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NORTHERN
QUEENSLAND

Birds With Altitude

Your guide to monitoring bird life in Queensland's Wet Tropics

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Contents

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BirdLife Northern Queensland acknowledges Traditional Owner groups of the Wet Tropics region. We pay our respect to their elders past, present, and emerging, and extend that respect to all Aboriginal and Torres Strait Island people.

Cover photo by Rob Shepherd via birdlifephotography.org.au.

Wet Tropics birds in trouble

The Wet Tropics (WT) is a hot spot for bird diversity. Within this region, that covers only 0.1% of Australia's land area, more than 45% of Australia's bird species can be found. Twenty-three of these are either endemic or largely confined to the region (Birds | Wet Tropics Management Authority).

The Wet Tropics region – a precious 0.1%

Unfortunately, evidence is mounting that Wet Tropics populations of rainforest-dependent birds are declining because of climate change (Williams & de la Fuente, 2021; Kowalski et al, 2022) and the Action Plan for Australian Birds 2020 (Garnett & Baker, 2021: APAB) identifies 14 threatened, or near threatened, Wet Tropics birds (Table 1).

Table 1. Threatened and near threatened birds in the Wet Tropics

Endangered	Vulnerable	Near Threatened
• Fernwren • WT King-Parrot • WT Brown Gerygone	• Atherton Scrubwren • Mountain Thornbill • Bower's Shrikethrush • Victoria's Riflebird • WT Large-billed Scrubwren • WT Eastern Whipbird	• Golden Bowerbird • Tooth-billed Bowerbird • WT Satin Bowerbird • Grey-headed Robin • Little Treecreeper

According to IUCN criteria, as listed in the Action Plan for Australian Birds 2020.

These threatened and near threatened birds tend to be rainforest specialists, not ranging far from closed forest, and are mostly confined to the Wet Tropics midlands and uplands (>600m elevation). Information from the APAB is summarised below:

Endangered

Fernwren

Endemic to the Wet Tropics where they occur mostly in upland rainforest favouring moist areas such as near streams. Have undergone a steep decline in population, particularly at lower altitudes. Appears to have disappeared from some lower sites (360-400m).

Fernwren Photo: Martin Willis.

Wet Tropics Australian King-Parrot

Endemic to the Wet Tropics where they live in upland rainforests. A recent rapid decline in population is evident from Williams & de la Fuente 2021 (77% decline) and lower Birdata reporting rates between 1999 and 2018 (2 ha, 20 mins = down 81%; 500 m area search = down 36%).

WT Australian King Parrot Photo: Peter Valentine.

Wet Tropics Brown Gerygone

Endemic to the Wet Tropics, occurring in upland rainforest. A decline in population is evident from Williams & de la Fuente 2021 (54% decline) and lower Birdata reporting rates between 1999 and 2018 (2 ha, 20 mins = down 84%; 500 m area search = down 60%).

Brown Gerygone Photo: (C) John Barkla 2011 birdlifephotography.org.au

Vulnerable

Atherton Scrubwren

Endemic to the Wet Tropics where they occur in upland rainforest. A decline in population is evident from Williams & de la Fuente 2021 (43% decline) with almost none at lower altitudes. Birdata reporting rates between 1999 and 2018 have also declined (2 ha, 20 mins = down 98%; 500 m area search = down 27%). Difficulties in identification may bias reporting rates.

Atherton Scrubwren Photo: Peter Valentine.

Mountain Thornbill

Endemic to the Wet Tropics where they occur in upland rainforest. Williams & de la Fuente (2021) report a 46% decline in population. May be more abundant outside than inside protected areas.

Mountain Thornbill Photo: Doug Herrington.

Bower's Shrikethrush

Endemic to the Wet Tropics where they occur in upland rainforest. A substantial decline is likely but not all data are consistent. Williams & de la Fuente (2021) report a 72% decline and there was a 71% decline in reporting at the School for Field Studies (Kowalski et al. 2022). However, there hasn't been any significant change in reporting rates between 1999 and 2018 for 2 ha, 20 mins or 500 m surveys in Birdata. This may be to do with the distribution of surveys, or misidentification with Little/Rufous Shrikethrush.

Bower's Shrikethrush Photo: Peter Valentine.

Victoria's Riflebird

Endemic to the Wet Tropics. Williams & de la Fuente (2021) report a 35% decline in population (Williams & de la Fuente 2021).

Victoria's Riflebird Photo: (C) Bill Harding 2018 birdlifephotography.org.au

Wet Tropics Large-billed Scrubwren

Sub-species endemic to the Wet Tropics. A 31% decline in population is evident from Williams & de la Fuente (2021). Reporting rates also indicate a decline at the School for Field Studies (down 51%; Kowalski et al. 2022). Birdata reporting rates between 1999 and 2018 have also declined (2 ha, 20 mins = down 88%; 500 m area search = down 46%).

Large-billed Scrubwren Photo: (C) Ian Wilson 2016 birdlifephotography.org.au

Wet Tropics Eastern Whipbird

Sub-species endemic to the Wet Tropics. A 42% decline in population is evident from Williams and de la Fuente (2021).

Eastern Whipbird Photo: (C) Peter Owen 2022 birdlifephotography.org.au

Near Threatened

Golden Bowerbird

Endemic to higher altitudes in the Wet Tropics region, with 90% of bowers above 900m. A 57% decline in population is suggested (Williams & de la Fuente 2021) but data is highly variable from year to year and there has been little change in the number or distribution of bowers. Population trends need further confirmation.

Golden Bowerbird Photo: Peter Valentine.

Tooth-billed Bowerbird

Endemic to the WT where they live in upland rainforests. There is evidence for population decline (Williams & de la Fuente 2021 = down 95%; Birdata reporting rates 1999-2018, 2 ha, 20 mins = down 51%). However, there has been no change in the number or distribution of known courts. The ambiguous results could be consistent with slow recovery from cyclones Larry and Yasi which damaged court sites, probably killed many birds, and reduced the frequency of calls and thus detection rates. There probably has been a decline, but population trends need further confirmation.

Tooth-billed Bowerbird Photo: Alastair Freeman.

Wet Tropics Satin Bowerbird

Endemic to higher altitudes in the Wet Tropics region. Declines indicated but not confirmed due to lack of data.

WT Satin Bowerbird Photo: (C) Harry Charalambous 2014 birdlifephotography.org.au

Grey-headed Robin

Endemic to the Wet Tropics where they occur in upland rainforest. There is evidence of population decline (Williams & de la Fuente 2021 = down 26.6%; Birdata reporting rates 2 ha/20min = down 44%; 500 m = down 12%).

