New localities for nine bird species in Arnhem Land, including those for the notable Gouldian Finch, Red Goshawk and Hooded Robin

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Abstract

Due to its remoteness and restricted access, Arnhem Land remains one of the least ornithologically explored regions of Australia. This paper documents records of nine bird species which result from bird tours and surveys in the area surrounding Arnhem Land Barramundi Lodge, south of Maningrida, western Arnhem Land, from 2008 to 2018, and assesses their significance based on the historical literature, two national bird atlases and online database records. Three species, Red Goshawk (*Erythronini tricolor radiata* Accipitridae), Rufous Owl (*Ninox rufa* Strigilidae) and Gouldian Finch (*Chloebia gouldiae* Estrildidae), are historically known from localities to the west (Gunbalanya and King River) and east (Gove Peninsula), so their presence in the study area might be expected. Observations of two nesting pairs of Red Goshawks represent the first breeding records of this rare species for Arnhem Land. Annual sightings of predominantly juvenile Gouldian Finches and a record of recently-fledged birds suggest local breeding. Four other species, Hooded Parrot (*Psephotellus dissimilis* Psittaculidae), Yellow-tinted Honeyeater (*Ptilotula flavescens* Meliphagidae), Black-chinned Honeyeater (*Melithreptus gularis laetior* Meliphagidae) and Hooded Robin (*Melanodryas cucullata* Petroicidae), are largely known in the Top End from the semi-arid Katherine-Mataranka region, and the near-coastal observations documented here represent considerable extensions of the geographical ranges of all but the Hooded Parrot. All four species were associated with the seasonally-inundated paperbark woodland of the Tomkinson floodplain, though only the Yellow-tinted Honeyeater was abundant. The small population of Hooded Robins appears to be highly isolated and thus vulnerable to local, if not regional, extinction. Finally, I summarise records of the Mangrove Grey Fantail (*Rhipidura phasiana* Rhipiduridae) and the migratory Grey Fantail (*Rhipidura albiscapa* Rhipiduridae) in Arnhem Land, which help to define their ranges in the Top End of the Northern Territory.
Introduction

Occupying almost half of the Top End of the Northern Territory, Arnhem Land is one of the few non-desert regions of Australia that is owned and managed by indigenous people. Due to its remoteness and restricted access, however, it remains one of the least ornithologically explored regions of Australia. While chronicling of the avifauna of the adjacent Cobourg Peninsula began as early as 1840 with the arrival of John Gilbert at the settlement of Victoria in Port Essington (Fisher & Calaby 2009), it was another 75 years before ornithological exploration began in Arnhem Land (Noske 2017). In June 1915, William Rae McLennan set sail from Thursday Island to collect specimens and eggs of birds in Arnhem Land and the Gulf of Carpentaria for H.L. White, the eminent grazier-ornithologist. After six days travelling up and down the Liverpool River in search of a source of fresh water, he arrived on 26 September at the mouth of the King River, approx. 150 km southeast of Victoria settlement. McLennan spent the next four months in the King River area, recording 156 bird species before being forced to abandon the camp and return to Roper River after Aborigines raided his cutter and stole most of the provisions. McLennan’s King River camp is significant in being roughly halfway between Gunbulanya (70 km to the southwest) and Maningrida (80 km to the east).

Since that time, most ornithological attention has focussed on northeast Arnhem Land. During WW II, Cyril Humphries observed the birds around Melville Bay while stationed with the Royal Australian Air Force at Gove (now known as Nhulunbuy) Airfield over 15 months from July 1944 to October 1945 (Humphries 1947). Only three years later, the American ornithologist Herbert Deignan spent eight weeks during July and August 1948 collecting birds at Yirrkala for the American-Australian Scientific Expedition to Arnhem Land (Deignan 1964). Three decades later, Boekel (1976) recorded the birds he observed within 30 km of Nhulunbuy, where he was stationed as a school teacher for 10 months in 1974. During the 1990s, the Conservation Commission of the Northern Territory conducted systematic faunal surveys of Nanydjaka (Cape Arnhem) on Gove Peninsula (Gambold et al. 1995) and the Wessel and English Company Islands, off the coast of northeast Arnhem Land (Woinarski et al. 2001), as well as undertaking aerial surveys of waterbirds around the whole coast of the Top End, including Arnhem Land (Chatto 2000, 2006). The birds of the rehabilitation areas at the Gove bauxite mine were also investigated from 1998 to 2000 (Brady 2005; Brady & Noske 2010).

Northwest Arnhem Land has received less ornithological attention than the northeast. After his stay in Yirrkala, Deignan (1964) collected birds in Oenpelli (now Gunbulanya), close to Arnhem Land’s western boundary, from 21 September to 6 November 1948. Two decades later, members of the fifth and final Harold Hall Expedition also collected birds from a site 16 km southwest of Oenpelli Mission for three weeks in September 1968 (Hall 1974). In the same year, scientists from the Division of Wildlife Research, CSIRO, completed their bird surveys of Cobourg Peninsula, permitting a comparison with Gilbert’s seminal field studies (Frith & Hitchcock 1974; Noske 2017).
As part of a study of the Top End-endemic White-throated Grasswren (*Amytornis woodwardi*) (Noske 1992), Holmes & Noske (1990) used a helicopter to access four remote locations on the sandstone massif of western Arnhem Land in December 1987 and January 1988, obtaining the first records of this and other sandstone-endemic species in the interior of Arnhem Land. Soon afterwards, Robinson *et al.* (1992) reported range extensions of 20 bird species from the Gulf of Carpentaria and Arnhem Land. Both Holmes & Noske (1990) and Robinson *et al.* (1992) stressed the dearth of basic distributional and habitat information for many bird species in the region and the need for greater survey effort.

