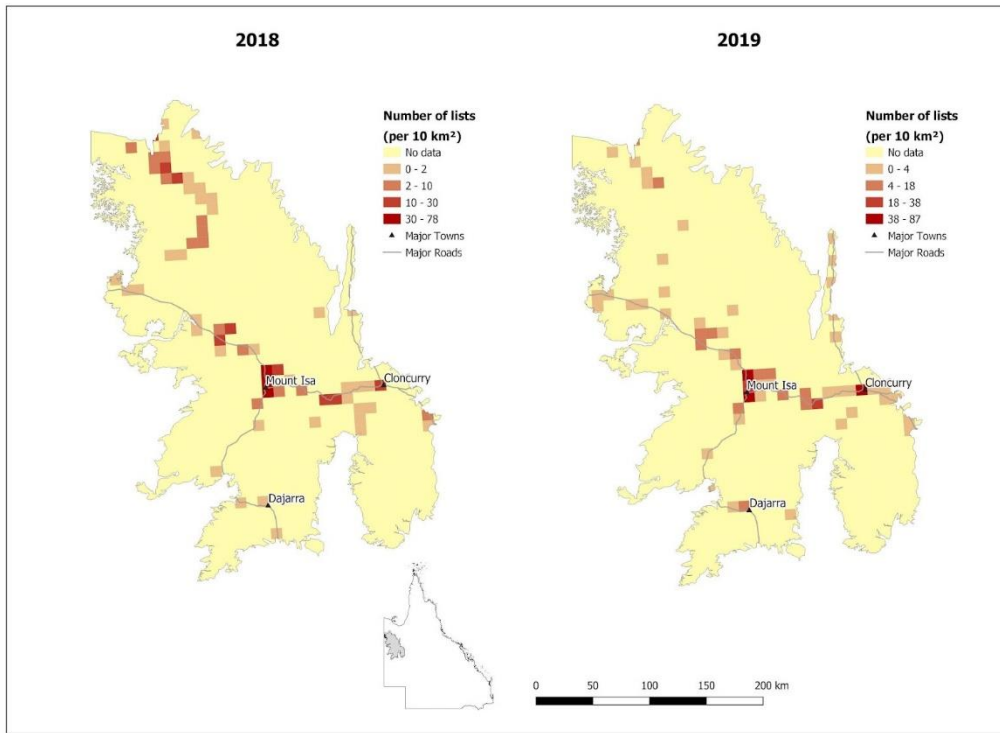
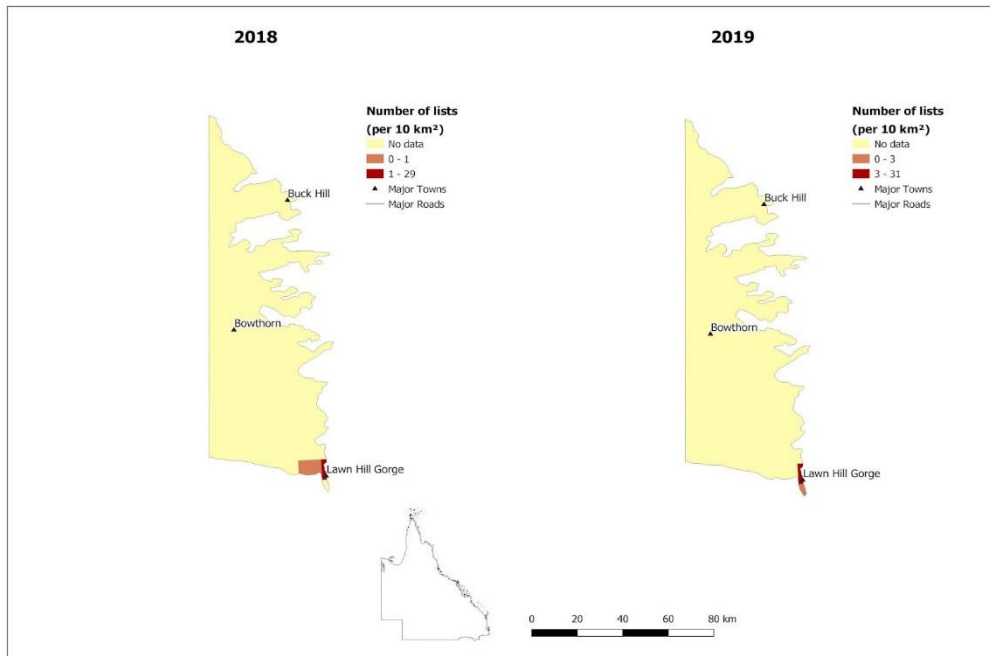