Grey-headed Robin Photo: Peter Valentine.

Little Treecreeper

This subspecies of White-throated treecreeper is endemic to the Wet Tropics where it mainly occurs in upland rainforest. Scarce at low altitudes. A 26.5% decline in population is indicated.

Little Treecreeper Photo: Subspecies of White-throated Treecreeper (C) Keith Fisher 2009 birdlifephotography.org.au

The effects of climate change

Not all bird species in the Wet Tropics are declining. The extensive surveys conducted by Stephen Williams and colleagues between 2000 and 2016 (Williams & de la Fuente (2021: Table 1) revealed that overall, populations of lowland species (<400 m elevation) had increased moderately as had many habitat generalists.

The changing climate is probably affecting different species in different ways, both directly and indirectly. For example, species may be impacted directly, suffering increased mortality during heat waves and other extreme weather events such as cyclones which may be more intense. Or, their food supply may be reduced due to longer, hotter, and drier dry seasons.

Other possible effects of climate change are indirect, the result of changing species interactions. These include a wide array of possible changes ranging from reduced food availability due to lower leaf nutrition and altered fruiting seasons, to competition with increasing populations of habitat generalists and invasive species. The effects of climate change may also be aggravated by habitat loss and fragmentation.

What can you do?

Many of our special Wet Tropics birds are in trouble. The climate is changing, habitats and resources are shifting, but we lack information about some species' population trends. Not enough is known about most species' specific requirements to understand how or why climate change is affecting them. You can help by surveying Wet Tropics birds and recording your observations. In particular, you can join the challenge to survey birds in the Key Biodiversity Areas (KBA) of the Wet Tropics, specifically Atherton Tablelands KBA, Coastal Wet Tropics KBA, Daintree KBA, Paluma KBA and Wooroonooran KBA (Key Biodiversity Areas (KBAs) - Nature's Hotspots | BirdLife).

The Wet Tropics Challenge

Birdlife North Queensland's Challenge is to establish regular bird monitoring across the Wet Tropics by harnessing the skill and interest of Birdlife members and other interested bird observers and using the Birdata app to capture and store data.

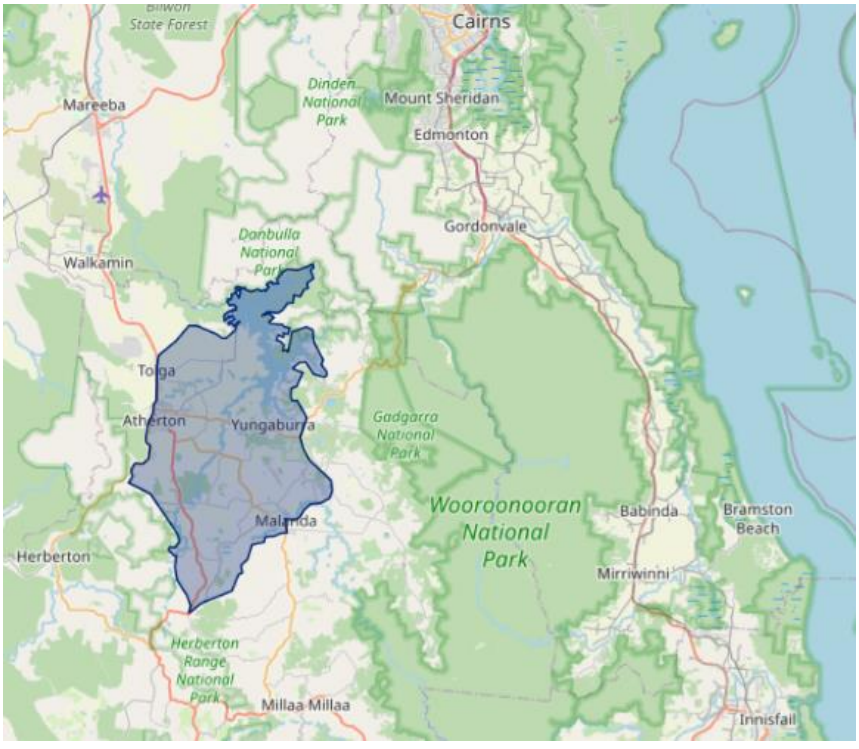
With globally threatened species, many with a very restricted range, the area is home to all the Wet Tropics endemic bird species, including those threatened by climate change. Let's look at the five KBAs in more detail.

Atherton Tablelands Key Biodiversity Area

At 353 km², the Atherton Tablelands KBA is notable for including heavily modified agricultural land – an uncommon feature for a Key Biodiversity Area. Despite this, it plays a crucial role in the conservation of the globally vulnerable Sarus Crane. Each dry season, the Tablelands support the only known significant concentration of non-breeding Sarus Cranes in Australia, with roosting sites consistently hosting more than 1% of the global population.

Ongoing revegetation efforts within the KBA aim to create native vegetation corridors that connect fragmented patches of intact forest. These corridors are enhancing landscape connectivity and helping to support a broader range of biodiversity.

The region offers excellent birdwatching opportunities for those seeking Wet Tropics endemics. Accessible sites include Hallorans Hill and Platypus Park in Atherton, Peterson Creek in Yungaburra, the iconic Curtain Fig Tree, Wongabel State Forest, and Malanda Falls Conservation Park.



Map illustrating the location of Atherton Tablelands KBA. Map source.

Coastal Wet Tropics Key Biodiversity Area

The Coastal Wet Tropics Key Biodiversity Area (KBA) spans 520 km², encompassing coastal ranges from sea level to 860 metres in elevation between Cairns and Cardwell. It provides essential lower elevation habitat for a range of Wet Tropics endemic birds, including the Pied Monarch, Chowchilla, Victoria's Riflebird, Macleay's Honeyeater, and Bower's Shrike-thrush. The area is also a great place to spot Lovely Fairywren and the iconic Southern Cassowary.

Nearby coastal communities – including Bramston Beach, Innisfail, Etty Bay, Mission Beach, and Cardwell – enhance the appeal of the region, offering scenic beaches, relaxed atmospheres, and easy access to the surrounding rainforest and wildlife.

Popular birdwatching locations within the KBA include Russell River National Park (Graham Range section) north of Bramston Beach, Etty Bay near Innisfail, Lacey Creek and the Dreaming Trail, the Licuala and Musgravea Walks, Bicton Hill near Mission Beach, and Edmund Kennedy National Park near Cardwell.

Map illustrating the location of Coastal Wet Tropics KBA. Map source.