In June 2008, the author was contacted by Alex Julius, owner of Arnhem Land Barramundi Nature Lodge (ABNL), to assess the feasibility of bird tours in the area, and one month later, the first of many ABNL-hosted ‘Bird Weeks’ was conducted with co-guides Johnny Estbergs and Dick Eussen. During this and subsequent tours, we observed several species that were outside their known range according to the published literature. This paper documents these observations, except for those of the Northern Shrike-tit which are presented separately in this issue of *Northern Territory Naturalist*.

**Study area and methods**

Arnhem Land is bounded to the north by the Arafura Sea and to the east by the Gulf of Carpentaria. On the west, it is bordered largely by Kakadu National Park (133°00'E), while its irregular southern boundary is marked by the 14°00'S parallel approximately as far as the meridian 134°15'E, and the Roper River in the southeast around 14°42'S (Figure 1a). In this report I use the terms northern and southern Arnhem Land to refer to those parts north of 13°S and south of 14°S, respectively, and central Arnhem Land for those parts between 13°S and 14°S.

This report is based on records collected mainly from 2008 to 2010 in the area within 20 km of ABNL, including the township of Maningrida, which is situated on the mouth of the Liverpool River, Western Arnhem Land (Figure 1b). Established in 2004 by Alex Julius as a fishing lodge, ABNL is located 17 km SSE of Maningrida on a plateau which overlooks the vast floodplain of the Tomkinson River, a tributary of the Liverpool River. Following a reconnaissance trip by the author in June 2008, ABNL hosted the first Arnhem Land ‘Bird Week’ one month later, exploring the Liverpool and Tomkinson Rivers, and Haul Round Island by boat, and many woodland sites within two hours drive from ABNL. Since then, one or two tours of five to seven days, mostly in July and August, were undertaken annually until 2015 (Table 1), when ABNL was purchased by Outback Spirit Tours Pty Ltd. Subsequently, ‘Bird Week’ tours were undertaken in September, though only two or three days were devoted to the ABNL environs, while a similar period was spent at the recently-opened Murwangi Safari Camp (Figure 1a) on the western edge of the Arafura Swamp (Noske & Johnstone 2018; Noske *et al.* 2018). All the ABNL bird tours included a vehicular trip to: (1) Nangak floodplain lying between the Tomkinson River and the rocky escarpment on which ABNL and Djinkarr Ranger
Station (1.7 km south of ABNL) were perched, and (2) several waterholes along a 10 km section of the main road from Maningrida to Gunbalanya, 15–25 km east of the Mann River crossing or 0.5–10.5 km west of the turnoff to Kolorbidahbidah, which is 18 km SSE of ABNL. Hereafter I refer to the latter section of the road as the Upper Tomkinson floodplain.

In addition to co-leading bird tours, I conducted 20 min censuses of up to 20 × 2 ha sites within 20 km of ABNL in each of six months (October 2008, January, May, August and December 2009, and March 2010) for a study comparing the avifauna of two distinct local habitats: (1) eucalypt forest dominated by Darwin Woollybutt...
(Eucalyptus miniata) and/or Darwin Stringybark (Eucalyptus tetradaonta) on the rocky plateau (60–80 m asl), and (2) paperbark woodland on the seasonally-inundated Upper Tomkinson floodplain (4–20 m asl). Sites were sampled three times over two to three consecutive days except in January, when four of the paperbark plots could not be accessed due to flooding, and December, when eucalypt sites were not sampled due to inclement weather, and paperbark sites were sampled only once. The detailed results of that study will be presented elsewhere.

In the results below, I have summarised the records of the selected species from both ‘Bird Week’ tours and bird surveys, as well as historical records, including those from The Atlas of Australian Birds (Blakers et al. 1984; hereafter Atlas 1) and The New Atlas of Australian Birds (Barrett et al. 2003; hereafter Atlas 2). Atlas 1 covered the period from 1977–1981, while Atlas 2 covered 1998–2002. The one-degree cell encompassing Maningrida (12°00’–12°59’S, 134°00’–134°59’E, hereafter abbreviated as 12/134) also includes the township of Ramingining. It is bordered to the west and east by one-degree cells encompassing Gunbalanya (12/133) and Galiwinku (12/135), respectively, and to the south by the cell encompassing Bulman (13/134) on the Central Arnhem Road. Further east is the Gove Peninsula (12/136) encompassing Nhulunbuy and Yirrkala. The geographical co-ordinates of many records are provided in Appendix 1.

For additional records from Arnhem Land, I downloaded and scrutinised online data from eBird (2020) and the Atlas of Living Australia (ALA 2020) for each species, and where geographical co-ordinates were not given for a particular location, I used Google Earth to determine approximate coordinates. Where considered relevant, I have cited the name of the observer and the eBird checklist number (beginning with ‘S’); for example “eBird 2020: M. Barton, S15734020”) or Atlas of Living Australia catalogue number (preceded by ‘ALA#’) of the record. Unless otherwise stated, distances between places were measured as straight lines using Google Earth. The question of whether records constitute extensions or the filling of gaps in the range for a particular species, is dependent on sources and publication dates of information. In this paper I have based my assessments on maps and information published in the Handbook of Australian, New Zealand and Antarctic Birds (Higgins 1999), in combination with Atlas 2, since maps in field guides (Menkhorst et al. 2017) are too generalised and small in scale to be accurate.

Results

RED GOSHAWK (Erythrotriorchis radiatus)

Considered Vulnerable both nationally and within the Northern Territory, the Red Goshawk is widely, but patchily distributed across the Top End (Marchant & Higgins 1994), with a major stronghold on the Tiwi Islands (NTG 2020). It was first recorded in Arnhem Land by McLennan who collected one specimen near his King River camp in November 1915 (White 1917b). While distribution maps suggest that it is absent from eastern Arnhem Land (Marchant & Higgins 1993; Barrett et al. 2003), Humphries (1947)
recorded the species occasionally in the Melville Bay (Gove Peninsula) region in the mid-1940s, and Deignan (1964) observed a bird between Yirrkala and Melville Bay in August 1948. During Atlas 1 (1977–1981) it was recorded from the Gunbalanya and Nhulunbuy cells, but not the Maningrida cell, and there were no records from Arnhem Land at all during Atlas 2 (1990–2002).