## 6. Northwest Highlands including Gulf Fall Uplands

Andrew Humpherys



Map of Mount Isa Inlier Bioregion showing eBird survey effort



Map of Gulf Fall Uplands Bioregion, showing eBird survey effort



**Spinifex Pigeon** (Jon Norling)



**Varied Lorikeet** (Graham Donaldson)



**Kalkadoon Grasswren** (Jon Norling)

## Geography

The Northwest Highlands Bioregion (NWH) covers some 67,540 km<sup>2</sup>, or 3.9 % of Queensland, and stretches predominantly across two climate zones: Desert and Grassland (BoM 2022). It is an elevated, topographically diverse region that incorporates two of the Commonwealth Government's IBRA (version 7) bioregions: Mount Isa Inlier and the eastern part of Gulf Fall and Uplands that crosses into northwest Queensland from the Northern Territory (AG 2012).

NWH encompasses over 80 Regional Ecosystems including a number which are threatened: Red Gum (*Eucalyptus camaldulensis*) woodlands, riverine wetland, and Gidgee (*Acacia cambagei*) low open woodland. It also supports nationally significant wetlands including Lawn Hill Gorge, Lake Julius on the Leichhardt River, Lake Moondarra, and the Thornton complex of wetlands in the upper reaches of the Gregory River (DES 2019a). Major population centres of NWH are Mount Isa and Cloncurry. Transport corridors traversing the bioregion are the Barkly and Boulia–Mt Isa Highways and Gregory Downs–Camooweal Road. The NWH bioregion experiences hot summers and mild winters with most rain falling over the summer months.

## Birds of the bioregion and their conservation

The Queensland Government lists 317 native and six introduced bird species in NWH from historic data, and there are 18 species that are considered threatened or rare including Gouldian Finch and Carpentarian Grasswren (DES 2013). The major Protected Areas are Boodjamulla (Lawn Hill) National Park (NP) (2,820 km<sup>2</sup>) and Camooweal Caves NP (13,800 ha). Three Nature Refuges support habitat for threatened species, including the Gouldian Finch (DES 2013) in the NWH bioregion: Ballara (174,916 ha) is located southwest of Cloncurry and protects Grey Falcon habitat; Chidna (8,307 ha) is northwest of Cloncurry and protect Gouldian Finch and Carpentarian Grasswren habitat; and Bullen Bullen (10,239 ha) is north of Cloncurry and protects eight wetland health indicator bird species (DES 2013). This bioregion encompasses two Key Biodiversity Areas (KBA): Boodjamulla (37,000 ha) and Buckley River (47,900 ha) (BirdLife Australia 2019).

Southern Gulf National Resource Management (NRM), formerly Southern Gulf Catchments Inc., have continued work in partnership with James Cook University on the optimal fire regimes for maintaining populations of the Carpentaria Grasswren. Since 2016, Southern Gulf NRM has been working with local and regional partners to expand proactive fire management practices across grasswren habitat to reduce the risk of widespread wildfire in the future. In the current project, Biodiversity Bright Spots – Carpentarian Grasswren Corridor, collaborative regional fire management will establish a fire management corridor (the Carpentarian Corridor) from the Buckley River Key Biodiversity Area to Boodjamulla National Park (Crowley 2016). In the 2018 KBA Summary Boodjamulla KBA was listed as "Out of Danger " due to changes in fire management (Leaney et al. 2019).