Daintree Key Biodiversity Area

The Daintree Key Biodiversity Area (KBA) covers 2,713 km² and includes parts of Mount Windsor, Mount Lewis, Daintree, and Ngalba-bulal National Parks. From sea level to over 1,330 metres in elevation, this rugged landscape contains some of the oldest surviving rainforest on Earth. It's a living laboratory and a vital refuge for many Wet Tropics endemics, including the Atherton Scrubwren, Fernwren, Mountain Thornbill, Tooth-billed and Golden Bowerbirds, Victoria's Riflebird, Bower's Shrike-thrush, Chowchilla, and Pied Monarch.

For citizen scientists, the Daintree offers a unique and valuable opportunity to observe and contribute. Despite its ecological importance, regular bird monitoring in this KBA is limited – meaning your surveys can make a real difference. By recording what you see and hear, you'll

help build a clearer picture of how bird populations are faring across the greater Daintree area and support long-term conservation efforts.

There are many accessible spots to get involved. South of the Daintree River, the Mossman Gorge rainforest circuit is a great starting point. North of the Daintree River, explore Mount Alexandra Lookout, the Jindalba Circuit Track, Myall Beach Track, Kulki Boardwalk, Dubuji Boardwalk, and Madja Boardwalk – all excellent for spotting birds and soaking up the richness of the rainforest.

Beyond birding, the Daintree region offers chances to connect more deeply with nature – whether through wildlife spotting, photography, or guided tours along the iconic Daintree River. It's a place where every observation counts and every visit supports conservation.

Paluma Key Biodiversity Area

The Paluma Key Biodiversity Area (KBA) spans approximately 581 km² of rainforest-clad ranges between Ingham and Townsville, rising from 10 m to just over 1,000 metres in elevation. As one of the southernmost KBAs in the Wet Tropics, it serves as a vital refuge for a wide array of endemic and rainforest-dependent species, helping to maintain ecological connectivity across the broader Wet Tropics corridor.

The region supports numerous Wet Tropics endemic birds, including the Golden Bowerbird, Tooth-billed Bowerbird, Mountain Thornbill, Fernwren, Victoria's Riflebird, and Grey-headed Robin. It is also home to Wet Tropics subspecies of Eastern Whipbird, Crimson Rosella, King Parrot and Satin Bowerbird. Other notable species include the Bridled and Macleay's Honeyeaters, with recent records confirming the presence of Southern Cassowary at the southern edge of their range.

There are many rewarding birdwatching sites throughout the area. Good places to go include Jourama Falls camping area and waterfall track, Little Crystal Creek, and at Paluma; the Andree Griffin Walking Trail to Cloudy Creek, McClelland's Lookout and the trail to Witt's Lookout, the Paluma Rainforest Trail. Further out, Star Valley Lookout, the track to Birthday Creek Falls, and the walking trails around Paluma Dam are worth visiting.

Wooroonooran Key Biodiversity Area

At 5,118 km², the Wooroonooran Key Biodiversity Area (KBA) is the largest and most remarkable stronghold for biodiversity in the Wet Tropics. Stretching from the lowland rainforests just 20 metres above sea level to the towering peaks of Queensland's highest mountains – Mount Bartle Frere (1,622 m) and Mount Bellenden Ker (1,593 m) – this World Heritage-listed landscape offers an incredible range of habitats to explore and monitor.

Wooroonooran is a centre of endemism, home to every known Wet Tropics endemic bird species and subspecies. It also connects a network of national parks including Danbulla, Davies Creek, Dinden, Gadgarra, Girringun, Kirrama, Koombooloomba, Kuranda, Japoon, Mowbray, Tully Falls, Tully Gorge, and Wooroonooran National Parks – each a piece of a vital conservation puzzle.

For citizen scientists, Wooroonooran is a treasure trove of discovery and a fantastic place to contribute to real conservation outcomes. Whether you're logging surveys or species on apps like Birdata or recording bird calls and photographs, your observations help build a clearer picture of this dynamic ecosystem.

Some of the best and easily accessible birdwatching and survey spots include:

- Behana Creek Gorge Track
- Babinda Boulders and Goldfields Track
- Josephine Falls
- Henrietta Creek and the Palmerston Highway Scenic Drive
- South Johnstone Campground (via K-Tree Road)
- Windin Falls Track and Junction Camp (Western Bartle Frere Trailhead via Gourka Road)
- Charmillan Creek and Tully Falls Lookout (near Ravenshoe)
- Cathedral Fig Tree (Boar Pocket Road)
- Euramo Crater Circuit Walk (Danbulla Forest Drive)
- Davies Creek walking trails
- Barron Falls Lookout and surrounding tracks

Whether you're a seasoned birder or just starting out, the Wooroonooran KBA invites you to get involved, connect with nature, and help protect this incredible part of the world – one observation at a time. For more information on bird monitoring sites in the Wet Tropics, go to our new guide.

Birdata methods

Rainforest bird surveys

With dense vegetation and diverse species, surveying birds in the rainforest is a challenge. It is hard to see very far into the forest and so we are very dependent on hearing and identifying bird calls. As much as 80% of bird observations in the rainforest are identified from calls, and hearing a call is often what keys us in to later see a bird (Anderson et al. 2015). This complicates surveys because larger species are detectable over greater distances than smaller species and many species have seasonal differences in their calling behaviour (Anderson et al. 2015). Coupled with this, rare species can be hard to detect, and more time and area need to be covered to survey them sufficiently.

Birdata's 2 ha, 20-minute area search and 500 m area search survey methods both have features that make them useful tools for rainforest bird surveys. They each have advantages that make them complementary and, where possible, surveyors are encouraged to complete surveys using both methods. The free Birdata app and detailed instructions can be found here.

2 ha, 20-minute area search

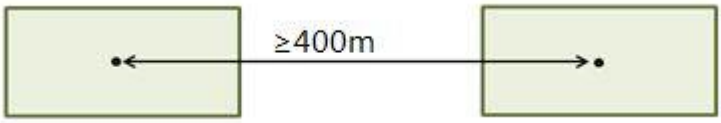
Generally, the more 'structured' or 'controlled' a survey is, the easier it is to compare with surveys done in different areas or at different times. The 2 ha, 20 min area search method is restricted both by survey area and duration so is our first choice of method for the Wooroonooran Challenge. This is because we're particularly interested in monitoring species affected by climate change, and we know that species are changing their elevational range in response to climate. To detect that change, being accurate with the elevations at which we conduct bird surveys is important. This method ensures altitude remains fairly consistent for the duration of the survey.

In theory, a 2 ha area can be configured in lots of different ways. In practice though, at our Wooroonooran monitoring sites where there is a road or walking track, a 200m x 100m search area is the most practical. A 200m walk along the road or track can be treated as a transect through the 2 ha area and this is appropriate because line transects are less prone to error than point counts in these settings (Anderson et al. 2015).

