

The Avifauna of Green Bluff and South Moonee Forest, 2017-2018



[InSight Ecology and the Moonee Bird Team](#)

Green Bluff to South Moonee Forest – Restoring Key Habitat and Connectivity Project, 2016-2019 for Coffs Harbour Regional Landcare Ltd

October 2019

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Photographs: Cover page, from top to bottom and from left to right along each row – panoramic view of the southern section of South Moonee Forest showing Green Bluff in foreground and North Sapphire Beach in midground (Julie Lane, 10/12/2018). Upper row of birds - Beach Stone-curlew *Esacus magnirostris* at Moonee Creek sandflats near main picnic area, 12/12/2017 (InSight Ecology), Rose-crowned Fruit-Dove *Ptilinopus regina* (Chris Charles), Regent Bowerbird *Sericulus chrysocephalus* (Phil O'Shea), Eastern Yellow Robin *Eopsaltria australis* (Iestyn Taylor). Lower row of birds – Noisy Pitta *Pitta versicolor* (Phil O'Shea); Tawny Grassbird *Megalurus timoriensis* (Ken Jones), Eastern Whipbird *Psophodes olivaceus* (Dirk Tomsa), Australian Logrunner *Orthonyx temminckii* (birdwallpapers.com). Bottom row – members of Moonee Bird Team at Site 8 (Julie Lane), Stingray Creek mangroves and sedgeland – Site 8 (InSight Ecology), members of Moonee Bird Team near Site 3 looking north to Moonee Beach (Julie Lane). Inside cover page: South Moonee Forest to the coastal range from Green Bluff (InSight Ecology, 8/8/2017).

Acknowledgements

This project arose from a chance meeting with Lindy Davis along the track to Green Bluff one day. With Lindy's passion, commitment and bush regeneration expertise and the support of Coffs Regional Landcare (CHRL) and NSW Environmental Trust the idea became reality. Pia Dollmann (CHRL project coordinator) and Peta Fairbairn (project manager) were also central to the project's success. The NSW Environmental Trust funded the project under the Restoration and Rehabilitation Program, 2016-2019. CHRL contracted InSight Ecology to undertake the bird monitoring and community engagement and education components of the overall project. InSight Ecology also contributed a significant in-kind component to the project.

The project also depended on a group of local residents who became the Moonee Bird Team. They volunteered their time and enthusiastically helped survey the birds of Green Bluff and South Moonee Forest. They were Teresa Huggett, Julie Lane, Cathy Willis, Phil and Gemma O'Shea, Rod Johnson, Kim Murdoch, Glenn Lane and Don Colley. Phil provided photographs of birds recorded in the study area and nearby while Julie took a range of group survey and panoramic site photographs. Chris Charles supplied excellent images of Rose-crowned Fruit-Dove as did Iestyn Taylor of Eastern Yellow Robin and Viktoria Buckley of Eastern Osprey. The use of the work of other bird photographers is also gratefully acknowledged – Greg Clancy, Margarita, Silva Vaughan-Jones, Tom Clark, JJ Harrison, Ken Jones, Tobias Hayashi, David Cook, Lindsay Hansch and Dirk Tomsa. John Turbill (Department of Planning, Industry and Environment – Coffs Harbour) provided information on an earlier faunal survey of part of South Moonee Forest.

People met along the trails during the bird surveys and project workshops also provided their local knowledge of the area, its vegetation and land use and bush regeneration histories. These included members of Lindy Davis's Green Bluff Moonee Beach Landcare Team. Peta Fairbairn assisted with identification of plant species at some of the sites including Site 7 and 12.

Coffs Harbour and District Local Aboriginal Land Council permitted access across the midden site which is the traditional cultural heritage of the Gumbaynggirr Nation. The support of the NSW National Parks and Wildlife Service (NPWS), NSW Department of Planning, Industry and Environment (DPIE), and NSW Crown Holiday Parks Trust managers Kelly and Mark Shaw of Reflections Moonee Beach Holiday Park is also acknowledged. Mark provided access to a database of all trees, planted and remnant, that occur on Moonee Beach Holiday Park. The Trust provided \$4,000 to fund project interpretive signage. NPWS permitted access to Coffs Coast Regional Park within which South Moonee Forest now occurs as well access to Solitary Islands Marine Park which includes Moonee Creek and Stingray Creek estuarine and riparian zones. DPIE allowed access to the Crown Reserve which includes Green Bluff and the connecting headland bushland.

To all we are grateful.

Summary

The forests, woodlands, grasslands and wetlands of Green Bluff and South Moonee Forest are home to remarkably diverse, species-rich terrestrial and aquatic bird communities. The area provides high quality foraging, refuge and breeding resources to a mix of resident, nomadic and migratory bird species, some of which are threatened or of local or regional conservation significance. Two of the species migrate thousands of kilometres each year to and from their breeding grounds in Russia and China. Others such as the nationally critically endangered Swift Parrot forage during the winter in South Moonee Forest before returning to breed in Tasmania in the spring.