## Major events in 2018-2019

In 2018, temperatures were above to well above average for maximum, minimum, and annual mean. The rainfall was below to well below average for areas south of Mount Isa, and there was only minor flooding in January (BoM 2019). All Local Government Areas (Boulia, Burke, Cloncurry, Mckinlay, and Mount Isa) were drought declared from January to March and again September to December (QG 2019). There was a significant monsoonal weather event in early 2019 that caused major flooding in the catchments of the many river systems in the region (BoM 2020). This relieved previous drought conditions and provided impetus for new vegetation growth. Major rivers remained full until later in the dry season than usual.

The 2018/2019 sighting list was compiled in a period that saw some major flooding in the region. This impacted both birds and birdwatchers. The better season that followed is likely to have been favourable for most bird species in the region but would have impacted access to some sites for birdwatching purposes. Birdwatching effort in the region continues to be concentrated at a very few "honeypot" sites such as Boodjamulla NP which does not accurately represent the state of birds across the bioregion. There are relatively few designated conservation areas in the bioregion with ready access and facilities for birdwatchers. Easy access for birdwatchers to important sites in this remote region remains a major impediment. In addition, most birdwatching seems to be focussed on certain key, charismatic species at the available sites which also influences available records.

Species observed in 2018 were 217 in the Mount Isa Inlier and 106 in the Gulf Fall region; species observed in 2019 were 219 species and 95 species respectively. Most of the species recorded are relatively common or widespread in the region. There were relatively few records of unusual vagrants or notable species. There were multiple records of charismatic species or species with restricted distributions in Queensland at a few, well known sites. This reflects the popularity of these sites (e.g., Boodjamulla NP and Adels Grove) with birdwatchers targeting these species and possibly the paucity of other readily accessible conservation sites in the region. Notably, pairs of Grey Falcon were observed in the bioregion in both 2018 and 2019.

## 2018 Notable bird records

**Arafura Fantail.** Several birds observed including one in April and four in September at Boodjamulla NP.

**Azure Kingfisher.** Only two observations recorded, both from the Gregory River Crossing in April and May.

**Barking Owl.** Six observations recorded between May and September in Boodjamulla NP.

**Black-shouldered Kite.** Small number of observations recorded at Lake Moondarra and Riversleigh Road.

**Black-tailed Treecreeper.** Many observations recorded at a wide variety of sites in Mount Isa and Cloncurry Shires, and three observed in Boodjamulla NP between July and September.

**Blue-billed Duck.** Near-threatened. Observations of small numbers recorded at the Mount Isa Wastewater treatment plant and Lake Corella in Cloncurry Shire.

**Brahminy Kite.** One recorded at Boodjamulla NP in September.

**Brown Quail.** A single observation of an individual in Cloncurry Shire, and a group of three recorded at Boodjamulla NP in September.

**Buff-sided Robin.** Numerous records from several months mostly from the Adels Grove and O'Shannessy River area in Mount Isa Shire. More observations recorded between May and September in Boodjamulla NP.

**Carpentarian Grasswren.** Vulnerable. Numerous observations recorded from McNamara's Road near Mount Isa.

**Crimson Chat.** Numerous observations recorded from Mount Isa and Cloncurry Shires.

**Emu.** Numerous observations recorded at different locations across the bioregion.

**Forest Kingfisher.** Single observation recorded from Clem Walton Park in Cloncurry Shire during June.

**Freckled Duck.** Multiple observations recorded with most from Lake Moondarra, but some also from Cloncurry Shire.

**Gouldian Finch.** Near-threatened. A single observation recorded at New Century Mine.

**Great Crested Grebe.** Numerous observations recorded from a variety of sites across Mount Isa and Cloncurry Shires.

**Green Pygmy Goose.** Three observed in Boodjamulla NP in September.

**Grey Falcon.** Vulnerable. Two recorded in Boodjamulla NP in September 2018, and two separate observations recorded from Riversleigh Road in April.

**Hardhead.** Many observations recorded from across Mount Isa and Cloncurry Shires, and four observed at Boodjamulla NP in September.

**Helmeted Guineafowl.** Introduced. Multiple observations of flocks with up to nine individuals recorded at the Horse Paddocks in Mount Isa.