One of the useful things about this method is that it's constrained by time as well as area, and 20 minutes can be timed easily and accurately. You may walk a few meters more or a few meters less, but if you're watching and listening for birds systematically for 20 mins, you're going to be surveying around 2 ha.

Judging distances from bird calls, and whether they're 'in' or 'out' of the survey area is another factor surveyors are sometimes anxious about. Here we can take some assurance from a study on bird detectability in the Wet Tropics (Anderson et al. 2015) that found that the effective sampling distance for most species is within 30-60 m. A 200m x 100m search area is compatible with this because that's the approximate distance to survey either side of a 200m section of path, track, or road. Of course, some birds, such as large, loud species like the Pied Currawong, Victoria's Riflebird, and King Parrot can easily be heard beyond a 2 ha area. Try to judge the distance and be consistent, but don't let uncertainty put you off using this method. Remember the method is constrained by time as well as area.

If conducting multiple 2 ha, 20 min area searches, a minimum of 400 m should be left between surveys to avoid overlap.



500 m radius area search

The 500 m radius area search method is very flexible. Any sized area can be searched, so long as it is within 500 m of a central point. That means the area searched could be as much as 80ha, and cover as much as 1km. In Wooroonooran National Park, a survey over that large an area would have a high chance of covering more than one habitat or elevation. Sections of the Bartle Frere track, for instance, rise between 100 and 300m in elevation over 500 m of trail. In practice, area searches at Wooroonooran bird monitoring sites are best done over a maximum of 500 m of walking track or road so that changes in habitat or elevation are not excessive.

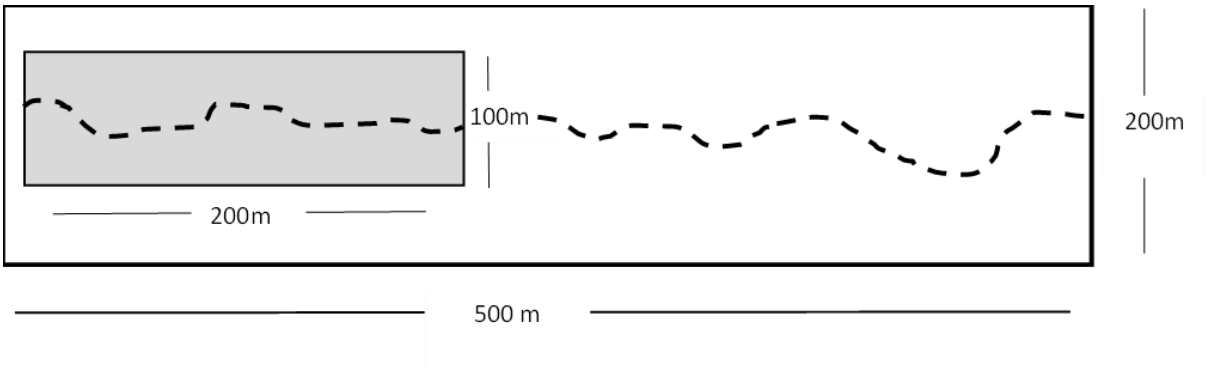
The duration of surveys is also flexible with this method. Surveys can last anywhere from 20 minutes to one week, though less than 24hrs is preferred by Birdlife.

Because it's not strictly time or area limited, this method is less rigorous than the 2 ha, 20 min area search and is less sensitive to changes in species' populations. However, this method does allow surveyors more time and does allow a larger area to be sampled at one location. This can be very useful in rainforest where poor visibility, high species diversity, and rare species mean it can take longer than 20 minutes to survey accurately and thoroughly (Anderson et al. 2015). With

a longer survey period, and larger area, there's a greater chance of finding the less common species – and many of the species we're most interested in are getting rarer, and harder, to detect. During rainforest surveys we often need to follow up calls to ensure our identifications are correct so more time can be very useful, especially for less experienced bird watchers and visitors to the region. We suggest 30 minutes to one hour for the Wooroonooran bird monitoring sites.

Conducting 2 ha, 20 min and 500 m area searches in the same location

Many of the Wooroonooran bird monitoring sites can accommodate both 2 ha, 20 min and 500 m area search surveys. Where time allows, it's ideal to do both. These can be done sequentially using the Birdata app by first doing one survey and then the other (it doesn't matter which is done first)[1]. The 2 ha search area is included in the wider area search but there is no overlap in records because the two surveys are separate in time. Areas effectively surveyed in sequential 2 ha, 20 min and 500 m area searches along a walking track would look like the diagram below.



To estimate distances, you can either:

- work out ahead of time how many steps you take to cover that distance
- measure road transects on your car's odometer
- use the Trip Computer function on your GPS if satellite coverage is reasonable (having it turned on before entering the forest helps)
- use a pedometer/fitness app

[1] *Data entry for an embedded survey, which treats a 2 ha, 20-min survey as part of a 500 m area search, over-lapping in time, is only available on the Birdata website, not the mobile app.*

Boost your Birdata

Ecological information is still lacking for many Wet Tropics species. We can value add to our Birdata surveys by recording any other potentially useful information in the sighting details. Observations of habitat use, and breeding behaviour can help refine knowledge of species' preferred habitats and how they are coping in those habitats. This can give clues to the reasons for a species' sensitivity to climate change and whether there are any options for counteracting them.

Details you might record include:

- How many birds of each species are there? Count, don't just record presence.
- What's a bird eating? For example, is there lots of fruit available?
- Are any birds drinking? Which ones?
- Is there any courtship behaviour? Nesting? Young being fed?
- Is there feral animal sign? Invasive plants?

More bird survey tips

- Have no more than three people doing a survey. More people may disturb the birds. Move slowly along the path or road, occasionally stopping quietly and listening for calls, also recording birds behind you if they are considered new birds. The amount of time spent at any point is dictated by bird activity. However, when doing a 2 ha, 20 min area search, it is important to balance watching bird activity against the need to cover the area during the survey time.
- Species totals represent a snapshot of individuals using the survey area. Look and listen ahead of you to reduce overcounting due to birds moving. Be conservative in recording detections as new individuals. Keep the search area in mind and try to discriminate between birds calling inside and outside the survey area.
- Complete surveys within one habitat type so records can be related to that one habitat. For example, if surveying along a road bordered on one side by forest and the other by paddock, survey the forest, or the paddock if you wish, but not both habitats at the same time. Include birds flying over the search area. They are traversing the habitat.
- Early mornings are best for bird surveys. Starting half an hour after dawn is a good way to avoid the noisy early risers that drown out quieter species and to avoid getting 'swamped' and unable to make realistic counts. Avoid wet, windy, or hot weather as these conditions may substantially depress bird activity. In summer, it's often too hot to survey birds past about 9 or 10 am.
- 8 x 42 binoculars are best for rainforest bird surveys.
- Don't use call recordings during surveys as this can disrupt the behaviour of birds at the site and affect survey results.