The Red Goshawk was first recorded in the study area on 19 July 2008 when an adult was seen diving at Pacific Black Ducks (*Anas superciliosa*) while it was being chased by Little Corellas (*Cacatua sanguinea*) at the Crater Lake (4 km SE of ABNL). On the following day, J. Estbergs spotted a nest at approx. 18 m in a tall (20 m) Darwin Stringybark, approx. 1.5 km from ABNL. In the following year, an adult was observed sitting on this nest on 27 and 28 August 2009, and on each day from 5–9 September. There was no evidence of activity at this nest during tours in 2010 and 2011, though on 18 July 2010, a bird was recorded at or near Maningrida (eBird 2020: M. Barton, S15734020). In July 2012, an adult was seen sitting at a new nest in a tree approx. 50 m away, and this nest was used in each of the following five years (Figure 2a; J. Estbergs pers. comm.). In 2016, the nest contained a single large chick with an adult in attendance on 26 September, and later the chick was observed being fed with a small bird. An adult was again sitting on the nest from 22 to 24 September 2017, but there was no activity during September 2018. J. Estbergs found another nest on the road to Crab Creek, approx. 15 km east of Maningrida, which was attended by a female on 7 September 2009, and again on 10 December 2010. Similar to the first nest, it was built in a tall Darwin Stringybark (approx. 22 m high), at approx. 18 m from the ground.

![Figure 2. Red Goshawk (*Erythrotriorchis radiatus*), on nest near Arnhem Land Barramundi Nature Lodge. a. adult probably incubating, 28 September 2017 (Graham Hall); b. adult feeding nestling, 4 October 2016. (Leigh Hall)]
Table 1. Maximum number of birds (and frequency of sightings, in brackets) of notable species recorded during bird tours based at Arnhem Land Barramundi Nature Lodge from 2008–2018. The abbreviation “nr” signifies not recorded. The data from August 2010 to 2015 were provided by J. Estbergs.

<table>
<thead>
<tr>
<th>Year</th>
<th>Start date</th>
<th>Finish date</th>
<th>Red Goshawk</th>
<th>Hooded Parrot</th>
<th>Rufous Owl</th>
<th>Black-chinned Honeyeater</th>
<th>Gouldian Finch</th>
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<td>19 July</td>
<td>26 July</td>
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<td>11 September</td>
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<td>2 (1)</td>
<td>3 (1)</td>
<td>60 (3)</td>
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<td>27 June</td>
<td>4 July</td>
<td>nr</td>
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<td>1 (1)</td>
<td>1+ (1)</td>
<td>10 (2)</td>
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**RUFOUS OWL** (*Ninox rufa*)

Widely distributed across the Top End (Higgins 1999), the Rufous Owl was apparently first recorded in Arnhem Land by McLennan who collected three of six birds that he found in mangroves and two small patches of monsoon rainforest along the King River from 15–22 October 1915 (White 1917a). Distribution maps suggest that the Rufous Owl occurs across most of Arnhem Land (Higgins 1999). In northeastern Arnhem Land, Humphries (1947) sighted one pair in dense rainforest near Melville Bay, though neither Boekel (1976) nor Officer (1976) recorded it around Nhulunbuy. During *Atlas 1*, it was recorded from Gunbalanya and Nhulunbuy cells (Blakers et al. 1984). In July 1990, Robinson et al. (1992) observed one bird in a vine thicket with tall canopy cover, 50 km south of Ramingining (49 km SW of the nearest coast) and another in evergreen forest along Annie Creek (76 km south of Ramingining). In the following month, a bird was sighted approx. 5 km southwest of Ramingining (J.C.Z. Woinarski, ALA #1128979). During *Atlas 2*, one bird was found 5 km northeast of Annie Creek on 27 July 1999 (K. Brennan, ALA #1081086) and another at Port Bradshaw, 38 km south of Nhulunbuy, on 9 July 2000 (ALA #2071221), in the Maningrida and Nhulunbuy cells, respectively.

On 8 September 2009, during ‘Bird Week’, J. Estbergs discovered two birds in a small patch of monsoon rainforest near the Cadell River, 35 km ESE of Maningrida. The site was visited again on 1 July and 30 August 2010, when one bird was seen. In addition, two birds were sighted in tall mangroves during a boat cruise on the Tomkinson River on 4 October 2016 (C. Brady pers. comm.). The most recent record is from Nhulunbuy, where one bird was observed in March 2017 (eBird 2020; C. Wiley/K. Rose, S35080317).
HOODED PARROT (*Psephotellus dissimilis*)

Endemic to the Top End, the Hooded Parrot (Figure 3) is mainly known from inland localities, particularly in the Pine Creek and Katherine-Mataranka regions (Higgins 1999). The species has not been recorded on Cobourg Peninsula or Gove Peninsula, but in the 1940s it was recorded at Banyan Island at the mouth of Woolen River, approx. 30 km east of Ramingining (Barrett 1949 in Higgins 1999). While there are no historical records from Gunbalanya, it was allegedly observed at a site 84 km ESE of Gunbalanya (or 47 km west of Maningrida), in the Gunbalanya cell, during *Atlas 1* (Blakers et al. 1984; ALA # 534047). During the same period (1977–1981), Reed & Tidemann (1994) found five nests at ‘Mann River’ and ‘Arafura Homestead’ (now Murwangi Safari Camp), both sites in the Maningrida cell and 25–30 km inland from the nearest coast. Further inland, Robinson *et al.* (1992) recorded five birds in one flock and occasional other pairs 50 km south of Ramingining on 3 August 1990. On 25 August 1996, the species was allegedly seen at a site approx. 7 km SE of Kolorbidahbidah or 116 km north of Bulman (ALA #62183223), but the location is very remote. There were no records from Arnhem Land during *Atlas 2* (1998–2002).