**Hooded Robin.** Several observations recorded predominantly from McNamara's Road in Mount Isa Shire.

**Jacky Winter.** Numerous observations recorded from many sites in northwest Queensland including seven birds recorded in Boodjamulla NP in August and September.

**Kalkadoon Grasswren.** Numerous observations recorded at the Pamela Street Water Tank and the Warrigal Waterhole in Mount Isa Shire.

**Little Buttonquail.** Several observations of single birds recorded from Riversleigh Road and McNamara Roads in the northwestern part of Mount Isa Shire in April.

**Long-tailed Finch.** Flocks of up to 13 birds recorded in Boodjamulla NP in September.

**Northern Rosella.** Eight recorded at Boodjamulla NP in September 2018.

**Orange Chat.** Numerous observations recorded from Mount Isa and Cloncurry Shires.

**Pacific Koel.** One recorded in Boodjamulla NP in April.

**Pale-headed Rosella.** Two observations recorded from Clem Walton Park/Lake Corella in Cloncurry Shire in June and September.

**Peregrine Falcon.** Several observations recorded from Chinaman Creek Dam, Lake Moondarra, and Fountain Springs.

**Pink-eared Duck.** Many observations recorded from a wide variety of sites around Mount Isa and Cloncurry Shires. 17 recorded in Boodjamulla NP in September.

**Plumed Whistling Duck.** Multiple observations recorded at Cloncurry and Mount Isa with up to 100 individuals recorded at Lake Moondarra. Seven observed at Boodjamulla NP in September.

**Purple-backed Fairywren.** Many observations recorded at a wide variety of sites in Mount Isa and Cloncurry Shires, and numerous observations recorded at Boodjamulla NP between April and September.

**Purple-crowned Fairywren.** Numerous records including many from Adels Grove and Boodjamulla NP.

**Red-backed Fairywren.** Several observations recorded with most from Lake Moondarra, and one record from Boodjamulla NP in April.

**Red-capped Robin.** Several observations recorded from near Mount Isa including Lake Moondarra.

**Red-chested Buttonquail.** Nine recorded at Riversleigh Road in Mount Isa Shire, but some concern by author that the species can be easily confused with Little Buttonquail.

**Red-collared Lorikeet.** Numerous records including two from Mount Isa, many from Adels Grove, and many at Boodjamulla NP with flocks of up to 10 between May and September.

**Red-necked Avocet.** One observation of three birds recorded at Lake Moondarra in Mount Isa Shire during March.

**Sandstone Shrikethrush.** Several birds recorded in Boodjamulla NP between June and September.

**Square-tailed Kite.** Single observation recorded from Gregory Downs–Camooweal Road.

**Wandering Whistling Duck.** Several observations recorded from Lake Moondarra.

**White-winged Fairywren.** A single observation recorded at Lake Moondarra.

## 2019 Notable bird records

**Azure Kingfisher.** Two individuals recorded at the O'Shannessy River in April.

**Black-shouldered Kite.** Small number of observations recorded at Lake Moondarra and several roadside sites in Cloncurry Shire.

**Black-tailed Godwit.** Near-threatened. A single observation recorded at Lake Moondarra in October.

**Black-tailed Treecreeper.** Many observations at a wide variety of sites recorded in Mount Isa and Cloncurry Shires.

**Brown Quail.** Several observations of small numbers recorded in Mount Isa Shire including at Warrigal Waterhole and Lake Moondarra.

**Buff-sided Robin.** Numerous observations recorded with most from the Adels Grove area and Boodjamulla NP.

**Bush Stone-curlew.** Only a single observation recorded from Cloncurry Shire.

**Carpentarian Grasswren.** Vulnerable. Observations included a single record from Dajarra in Cloncurry Shire and numerous records from Mount Isa Shire including the Lady Lorretta Mine and McNamara Road at Gunpowder.

**Crimson Chat.** A single observation of two individuals recorded at Boodjamulla NP in September, and several observations from the Lake Moondarra area in Mount Isa Shire.