Health and safety

Familiarise yourself with BirdLife's Risk Assessment for this project (Appendix 1) and follow the guidelines for safe bird monitoring in Wooroonooran National Park including:

- Stay in pairs or small groups at all times.
- Ensure a responsible person (e.g. family member) knows where you are going and when you are expected to return.
- If surveying sites in more remote locations, carry maps and other navigations tools (phone navigational apps, GPS units) to navigate to and between the sites.
- Carry a mobile phone and keep it charged. Be aware that mobile reception is not available at some monitoring sites. Consider carrying a satellite phone and/or EPIRB/PLB (personal locator beacon).
- Wear appropriate clothing (generally long trousers and long-sleeved shirt in subdued colours) and sturdy footwear. Pack sunglasses, sun cream, gaiters, rainproof jacket and hat as appropriate.
- Check weather and road conditions before departing and postpone outdoor activities if road access is problematic or severe weather is likely.
- Carry a first aid kit, including snake bandage and wax strips for Stinging Tree stings.
- Consider COVID-19 requirements and carry hand sanitiser; disinfectant spray and/or wipes; tissues and mask.
- Take fresh drinking water and food.
- Pack a torch (with fully charged battery).
- Ensure your vehicle is equipped with recovery gear and that you know how to use it if you are accessing monitoring sites on remote National Park roads.

Useful resources

Birdata Web Portal: http://birdata.birdlife.org.au

BirdLife Australia: https://birdlife.org.au/

BirdLife Northern Queensland: https://www.birdlifenq.org/conservation

Bird calls: https://xeno-canto.org/collection/area/australia

Bird identification: https://merlin.allaboutbirds.org/

Climate change and the biodiversity of the Wet Tropics – Stephen Williams – Talk at Malanda, 5 April 2019: (119) TKMG Tree Kangaroo & Mammal Group - YouTube

Wet Tropics birds: https://www.wettropics.gov.au/birds

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DETAILS OF PERSONS COMPLETING RISK ASSESSMENT		
Name: Ceri Pearce (BirdLife Northern Queensland)	**Position:** Birds With Altitude Project Leader	☐ Employee ☐ Contractor ☒ Volunteer
Contact number: 0488 131 581 **Email:** Ceridwen.Pearce@bigpond.com	**Designated Working Group:** BirdLife Northern Queensland.	

Name:	**Position (relative to this activity/project):**	☐ Employee ☐ Contractor ☐ Volunteer
Contact number: **Alt:** **Email:**	**Designated Working Group:** BirdLife National Office and Regional Staff, birdlife branch or group.	

DETAILS OF ACTIVITY / PROJECT			
Title: Birds With Altitude – bird monitoring in the wet tropics of northern Queensland	**Location/Site:** Northern Queensland natural/outdoor areas, including five Key Biodiversity Areas (Atherton Tablelands, Coastal Wet Tropics, Daintree, Paluma, and Wooroonooran), the Wet Tropics World Heritage Area, and land of other tenure.	**Start date:** January 2026	**Finish date:** ongoing
Description: Volunteers undertake bird surveys at sites in Northern Queensland national parks, state forests and other natural/outdoor areas, and enter the data into Birdata. Volunteers are directed to read and take advice from this risk assessment to ensure risks associated with field activities are minimised and managed. Induction and safety briefings are provided to volunteers prior to and/or at arranged events. Volunteers may operate independently, or in pairs or groups. Maps and/or electronic tools such as GPS units or mobile phone apps are used to navigate to and between the sites. If sites are in remote locations, additional safety equipment, and safety protocols, including check-in processes must be used. Mobile phones are used for safety check-ins, when in range.	**Participants:** Bird monitoring is undertaken independently by volunteers (citizen scientists) from a variety of backgrounds/experience across the region. All participants are responsible for their own personal safety. Volunteers at organised events complete a registration process.	**External Organisation involved:** For specific project activities organised in Wooroonooran National Park: Department of Environment, Tourism, Science & Innovation, Queensland Parks and Wildlife Service (QPWS). **Contact:** BWA Project Liaison: Chris Roach (QPWS) **Email:** Chris.Roach@detsi.qld.gov.au	

Equipment list:	**Required Training/qualifications to undertake activity/project:**
• Mobile Phone (with fully charged battery, recharging equipment and back up battery charger). • Navigational tools such as maps, and electronic tools such as phone apps and/or GPS unit. • Well stocked first aid kit, including snake bandage. • PPE: long-sleeved shirt, long trousers, sturdy footwear, rainproof jacket, hat, glasses and sunscreen, insect repellent. Hand sanitizer as appropriate. • Warning signs for group activities near vehicular traffic. • Fresh drinking water and food. • Torches (with fully charged battery). • For remote area activities (EPIRB, survival kit including compass, matches/fire starter, emergency blanket, whistle, water purification tabs, etc).	• Driver's License (driver/s) **Recommended training:** • First aid training

1. Document the activity List the steps required to perform the job/activity in the sequence they are carried out.	**2. Identify the hazards** Against each job, list the hazards that could cause injury or damage.	**3. Determine and Describe the Risk**	**4. Rate the risk** Using the risk rating matrix, rate each risk identified.	**5. Document the control measures** Using the Hierarchy of Control, describe the preferred Risk Control measures. I.e. Elimination, Substitution, Engineering & Administration controls, PPE.	**6. Rate the risk with controls in place** Using the risk rating matrix, rate each risk identified.	**7. Person responsible for implementing control measure**
Preparations for field surveys – including deciding whether to proceed with the surveys.	Addressing the need to undertake field surveys in the context of illness.	Illness from viral or bacterial infection. Transmission of bacteria/virus to vulnerable people who may suffer serious or fatal illness.	**3 Moderate Risk**	• Please, do not undertake field activities if you are feeling unwell, even if the symptoms are mild. Seek medical advice from your doctor. • If you have underlying health conditions or are within a high risk group, it is your responsibility to decide if you should participate in conducting surveys. If you are uncertain whether you should participate, we suggest you consult with your doctor. • For organised events, activities may be cancelled if there are concerns regarding disease transmission. Participants will be advised as soon as possible.	**4 Low Risk**	All participants