Hooded Parrots were first observed near ABNL on 26 July 2008, when two birds were observed on the Nangak floodplain, approx. 16 km from the mouth of the Liverpool River, and another two at a soak on the Upper Tomkinson floodplain (Table 1). On 9 May 2009, a pair was found foraging beside the road approx. 1 km from ABNL, and on 22 June, 16 were counted on the Nangak floodplain, although they were not re-sighted during the following six days. In 2010, 20 birds were seen near ABNL as early as 29 March (eBird 2020: Ian Davies, S19288988), while during ‘Bird Week’ (27 June–4 July) flocks of up to 36 birds were seen on three days on the Nangak floodplain. On the Nangak floodplain, the birds appeared to favour the area where the recently burnt floodplain abutted the unburnt low paperbark woodland with its tall grasses; four birds were observed chewing on the wall of a magnetic termite mound (J. Estbergs *in litt.*). Some were still present at Nangak in late August 2010 (Table 1). Small numbers were observed each year from 2011 to 2013, including early October 2012, but none were seen from 2015 to 2018.

More recently, on 13 June 2019, three birds were reported from a site 37 km by road west of the Gapuwiyak turnoff from the Central Arnhem Road (eBird 2020: M. Griffith, S57336145), which is 79 km ESE of the abovementioned site of Robinson *et al.* (1992).
and approx. 65 km SSE of Banyan Island. This appears to be the easternmost record of the species. The only record of the species from central Arnhem Land was made on 5 August 2007 at a site 38 km NE of Bulman on the Central Arnhem Road (eBird 2020: S. Sparkman, S70858645).

**YELLOW-TINTED HONEYEATER** (*Ptilotula flavescens*)

In the Northern Territory, the Yellow-tinted Honeyeater (Figure 4) is known mainly from the Katherine-Mataranka and Victoria River-Timber Creek regions in the south-central and southwest of the Top End, respectively (Storr 1977; McCrie & Watson 2003). At Yinberrie Hills, approx. 50 km northwest of Katherine, it was one of the most abundant species, especially during the Wet season (Woinarski & Tidemann 1991). Higgins *et al.* (2001) presumed the species was largely absent from Arnhem Land, except for Gove Peninsula where it was recorded once only by both Humphries (1947) and Boekel (1976). There are no historical records from King River, Cobourg Peninsula, or Gunbalanya. Moreover, there were no records of the species from northern Arnhem Land during *Atlas 1*, but during *Atlas 2*, I recorded the species 20 km east of the Mann River crossing on the Upper Tomkinson floodplain on 27 September 2000.

During the study period, the Yellow-tinted Honeyeater was found to be a common resident of woodlands dominated by Broad-leaved Paperbark on the seasonally inundated floodplain of the Tomkinson River catchment. Each year from 2008 to 2018 it was recorded during ‘Bird Week’ tours at Nangak, and was especially abundant around the well-wooded billabongs where Cajaput (*Melaleuca cajaputi*) was co-dominant with *M. viridiflora*. During 262 censuses, I recorded this species 57 times (21.8%), but almost exclusively at paperbark woodland sites. Indeed, Yellow-tinted Honeyeaters were the fourth most frequently encountered and sixth most abundant species on the paperbark woodland sites (R. Noske unpub. data). Observations of recently-fledged birds on the Nangak floodplain and the Upper Tomkinson floodplain in March (n=1), June (n=3) and September (n=2) indicate that egg laying occurred from February to August (R. Noske unpub. data), whereas at Yinberrie Hills, breeding (unspecified) was noted from December to May (Woinarski & Tidemann 1991).

Further east, the species was found to be common around the Arafura Swamp, with up to 27 individuals at survey sites (n=10), 1–32 km from Murwangi Safari Camp from 10 September 1998 to 21 September 1999 (K. Brennan, *Fauna Atlas NT*; ALA#1077448,
Almost two decades later, it was frequently recorded in both paperbark and eucalypt woodlands around Murwangi Safari Camp during ‘Bird Weeks’ in September and October 2016, September 2017, and 31 August–1 September 2018 (R. Noske, unpub. data).

Outside the Maningrida-Arafura Swamp area, eBird (2020) records from northern Arnhem Land comprise one from Lake Evella beside Gapuwiyak on 18 August 2016 (J. and P. Manins, S41888048; 12°30’S, 135°48’E) and another from a site approx. 24 km to the south on the Bulman-Nhulunbuy Road in August 2005 (C. Curson, S16600573; 12°42’S, 135°45’E), both within the Galiwinku cell. About 60 km further east, two birds were observed in July 2012 at a site approx. 84 km SW of Nhulunbuy (C. Wiley, S11145533; 12°46’S, 136°17’E). In central Arnhem Land, the northernmost records are from the vicinity of Annie Creek (old Goyder River crossing), approx. 60 km south of Murwangi, in September 1999 (K. Brennan, ALA #1079703, 1080236) and October 2016 (eBird 2020: K. Rose, S31956465).