**Emu.** Numerous observations recorded at different locations in the region.

**Great Crested Grebe.** Numerous observations recorded from a variety of sites in Mount Isa and Cloncurry Shires.

**Grey Falcon.** Vulnerable. Two birds recorded at Boodjamulla NP.

**Grey Goshawk.** A single observation recorded at the Pamela Street Water Treatment Plant in Mount Isa.

**Hardhead.** Many observations recorded from across Mount Isa and Cloncurry Shires.

**Helmeted Guineafowl.** Introduced. A single observation recorded of a group of 45 individuals at Lake Moondarra in Mount Isa Shire.

**Hooded Robin.** Several observations recorded predominantly from Carlton Hills Station and Mica Creek Crossing in Mount Isa Shire.

**Jacky Winter.** Two observations recorded from Boodjamulla NP including a group of eight individuals, and numerous observations recorded from many other sites in north-west Queensland.

**Kalkadoon Grasswren.** Observations included one record from Mary Kathleen mine site in Cloncurry Shire and numerous records from Mount Isa Shire including Carlton Hills Station and Pamela Street Water Tank.

**Latham's Snipe.** Several observations recorded at Clearwater Lagoon and Lake Moondarra.

**Leaden Flycatcher.** Observations included a single record from Boodjamulla NP in June and two observations in August and February from Lake Mary Kathleen in Cloncurry Shire.

**Little Curlew.** Several observations recorded at Lake Moondarra in November.

**Little Stint.** Accidental. Three observations recorded at Lake Moondarra in November.

**Long-toed Stint.** Three observations recorded at Lake Moondarra in November.

**Mallard.** Introduced. Several observations recorded from the vicinity of Cloncurry township including Chinaman Creek Dam.

**Noisy Friarbird.** Observation of seven birds recorded at Mary Kathleen mine site in Cloncurry Shire during April.

**Northern Rosella.** A small number of individuals recorded at Boodjamulla NP in May and August.

**Pacific Baza.** A single observation of two birds recorded at Boodjamulla NP in September.

**Pectoral Sandpiper.** Accidental. A single observation recorded at Lake Moondarra.

**Peregrine Falcon.** Several observations recorded from Chinaman Creek Dam, Lake Moondarra, and Fountain Springs.

**Pink-eared Duck.** Many observations of small numbers of birds recorded from a wide variety of sites in Mount Isa and Cloncurry Shires.

**Plumed Whistling Duck.** A number of observations recorded from Cloncurry and Mount Isa with up to 220 individuals recorded at Lake Moondarra.

**Purple-backed Fairywren.** Many observations at a wide variety of sites recorded in Mount Isa and Cloncurry Shires.

**Purple-crowned Fairywren.** Numerous observations recorded over various months with many from Adels Grove and Lawn Hill NP.

**Red-backed Fairywren.** Several observations recorded mostly from Lake Moondarra and two birds from Boodjamulla NP in August.

**Red-chested Buttonquail.** Observations of single birds recorded at the Lake Moondarra area of Mount Isa Shire.

**Red-collared Lorikeet.** Numerous observations of small groups included many from Mount Isa, Adels Grove, Clem Walton Park at Corella Dam, and Boodjamulla NP.

**Red-necked Stint.** Near-threatened. Several observations recorded at Lake Moondarra in various months.

**Rufous-crowned Emu-wren.** Two birds recorded at Dajarra in Cloncurry Shire in August.

**Sandstone Shrikethrush.** Numerous records over various months from Boodjamulla NP, and a single observation recorded from Adels Grove in February.

**Square-tailed Kite.** Observations included one at Gregory Downs-Camooweal Road and a single record of two at Boodjamulla NP in September.

**Stubble Quail.** A single observation recorded of a bird at Lake Moondarra in Mount Isa Shire.

**Swinhoe's Snipe.** A single observation recorded at Lake Moondarra.

**Wandering Whistling Duck.** Multiple observations recorded from Cloncurry and Mount Isa Shire of up to 150 birds.

**White-winged Fairywren.** A single observation recorded from Lake Moondarra.

**Yellow Chat.** Several observations recorded from the Lake Moondarra area in Mount Isa Shire.

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