1. Document the activity List the steps required to perform the job/activity in the sequence they are carried out.	**2. Identify the hazards** Against each job, list the hazards that could cause injury or damage.	**3. Determine and Describe the Risk**	**4. Rate the risk** Using the risk rating matrix, rate each risk identified.	**5. Document the control measures** Using the Hierarchy of Control, describe the preferred Risk Control measures. I.e. Elimination, Substitution, Engineering & Administration controls, PPE.	**6. Rate the risk with controls in place** Using the risk rating matrix, rate each risk identified.	**7. Person responsible for implementing control measure**
Preparations for field surveys – including deciding whether to proceed with the surveys.	Exposure to severe weather (e.g. storms, cyclones, heatwaves, flooding, hail).	Depending on the circumstances and impacts, severe weather could result in direct or indirect injury or a fatality.	**1 High**	• Please ensure that you check the weather forecast before undertaking field activities. • In the event of a severe weather warning, it is best to reschedule your field activities for when the weather is calm and safe. • For organised events, activities will be cancelled if there is a severe weather warning in the area to be surveyed. Participants will be advised of the cancellation as soon as possible.	**4 Low Risk**	All participants
Preparations for field surveys – including deciding whether to proceed with the surveys.	Exposure to fire risks	Direct exposure to bushfire could lead to injury, or a fatality.	**1 High**	• Please ensure that you check the fire danger rating (FDR) in the area to be surveyed before undertaking field activities. • Cancel activities where Code Red/Catastrophic or Extreme Fire Danger Ratings (FDRs) are in place. • Field activities may proceed in areas where there is a High or Moderate FDR if the following conditions are met (a) the person feels safe to undertake the activity, (b) the person listens to emergency radio stations and/or uses emergency apps to monitor for potential nearby risks during the field visit, (c) the persons whereabouts are known to others, (d) the distance travelled away from a vehicle is limited, and (e) the person is ready and able to leave the area if necessary at short notice. • If smoke is smelt or seen, immediately plan best route to safety and leave site.	**4 Low Risk**	
Fitness to participate.	Undisclosed medical conditions, allergies, disabilities or past injuries may affect your ability to undertake the field activities	Undisclosed medical conditions may be triggered during fieldwork with the other participants unaware and unable to provide help.	**1 High**	• Please ensure that you are fit for the activity, and you are well prepared to treat any known condition which may arise. • At organised events, please ensure that you disclose any medical conditions, allergies, disabilities or past injuries that may affect your ability to undertake the activity to the event leader. • Please be prepared during field outings by bringing any medications, solutions or devices required, if needed.	**4 Low Risk**	All participants

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		This could result in an injury or fatality.				
During and after field surveys. Includes travel to, from and within the field site.	Disease transmission between participants and/or with third parties. Bacteria or viruses may inadvertently be caught or passed on by people.	Illness from viral or bacterial infection. Transmission of bacteria/virus to vulnerable people who may suffer serious or fatal illness.	**3 Moderate risk**	• If you are feeling unwell, do not attend and/or go home, even if symptoms are mild. We encourage you to seek and follow medical advice from your doctor. • Stay informed and follow advice given by relevant Queensland authorities. • Carry your own personal hand sanitiser and disinfectant wipes and use these after contact with other people or to disinfect potentially contaminated surfaces or shared items. • Practice good respiratory hygiene (e.g. cover nose and mouth when coughing/sneezing, dispose of used tissues and masks safely, and use hand sanitiser after contact with respiratory secretions). • Wearing of masks is at the discretion of participants. • If you are confirmed as positive for a contagious disease, please inform the event organiser or other participants in your field activities so that they can take any appropriate action.	**4 Low Risk**	All participants
Driving to survey site and within/between survey sites.	Vehicle accident.	Involvement in a vehicle accident could lead to injury or death to the participants and/or third parties.	**1 High Risk**	• Ensure you hold a valid/up-to-date driver's licence. • Plan trip in advance including the travel route; check vehicle (e.g. tyre wear) and allow adequate travel time to ensure calm driving. • Check weather conditions before departing. • Drive to road conditions. If the road is in poor condition, slow down. • Allow for rest periods on long trips. Never drive if drowsy. • Obey the road rules and drive sensibly (e.g. no use of mobile phone while driving, no alcohol, drugs, speeding, tail-gating).	**4 Low Risk**	All participants

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				• Ensure car has a first aid kit and know how to use it. • In the event of an accident, call emergency services immediately, if necessary.		
Driving to survey site.	Vehicle breakdown.	Risks include (but are not restricted to) injury during attempted repairs, exposure to inclement weather and lack of drinking water and other sustenance.	**4 Low Risk**	• Plan trip in advance and check vehicle (e.g. tyre wear, spare tyre condition, jack, wheel brace, petrol, oil and water) before departure. • Always carry a mobile phone with fully charged battery. • Check you have RACQ phone number (or appropriate roadside assistance number) with vehicle. • Always carry sufficient water and food for remote site surveys.	**4 Low Risk**	All participants
Driving to survey site.	Vehicle bogging.	Risks include (but are not restricted to) injury during attempted extraction, exposure to inclement weather and lack of drinking water and other sustenance.	**4 Low Risk**	• Keep vehicle to formed tracks and avoid parking in bogging areas. • If driving on unsealed tracks, take a 4WD vehicle, whenever possible. • Where possible, avoid crossing waterways, muddy areas and other situations likely to result in bogging. If it is not possible to avoid these hazards, consider walking the remaining distance instead (if it is not far away) or skipping the bird survey at the site until road conditions improve. • Always carry a mobile phone with a fully charged battery. • Ensure a responsible person is aware of trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and appropriate actions to take if you have not checked in by a designated time. • Always carry sufficient water and food for remote site surveys.	**4 Low Risk**	All participants