**BLACK-CHINNED HONEYEATER (Melithreptus gularis laetior)**

Like the Yellow-tinted Honeyeater, the ‘golden-backed’ subspecies of the Black-chinned Honeyeater (Figure 5) is known mainly from the Katherine-Mataranka and Victoria River-Timber Creek regions in the south of the Top End, though it is much less common than the former species (Storr 1977; McCrie & Watson 2003). At Yinberrie Hills, its mean density was lower than that of the Yellow-tinted Honeyeater (0.01 vs 0.55 birds ha\(^{-1}\), respectively) (Woinarski & Tidemann 1991), and although more abundant in riparian sites than in non-riparian sites surveyed by Woinarski *et al.* (2000), it was found on the fewest sites, and had the lowest density of all honeyeaters except for the Yellow-throated Miner (*Manorina flavigula*). There are no historical records of the species in Arnhem Land, and Higgins *et al.* (2001) considered it to be absent from the region. The distribution map in Menkhorst *et al.* (2017) indicates that it is absent from northern and eastern Arnhem Land. Indeed, there were no records from northern or central Arnhem Land during *Atlas 1*, but during *Atlas 2*, it was recorded in the Bulman cell at a site 35 km northeast of Bulman (130 km SSW of Ramingining) on 29 September 2000 (NT Fauna Atlas; ALA #2057598), and another site 91 km south of Ramingining on 1 January 2001 (J.C.Z. Woinarski, ALA #1069523).
In the study area, Black-chinned Honeyeaters were first recorded on the outer edge of the Nangak floodplain, approx. 300 m from ABNL on 27 June 2008, and during the subsequent ‘Bird Week’ (July 2008) from two sites on the Upper Tomkinson floodplain, as well as in eucalypt woodland dominated by Salmon Gum (*Eucalyptus tintinnans*), approx. 8 km south of the turnoff to Kolorbidadah. They were also recorded on 10 (3.8%) of my 262 censuses during 2008–2010, involving five sites, four of which were in paperbark woodland, and two in mixed woodland. At 18:00 hr on 21 January 2009, a group of five birds was observed huddling to roost on an exposed horizontal branch of a tree approx. 300 m below Djinkarr Ranger Station. On 21 June 2009, a nest with young was found approx. 1 km southwest of the Kolorbidadah bidah turnoff, with at least four adults in attendance. The nest was approx. 7.5 m from the ground and approx. 1.5 m below the top of a Round-leaved Bloodwood (*Corymbia latifolia*). This appears to be the first breeding record north of 14°S in the Top End. The species was subsequently recorded at least once on each bird tour until 2013, after which it was recorded once in 2015 only (Table 1).

Although I did not encounter the species at Murwangi Safari Camp during bird tours in 2016–2018, it was reported from sites near Annie Creek (12°58’S, 135°01’E), 54–61 km south of Murwangi, on 27 April 2016 (eBird 2020; K. Rose, S29254974) and 2 October 2016 (S31956465).

**HOODED ROBIN** (*Melanodryas cucullata*)

![Hooded Robin (*Melanodryas cucullata*), male, near Katherine. (Marc Gardner)](image)

In the Top End, the Hooded Robin (Figure 6) is mainly confined to inland areas, such as around Pine Creek and Timber Creek (Boekel 1980; Woinarski & Tidemann 1991; McCrie & Watson 2003), though there are scattered records from Kakadu National Park (Brooker & Parker 1985). The sole historical record from northern Arnhem Land is of a specimen (H.L. White Collection, Museum of Victoria) collected by W. McLennan from the Goyder River on 8 September 1915 (White 1917b). The *Atlas of Living Australia* gives the geographical coordinates of the specimen as approx. 1 km west of Arafura Homestead (i.e. present-day Murwangi Safari Camp), though McLennan’s diary (White 1917a) indicates that the furthest he travelled by boat from the river’s mouth was 42 km, where he described the eastern bank as the edge of “a vast mangrove swamp”, which on Google Earth clearly approximates the northern end of the Arafura Swamp, approx. 11 km NNE of the homestead. An alleged specimen from Cobourg Peninsula (Frith & Hitchcock 1974) was probably collected from the Kimberley region (Fisher & Calaby 2009).
were no reports of the species from Arnhem Land during either Atlas 1 or Atlas 2, although it was allegedly recorded from a site approx. 7 km south of Nhulunbuy on both 12 February and 1 June 1980 (ALA #370785 and #370786, respectively). Recent published distribution maps (Higgins & Peter 2002; Menkhorst et al. 2017) indicate that it is entirely absent from Arnhem Land.

During my 2009–2010 surveys, I recorded the species six times, involving five sites, all on the Upper Tomkinson floodplain. The four sites with single observations were in paperbark woodland dominated by Broad-leaved Paperbark (6–9 m high) on the seasonally inundated floodplain, whereas two sightings were made at the fifth site which was in open woodland situated on a stony rise, dominated by somewhat stunted or sparsely-foliaged eucalypts (approx. 10 m high), including Darwin Stringybark and Round-leaved Bloodwood with groves of Quinine Tree (*Petalostigma pubescens*). Records covered all but one (March) of the five sampled months. There are no eBird records for the species in Arnhem Land.

**GREY FANTAIL** (*Rhipidura albiscapa*) and **MANGROVE GREY FANTAIL** (*R. phasiana*)

Prior to Ford’s (1981) review, the Mangrove Grey Fantail was treated as a subspecies of the Grey Fantail. This fact, coupled with the total lack of specimen records for Arnhem Land, has led to uncertainty about the status of these species in the region. Higgins & Peter (2002) concluded that both species were largely absent from Arnhem Land. The sole record of either species from northern Arnhem Land during Atlas 1, dated 1 July 1979, was from the edge of Melville Bay, 7 km south of Nhulunbuy (ALA #362045; Table 1), though there are no previous records from Gove Peninsula. Another record during Atlas 1 (ALA #2196414; Blakers et al. 1984), from a site located 38 km southwest of Bulman, central Arnhem Land, presumably refers to the Grey Fantail (Figure 7) since the Mangrove Grey Fantail is confined to coastlines. Moreover, the record’s date of 10 August 1977 is consistent with the species’ status as a Dry season visitor to the Top End, presumably from southeastern Australia, where the migratory race *alisteri* breeds (Storr 1977; Higgins & Peter 2002). In the Darwin and Kakadu regions, it has been recorded mainly in monsoon rainforest and paperbark forest (Brooker & Parker 1985; Woinarski et al. 1988; McCrie & Noske 2015).