1. Document the activity List the steps required to perform the job/activity in the sequence they are carried out.	**2. Identify the hazards** Against each job, list the hazards that could cause injury or damage.	**3. Determine and Describe the Risk**	**4. Rate the risk** Using the risk rating matrix, rate each risk identified.	**5. Document the control measures** Using the Hierarchy of Control, describe the preferred Risk Control measures. I.e. Elimination, Substitution, Engineering & Administration controls, PPE.	**6. Rate the risk with controls in place** Using the risk rating matrix, rate each risk identified.	**7. Person responsible for implementing control measure**
Driving to survey site.	Getting lost.	Exposure, and lack of drinking water and other sustenance results in injury or fatality.	**4 Low Risk**	• Ensure a responsible person is aware of your trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time. • Use maps and/or electronic navigational tools; ensure tools are functioning and fully charged. • Always carry a mobile phone with a fully charged battery • Take a personal emergency locator beacon (EPIRB) when operating in remote areas. • Always carry sufficient water and food. • Ensure car has a first aid kit and you know how to use it. Call emergency services immediately, if necessary.	**4 Low Risk**	All participants
Surveying field activities.	Unknown hazards on site.	Exposure to hazards on-site may result in serious illness, injury or fatality.	**1 High Risk**	• On arrival, check the site to identify any potential hazards prior to commencing surveys. Ensure all survey participants are aware of risks and agree on actions to take to stay safe. • For organised events, provide a safety induction to participants on arrival and complete the volunteer sign on sheet. • Ensure the location of first aid equipment and EPIRB are known before commencing activity. • If the site is deemed high risk, cease activities and leave the site. • On return to base, add any additional hazards identified to the risk assessment.	**3 Moderate Risk**	All participants
Surveying field activities.	Exposure to dehydration/ sunstroke.	Exposure to dehydration / sunstroke may	**3 Moderate Risk**	• Check weather forecast before planning field activities and postpone/cancel activities if severe weather (heatwave) is likely.	**4 Low Risk**	All participants

1. Document the activity List the steps required to perform the job/activity in the sequence they are carried out.	**2. Identify the hazards** Against each job, list the hazards that could cause injury or damage.	**3. Determine and Describe the Risk**	**4. Rate the risk** Using the risk rating matrix, rate each risk identified.	**5. Document the control measures** Using the Hierarchy of Control, describe the preferred Risk Control measures. I.e. Elimination, Substitution, Engineering & Administration controls, PPE.	**6. Rate the risk with controls in place** Using the risk rating matrix, rate each risk identified.	**7. Person responsible for implementing control measure**
		result in serious illness, injury or fatality.		• Avoid undertaking activities on days above 35°C. • Plan activities for the coolest part of the day and schedule regular breaks in the shade. • Wear appropriate PPE, such as sunscreen, a hat, long-sleeved shirt and long trousers. • Drink plenty of water to ensure adequate hydration and carry sufficient water when surveying. Consider taking electrolyte replacement if needed. • Always carry a mobile phone with a fully charged battery, and an EPIRB if operating in remote locations. • Ensure a responsible person is aware of your trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time. • Be aware of the signs of heat stress and heat stroke. https://www.qld.gov.au/health/staying-healthy/environmental/heatsafe. • Call emergency services (000) and/or send for help if needed.		
Surveying field activities.	Exposure to snake bite risk.	Exposure to snake bite may cause Illness or a fatality. Increased risk of a range of hazards to other participants as	**1 High Risk**	• Wear appropriate PPE, including long sleeved shirt, long trousers, and sturdy footwear. Consider wearing gaiters. • Always carry a mobile phone with a fully charged battery, and an EPIRB if in remote locations. • Understand appropriate treatment for snake bites and carry a snake bite first aid kit (with bandages) with you when undertaking outdoor activities.	**3 Moderate Risk**	All participants

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		they care for the patient.		• Regard all snakes as venomous and do not touch, handle or provoke snakes. • Always assess the situation before walking anywhere and look for the path of least risk (e.g. avoid long grass). • If a snake is encountered, stop and calmly back away. If the snake is trying to get away from you, allow it to move in its desired direction to seek shelter. Remain calm and move slowly away to safety. • Ensure a responsible person is aware of your trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time. • In event of a snakebite or suspected snake bite, move away from the danger area, when safe apply snake bite bandages as per first aid training/instructions in snake bite kit. Immediately call emergency services (000) and/or send for help. Use EPIRB if phone signal is not available.		
Surveying field activities.	Exposure to biting/ stinging animals.	Exposure to biting/ stinging animals may result in illness or fatality. Increased risk of a range of hazards to other participants as they care for the patient.	**3 Moderate Risk**	• If you have a known allergy (e.g. bees, wasps), ensure you always carry necessary medication with you. Inform your companions of your allergies, and any action they may take, if required. • Wear appropriate PPE, including a long-sleeved shirt, long trousers, and sturdy footwear. • Assess the site and avoid high risk areas. • Tuck pants into socks to minimise likelihood of ticks and other small biting animals (e.g., spiders, bull ants) accessing bare skin.	**4 Low Risk**	All participants

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				• Apply insect repellent as appropriate and in accordance with label. • Always carry a mobile phone with a fully charged battery, and an EPIRB if in remote locations. • Ensure a first aid kit is available. Call emergency services (000) if needed and/or send for help. Use EPIRB if phone signal is not available. • Ensure a responsible person is aware of trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time.		
Surveying field activities.	Tripping/ slipping hazards.	Tripping/ slipping may result in injury (or in worst case, fatality). Increased risk of a range of hazards to other participants as they care for the patient.	**1 High Risk**	• Always wear well-fitting, sturdy footwear. • Always carry a mobile phone with a fully charged battery. • Avoid sloping or heavily vegetated areas. • As far as possible, remain on well-formed tracks. • If walking over rough surfaces, check stability underfoot before placing full weight on surface. • Cease walking when writing notes or using binoculars. • Carry a first aid kit and bandages. Call emergency services (000) if needed. • Ensure a responsible person is aware of trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time.	**4 Low Risk**	All participants

1. Document the activity List the steps required to perform the job/activity in the sequence they are carried out.	**2. Identify the hazards** Against each job, list the hazards that could cause injury or damage.	**3. Determine and Describe the Risk**	**4. Rate the risk** Using the risk rating matrix, rate each risk identified.	**5. Document the control measures** Using the Hierarchy of Control, describe the preferred Risk Control measures. I.e. Elimination, Substitution, Engineering & Administration controls, PPE.	**6. Rate the risk with controls in place** Using the risk rating matrix, rate each risk identified.	**7. Person responsible for implementing control measure**
Surveying field activities.	Exposure to stinging, prickly or spiny plants.	Exposure to stinging, prickly or spiny plants may result in injury and potentially allergic reactions.	**3 Moderate Risk**	• Plan site visit and wear appropriate PPE, including long-sleeved shirt, long trousers, sturdy footwear. Consider wearing gaiters. • Know how to identify stinging plants in your area, e.g. stinging tree which is common on rainforest edges and disturbed areas like walking tracks. • Always assess the situation before walking anywhere and look for the safest route. Avoid dense vegetation. • Where possible, remain on established paths. • Ensure you carry a first aid kit in the vehicle and carry a first aid kit when away from the vehicle. • Always carry a mobile phone with a fully charged battery in case you need to call services (000).	**4 Low Risk**	All participants
Surveying field activities.	Exposure to dog or other animal attack Eg wild pigs, cassowary.	Exposure to animal attack may result in injury (or in worst case, a fatality). Increased risk of a range of hazards to other participants as they care for the patient.	**2 Significant Risk**	• Before the activity, monitor the news and other networks to identify the likelihood of aggressive animals in the area. If identified, reconsider need for field activity in that location. • Do not actively approach wildlife or unrestrained dogs. • Act in a way to reduce the risk of aggression from encountered animals. • If confronted by an aggressive animal, remain calm and move slowly away, facing the animal, without making eye contact, leaving by the shortest and safest route. Return to the safety of your vehicle. • Always carry a mobile phone with a fully charged battery, and an EPIRB if in remote locations. • Ensure a responsible person is aware of trip plan and have a notification process in place to confirm your safe return. Provide	**4 Low Risk**	All participants

1. Document the activity List the steps required to perform the job/activity in the sequence they are carried out.	**2. Identify the hazards** Against each job, list the hazards that could cause injury or damage.	**3. Determine and Describe the Risk**	**4. Rate the risk** Using the risk rating matrix, rate each risk identified.	**5. Document the control measures** Using the Hierarchy of Control, describe the preferred Risk Control measures. I.e. Elimination, Substitution, Engineering & Administration controls, PPE.	**6. Rate the risk with controls in place** Using the risk rating matrix, rate each risk identified.	**7. Person responsible for implementing control measure**
				instructions on who to contact and actions to take if you have not checked in by a designated time. • Always carry a first aid kit and know how to use it. If injured, call emergency services (000) if needed. Use EPIRB if phone signal is not available.		
Surveying field activities.	Falling tree limbs	Falling tree limbs may result in injury (or in worst case, death). Increased risk of a range of hazards to other participants as they care for the patient.	**2 Significant Risk**	• Check weather conditions before departing and postpone field activities if there is a warning for high winds, or if winds greater than 50 km/hr are expected. • Where possible, avoid parking vehicles beneath large old trees, dead trees or trees in poor health. • Always assess the situation before walking anywhere and look for a path of least risk. • Avoid standing for prolonged periods beneath large old trees, dead trees or trees in poor health. • Remain on established paths, where possible, as path maintenance generally removes tree limbs that may pose a risk. • Always carry a first aid kit and know how to use it. If injured, call emergency services (000) if needed. Use EPIRB if phone signal is not available. • Ensure a responsible person is aware of your trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time.	**4 Low Risk**	All participants
Surveying field activities.	Exposure to hypothermia.	Exposure to hypothermia may result in illness (or in	**3 Moderate Risk**	• Check weather forecast when planning field activities and postpone if the weather is too cold, or cold and wet.	**4 Low Risk**	All participants

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		worst case, death). Increased risk of a range of hazards to other participants as they care for the patient.		• Where appropriate clothing to suit weather conditions including PPE (long trousers, long sleeved shirt, sturdy footwear), and warm jacket, gloves and hat. • Be prepared for wet weather including having a rainproof jacket and potentially waterproof trousers. • Always carry a mobile phone with a fully charged battery. • Ensure a responsible person is aware of your trip plan and have a notification process in place to confirm your safe return. Provide instructions on who to contact and actions to take if you have not checked in by a designated time.		
Surveying field activities.	Exposure to drowning hazard.	Drowning from exposure to water.	**2 Significant Risk**	• **Never enter a pond.** • Avoid approaching closer than 2 m to water's edge, particularly where there is a slope or dense vegetation. If you can't see the edge do not proceed. • Never operate on a high risk site.	**3 Moderate Risk**	All participants
Surveying field activities.	Eye strain.	Eye sprain may result in short or long-term damage to vision.	**2 Significant Risk**	• Restrict time spent using binoculars. • Ensure binoculars are of high quality and correctly set up for your eyes. • Have rest periods at least every 20 min, relaxing eyes and looking at cool colours, such as greens and blues. • Wear good quality sunglasses when not using binoculars.	**3 Moderate Risk**	All participants
Surveying field activities.	Strain when lifting/ carrying equipment.	Strain may result in injury to the participant (e.g., pulled	**1 High Risk**	• As far as possible, avoid carrying heavy equipment. • Use appropriate lifting technique (squat, grasp, lift with legs, hold)	**4 Low Risk**	All participants

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		muscles, back pain).		• If carrying equipment heavier than 10 kg further than 200 m, ensure proper weight-bearing harnesses/straps/packs are used. • Weights greater than 25 kg should not be lifted by one person.		
Surveying field activities.	Diseases transmitted via birds (e.g. Psittacosis, Salmonella, etc.) or other animals.	Injury and/or sickness (or in worst case, death) to participant.	**3 Moderate Risk**	• Avoid direct contact with bird faeces. • Do not touch sick or dead birds. • If contact is made with bird faeces or wildlife, do not eat, drink or smoke before hands or garments are thoroughly washed and disinfected. • Carry antiseptic handwash.	**4 Low Risk**	All participants
Driving home after field activities.	Refer to Section 8: Driving to survey site.		**1 High Risk**		**3 Moderate Risk**	All participants.

Any changes or additions recommended:

1. **Person completing RA:** Ceri Pearce, BWA Project Leader **Date:** 16/1/2026
2. **Supervisor's endorsement**: NA **Date:**
3. **Proponent (such as Partner/Funding Organisation) Signature:** NA **Date:**
4. **BirdLife Australia People & Safety manager or/ Executive Director:** *(print name and sign)* _____ **Date:** 04/02/2026

Copy of this RA has been forwarded to: ☒ People & Safety ☒ Activity participants

In addition, if operating alone or on remote site:

- Contact the Project Leader, Ceri Pearce on 0488131581 to discuss the planned activity.
- Complete Fieldwork and Comms plans prior to commencing activities (templates available from Project Leader).
- Instruct responsible persons monitoring your safety to ring emergency services if no contact has been made by you within half an hour of your expected completion time.

Ensure the location of First Aid equipment and the emergency evacuation procedures are known before commencing activity.

In the event of an emergency incident or accident while undertaking a Birds With Altitude Project bird survey:

1. **Immediately call Emergency services: 000**
2. Once the emergency or accident has been managed - please report to the matter to the People & Safety Contacts below within 48 hours

   People & Safety Contacts: People and Safety Manager Geeta Rana, Mobile 0477 117 391, people&safety@birdlife.org.au within 48 hours of incident, accident or near miss and Executive Director Conservation and Science
3. REPORT AN INCIDENT/ACCIDENT/NEAR MISS to the Project Leader, Ceri Pearce on 0488131581 and/or to Geeta Rana on 0459 767 771 or 0477 117 391
4. **All 000 calls are also required to be reported to CEO via People and Safety Manager.**