Between the two Atlases, the Grey Fantail was recorded twice in the Maningrida cell by J.C.Z. Woinarski, firstly 55 km SSW of Ramingining on 27 May 1987, and secondly just 5 km south of Ramingining on 1 August 1990 (ALA #1258989, and #1128818, respectively).

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**Figure 7.** Grey Fantail (*Rhipidura albiscapa*), Katherine River. (Marc Gardner)
During *Atlas 2*, it was reported from the Nhulunbuy cell only, apparently the second record for Gove Peninsula (see above). Yet between 2011 and 2019, it was recorded no fewer than seven times from the Peninsula, five times in July, and once in June (Table 2). At Daliwuy (Table 2), the observer described the bird as having white along the full length of the tail and belonging to subspecies *Rhipidura albiscapa albicauda*. Given its coastal location and the lack of any confirmed records of this subspecies in the Top End, it is possible that this record refers instead to the Mangrove Grey Fantail, which has white along most of the length of the outermost tail feathers.

The sole record of the Grey Fantail from the study area between 2008 and 2018 was of two birds observed in a dense thicket of tall paperbarks beside Moremaker Billabong (Figure 1b), approx. 26 km WSW of Maningrida, on 23 July 2008 (R. Noske pers. obs.). Interestingly, the only record of the species from central Arnhem Land to date was from the old Goyder River Crossing, near Annie Creek, on 18 August 2016 (J. & P. Manins, S41888512).

Table 2. Records of Grey Fantail from northern Arnhem Land (sources: ALA 2020; eBird 2020). * denotes Fauna Atlas NT. # denotes eBird Australia. † denotes Birdata, BirdLife Australia.

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<thead>
<tr>
<th>Year</th>
<th>Date</th>
<th>Location</th>
<th>Latitude (S)</th>
<th>Longitude (E)</th>
<th>Observer</th>
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<td>12°14'S</td>
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<tr>
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<td>30 April</td>
<td>Nhulunbuy</td>
<td>12°10'</td>
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<td>27 May</td>
<td>–</td>
<td>12°45'</td>
<td>134°40'</td>
<td>Woinarski, J.*</td>
</tr>
<tr>
<td>1990</td>
<td>1 August</td>
<td>–</td>
<td>12°21'</td>
<td>134°54'</td>
<td>Woinarski, J.*</td>
</tr>
<tr>
<td>2011</td>
<td>17 July</td>
<td>Goanna Lagoon</td>
<td>12°13'</td>
<td>136°47'E</td>
<td>Denmark, T.#</td>
</tr>
<tr>
<td>2014</td>
<td>30 July</td>
<td>Nhulunbuy</td>
<td>12°10'</td>
<td>136°46'E</td>
<td>Unknown†</td>
</tr>
<tr>
<td>2016</td>
<td>19 July</td>
<td>Nhulunbuy Lagoon</td>
<td>12°20'</td>
<td>136°55'E</td>
<td>Rose, K.#</td>
</tr>
<tr>
<td>2016</td>
<td>15 June</td>
<td>Daliwuy (Binydjarrna)</td>
<td>12°18'E</td>
<td>136°46'E</td>
<td>Rose, A. &amp; S.#</td>
</tr>
</tbody>
</table>

While the Mangrove Grey Fantail (Figure 8) has an almost continuous coastal distribution in Western Australia from the Northern Territory border to as far south as Shark Bay (Johnstone & Storr 2004), its distribution in the Top End and northern Queensland appears to be highly fragmented. Higgins *et al.* (2006) considered that the species was absent from Arnhem Land, but I recorded it from Crab Creek, approx. 15 km east of Maningrida, on 28 September 2000 (Barrett *et al.* 2003; ALA #2071417), and it was still present at this site when we visited on 25 July.

*Figure 8. Mangrove Grey Fantail (Rhipidura phasiana), Mule Creek. (Marc Gardner)*
2008, 8 September 2009 and 10 December 2009 (R. Noske pers. obs.). A record from Marchinbar Island in the Wessel Islands group off northeast Arnhem Land on 18 April 2001 (ALA #2071025) must be questioned, given that Woinarski et al. (2001) did not record the species during a thorough survey of 62 of the Wessel and English Company Islands between July 1993 and October 1996. On the other hand, the somewhat similar Northern Fantail (R. rufiventris) was the fifth commonest bird species on these islands (Woinarski et al. 2001). Since 2009 the only records of the Mangrove Grey Fantail in Arnhem Land were from the mouth of Walker River (13°35'S, 135°50'E; B. MacDonald, S70586330) and Nungkanangka Island at the mouth of the Rose River, 1 km south of Numbulwar (M. Gardner, three records from 2017 to 2020), on the shores of the Gulf of Carpentaria in east-central and southeastern Arnhem Land, respectively.

GOULDIAN FINCH (*Chloebia gouldiae*)

Although originally described from specimens collected at Point Pearce, just south of present-day Wadeye, no fewer than 21 specimens of the Gouldian Finch (Figure 9) were allegedly collected from Port Essington, Cobourg Peninsula, between 1838 and 1849 (Fisher & Calaby 2009; Noske 2017). There have been no records from Cobourg Peninsula since 1849 (Frith & Hitchcock 1974), and indeed, there are few records from other coastal parts of the Top End. In November 1915, W. McLennan found small numbers (2–5) at a spring near his camp on the King River, and a flock of approx. 50 at another spring upstream (White 1917b). Humphries (1947) found the species in small

![Figure 9. Gouldian Finches (*Chloebia gouldiae*). Adults and recently-fledged birds, Edith Falls. (Marc Gardner)](image-url)
numbers on Gove Peninsula in 1944 and 1945, but there have been no subsequent records from northeastern Arnhem Land.

The Gouldian Finch was apparently first reported in the Maningrida cell from the Nangak floodplain, 6 km northwest of ABNL, on 27 April 1975 (D. Grace, ALA #432899), and 22 years later, from nearby Djinkarr Ranger Station on 16 November 1997 (K. Brennan, ALA #433407). During Atlas 1 the species was allegedly encountered at a site approx. 25 km west of Maningrida, on both 30 November 1979 and 8 August 1978, though the site is approx. 18 km from the nearest site on the Upper Tomkinson floodplain, suggesting erroneous geographic co-ordinates. On 28 August 1980, it was reported from the “Old Arafura Homestead” though the co-ordinates are 8 km northwest of Murwangi (M. Reed, ALA #433072). In the Gunbalanya cell, it was reported from a site approx. 63 km east of Gunbalanya and approx. 70 km west of Maningrida on both 30 November 1977 and 8 August 1978 (ALA #433025, 331284).

More than three decades after they were last recorded there, approx. 40 Gouldian Finches were sighted on the Nangak floodplain during the first ‘Bird Week’ in July 2008. However, larger numbers were encountered on the Upper Tomkinson floodplain: 185 and 126 birds were counted on 23 July and 26 July, respectively (Table 1). The majority of birds (approx. 75%) were drably coloured juveniles. In addition, on 21 July, an adult pair with eight recently-fledged birds was seen and photographed in woodland dominated by Salmon Gum approx. 8 km south of the Kolorbidahdah turnoff. A flock of approx. 30 birds was still present on Nanguk floodplain on 18 October 2008 (pers. obs.) and an unknown number was reported approx. 10 km east of the Mann River crossing on 11 October 2008 (S. Randall, ALA #1294384).

In late June 2009, up to 25 birds were counted on Nangak floodplain, and 17 on the Upper Tomkinson floodplain, suggesting over 40 birds in total. Two months later (September 2009), approx. 50 juveniles with 10 adults, and six juveniles with three adults were seen in the former and latter areas (Table 1). In 2010, six adults were seen and photographed approx. 3 km WSW of the Kolorbidahbhidah turnoff on 5 May, and 12 on 11 May (I. Davies pers. comm., S42449041), while at Nangak, up to 10 were seen in June and July. In 2011, only two birds were seen during 12 days in July, while in 2012 small numbers were seen in both July and October. From 2015 to 2018, none were recorded except in October 2016 (Table 1). In addition to these bird tour records, I recorded the species during censuses on the Upper Tomkinson floodplain on 19–20 October 2008 (2–30 birds at five sites), 9–10 May 2009 (1–2 birds at two sites), 26–28 August 2009 (1–60 at three sites) and on 7 December 2009 (approx. 20 at Nangak), but not in January 2009 or March 2010. Apart from those on the Nangak floodplain and on the Upper Tomkinson floodplain (2009–2010), the only eBird record from northern Arnhem Land refers to a site approx. 84 km southwest of Nhulunbuy (12°46’S, 136°17’E) on the Central Arnhem Road (T. Dolby, S16603218) on 9 March 2009.
Discussion

The present paper provides details of sightings of nine species of birds that were known from only a few localities in northern Arnhem Land prior to the instigation of the ABNL bird tours. Three of these species – Red Goshawk, Rufous Owl and Gouldian Finch (see below) – had been recorded during the early and/or late 1900s in both far western (i.e. Gunbalanya and King River) and far eastern (i.e. Gove Peninsula) Arnhem Land, so their occurrence in the intervening country is unsurprising. Nevertheless, the observations of nesting Red Goshawks in the Maningrida-ABNL area appear to represent the first confirmed breeding records for Arnhem Land.

The Hooded Parrot is known to breed in the Mann River catchment so its occurrence on the adjacent Tomkinson floodplain possibly represents post-breeding dispersal. The Nangak records of this species are closer to the coast than previously known localities, except for Banyan Island at the mouth of Woolen River, where it was reported during the 1940s. The 2019 eBird record from 37 km west of the Gapuwiyak turnoff on the Central Arnhem Road substantially extends the range of this species eastward to within 150 km of Nhulunbuy, although there have been no recent records from Gove Peninsula. Ignoring the undated Atlas 1 record from the Gunbalanya cell, the species appears to inhabit subcoastal northern Arnhem Land over approx. 160 km from Mann River in the west to the abovementioned 2019 site on the Central Arnhem Road in the east. The almost total lack of records from central Arnhem Land suggests that this northern population may be isolated from populations to the south.

Prior to this study the Yellow-tinted Honeyeater was known within northern Arnhem Land only from the Gove Peninsula, where it is evidently scarce. Based on a broad-scale survey of riparian and adjacent non-riparian sites across the Top End during 1997–1998, and an analysis of a large distributional dataset, Woinarski et al. (2000) concluded that it was mainly associated with eucalypt-lined rivers in the southernmost lower rainfall (< 1,000 mm) areas, distant from river mouths. In their study, the species dropped out from higher rainfall areas where rainforest plants and paperbarks replaced eucalypts as the dominant component of the riparian vegetation. In striking contrast to those findings, it was found to be one of the commonest bird species in the paperbark woodlands of the Tomkinson River catchment, where it is a breeding resident. It was also common at Murwangi, approx. 66 km from the nearest site on the Upper Tomkinson floodplain, and eBird records since 2005 suggest that its subcoastal range extends at least 90 km eastwards to Gapuwiyak, though there are no recent records from the Nhulunbuy area.

Two of the remaining four species are known in the Top End mainly from the semi-arid interior. Hitherto unknown from the northern half of Arnhem Land, the Black-chinned Honeyeater population of the Tomkinson floodplain appears to be isolated; the nearest eBird record, near Annie Creek, being approx. 100 km to the southeast of the closest sightings on the Upper Tomkinson floodplain. The sightings of the Hooded Robins reported herein appear to constitute the first confirmed records for Arnhem Land.
The infrequency and small area of observations of this species suggest the population is very small and isolated, and therefore potentially at risk of local extinction. This is of particular concern given that the Tiwi Islands Hooded Robin (*Melanodryas cucullata melvillensis*), that was allegedly common in the early 1900s (Mathews 1914), is now Critically Endangered or possibly even extinct (Garnett *et al.* 2011).

The multiple records of Grey Fantails from Gove Peninsula, and single records from Moremaker Billabong and Goyder River Crossing substantially extend the known range of this migratory bird eastwards from Kakadu National Park. However, records of this species from the Gove Peninsula must be treated with caution in view of possible confusion with the Mangrove Grey Fantail, which has not yet been found there. Indeed, the apparent absence of the latter species from over 900 km of coastline between Maningrida and the Walker River mouth on the Gulf of Carpentaria is curious. Although restricted to mangroves, the Mangrove Grey Fantail is much less common in this habitat than the Northern Fantail, and in the Darwin region, it seems largely confined to the frequently inundated seaward edge of mangroves (McCrie & Noske 2015). Its presence at Crab Creek, near Maningrida, is consistent with this preference, as this site is a small mangrove-lined inlet on the coast of the Arafura Sea. In contrast, the species was not recorded in the tall mangroves that fringe the Tomkinson and Liverpool rivers, despite many hours of birding by boat from 2008 to 2018. The most extensive areas of mangroves in Arnhem Land occur between Ramingining and Arnhem Bay (135°30'E–136°30'E; Wightman 2006). Surveys of mangroves in this region may yet yield other sites where the species occurs.

The Gouldian Finch was recorded in five consecutive years, including all months from May (once) to early December, but not in January or March, suggesting that these birds moved away from the Tomkinson-Mann floodplain during the Wet season. This species undertakes regular seasonal shifts in habitat in response to seasonal changes in the availability of seeds of a variety of grass species (Dostine *et al.* 2001). At Yinberrie Hills near Katherine, it bred in hilly woodland during the Dry season, feeding mainly on the seeds of annual speargrass (*Sorghum* sp.), before moving to adjacent lowlands to feed on perennial grass species throughout much of the Wet season (Dostine *et al.* 2001). From mid-December to mid-February, these finches foraged mostly at sites within a radius of 10 km from the breeding area. Breeding at this site, and at Newry Station, near the Western Australian border, took place from February to August, peaking in April, but varied from year to year depending on the timing and amount of rainfall over the preceding Wet season (Tidemann & Woinarski 1994; Tidemann *et al.* 1999). The Tomkinson-Mann floodplain, however, lacked annual *Sorghum*, and instead supported a variety of other grass species such as *Eriachne burkittii*, *Pseudopogonatherum contortum*, *Heteropogon triticeus*, *Themeda triandra* and *Heterachne gulliveri*. The presence of up to 185 birds, mostly juveniles, throughout the Dry season in the study area suggests that these birds belonged to a colony or population that nested during the Wet season in the higher
country to the south, dispersing to the floodplain in the Dry season after it had dried out. The sighting of recently-fledged dependent young from a late brood in late July 2008 in eucalypt woodland, approx. 26 km SSE of ABNL, indicates that this breeding colony may not be very distant from the study area.

Concluding remarks
Given the lack of ornithological exploration of Arnhem Land due to its remoteness from population centres and restricted access to visitors, it is hardly surprising that the bird tours and surveys reported herein have yielded some unexpected findings. Until these tours and surveys began in 2008, the only localities in western Arnhem Land that had been visited for extended periods were Gunbalanya, where collectors for two expeditions – one in 1948 and the other in 1968 – spent a combined total of nine weeks, and the King River, which W. McLennan explored over four months. Both of these localities were sampled mainly in the latter half of the Dry season. The only part of Arnhem Land to be sampled over a longer period is the Gove Peninsula, where Humphries and Boekel made casual observations over 15 and 10 months, respectively. The present study thereby represents the longest running, albeit not continuous, study of the mainland avifauna of Arnhem Land, and makes the Maningrida-ABNL region arguably the best-known. Nevertheless, many gaps still remain in our understanding of the distribution of birds across this large portion of the Top End of the Northern Territory, and there can be no doubt that other surprises await birders and scientists who visit Arnhem Land in the future.

Acknowledgements
I am indebted to Alex Julius, former owner of Arnhem Land Barramundi Nature Lodge, for instigating commercial bird tours in western Arnhem Land, and for providing accommodation, transport and other assistance for my bird surveys of the Lodge environs. I am also deeply grateful to co-guide Johnny Estbergs for his cheerful companionship during ‘Bird Weeks’ and for providing the 2011–2015 records. I acknowledge and thank the traditional owners of western Arnhem Land and Bawinanga Aboriginal Corporation for allowing me access to their country, and am very grateful to Leila Nimbadja, Wayne Kalakala and Stuart Yirawala (Ankin) for their hospitality and willingness to share their knowledge. Thanks are also due to co-guide Dick Eussen for his good company during the early bird tours and to David Thomas at Arnhem Land Barramundi Nature Lodge for extracting a certain vehicle from bogs on more than one occasion. I am very grateful to Niven McCrie for drawing the maps, and to Leo Joseph for his constructive comments on this manuscript. Finally, I thank Marc Gardner, Graham Hall and Leigh Hall for generously providing their photographs of these birds.
References

Fisher C. and Calaby J. (2009) The Top of the Top End: John Gilbert’s manuscript notes for John Gould on vertebrates of Port Essington and Cobourg Peninsula (Northern Territory, Australia); with comments on specimens collected during the settlement period 1838 to 1849, and subsequently. The Beagle, Records of the Museum and Art Galleries of the Northern Territory Supplement 4, 1–239.
New localities for birds in Arnhem Land


**Appendix 1.** Geographical co-ordinates (to nearest minute) of localities mentioned in the text, determined by the author using Google Earth unless source is marked with an asterisk.

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<th>Location</th>
<th>Co-ordinates</th>
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