The area is part of a key regional wildlife corridor – South Moonee Forest to Wedding Bells. It is one of the last remaining major native vegetation links between the coastal range and the coastline north of Coffs Harbour. Some species such as the threatened Grey-headed Flying-fox and Rose-crowned Fruit-Dove and the locally conservation-significant ground-foraging Superb Lyrebird, Noisy Pitta and Australian Logrunner utilise this connection.

In 2016 funding was obtained from the NSW Environmental Trust to continue bushland restoration works at Green Bluff and the north-east and eastern edges of South Moonee Forest, located 15 km north of Coffs Harbour. This extended the original Green Bluff bushland regeneration project area from 6.7 ha to 8.8 ha and included 1 ha of targeted revegetation works following weed removal and treatment. It also allowed, for the first time, systematic monitoring of bird communities present in Green Bluff and South Moonee habitats which included 5 endangered ecological communities. This component of the project targeted sites that had been previously regenerated, were proposed for regeneration and/or revegetation, and reference or control sites where no regeneration, restoration or revegetation was planned.

This document reports on the results of the baseline bird surveys undertaken at 15 sites at Green Bluff and South Moonee Forest from August 2017 to December 2018. This work recorded 1,677 individual birds from 110 species in habitats as diverse as coastal dunes, threatened littoral rainforest, endangered native grassland and herbland on Green Bluff, threatened swamp oak and swamp sclerophyll forests, endangered coastal saltmarsh, mangroves and tidal sand/mudflats. A small team of local community volunteers worked with a professional ornithologist in the project. A total of 38 bird species of conservation significance were recorded during the study. These included 10 threatened species, 4 species subject to international migratory bird protection agreements with China, Japan and/or South Korea (1 of these species – Far Eastern Curlew - was also a listed threatened species) and 25 species of local and/or regional conservation significance. A total of 44 bird species (40% of all species recorded) were detected breeding in the study area during the project.

Practical recommendations are put forward to protect, conserve and enhance bird communities and their habitat at Green Bluff and South Moonee Forest. These require coordinated, adequately resourced and science-informed action to rehabilitate and restore habitat, reduce key threats and address land management issues, engage and educate local communities and monitor the performance of treated and reference sites as bird habitat over at least the next 10 years. This will be challenging for land managers, landcarers and bird surveyors alike as the population of Moonee Beach and surrounds continues to grow placing pressure on the outstanding natural environment of the area.

Contents

Acknowledgements	2
Summary	3
1. Introduction	5
1.1 Avifaunal values and significance of Green Bluff and South Moonee Forest	5
1.2 The Green Bluff to South Moonee Forest Project	5
1.3 Objectives	6
2. Location and methods	6
2.1 Location and surveyed sites	6
2.2 Methods.....	11
2.2.1 Review of past land use, bush regeneration and faunal surveys	11
2.2.2 Site selection	12
2.2.3 Field surveying and survey effort.....	12
2.2.4 Habitat assessment.....	13
3. Results	13
3.1 Bird communities, habitats and habitat use in the study area	13
3.2 Bird abundance, species richness and habitat use	18
3.2.1 Overview	18
3.2.2 Birds recorded at each surveyed site in the study area.....	19
3.3 Birds of conservation significance	26
4. Discussion	45
4.1 Targeting habitat restoration action	45
4.2 Important bird conservation sites and habitat use	45
4.3 Bird populations and habitat use at restored sites	47
4.3.1 Treatment sites	47
4.3.2 Limitations to the interpretation of bird responses to habitat restoration	48
4.3.3 Bird responses to habitat restoration at four sites.....	48
4.4 Connectivity conservation and restoration design.....	50
5. Recommendations	51
5.1 Overview.....	51
5.2 Monitoring habitat restoration and revegetation sites for avifauna	51
5.3 Coordinating and resourcing the restoration effort.....	52
5.4 Engaging and educating local communities	53
5.5 Reducing key threats and addressing land management issues.....	53
References	62
APPENDIX	65

1. Introduction

1.1 Avifaunal values and significance of Green Bluff and South Moonee Forest

The forests, woodlands, grasslands and wetlands of Green Bluff and South Moonee Forest are home to a diverse and species-rich suite of terrestrial and aquatic bird communities. They provide high quality foraging and breeding resources to a mix of resident, nomadic and migratory bird species, some of which are threatened or of local or regional conservation significance.

The area is part of a key regional wildlife corridor – South Moonee Forest to Wedding Bells (Scotts 2003, Coffs Harbour Council 2014) which provides habitat and movement connectivity for coastal and upland fauna species. It is also one of the last remaining major native vegetation links between the coastal range and the coastline north of Coffs Harbour. Some species such as the threatened Grey-headed Flying-fox and Rose-crowned Fruit-Dove and the locally conservation-significant ground-foraging Superb Lyrebird, Noisy Pitta and Australian Logrunner utilise this connection or are isolated within South Moonee Forest by the Pacific Highway to the west.

There has been a significant increase in the amount and spatial extent of urban development in the Moonee/Moonee Beach area in the past decade. This is placing increased pressure on native birds and other biodiversity and their habitats at Green Bluff and in South Moonee Forest, particularly as more people and their pets use the area. As this pressure increases in the time ahead, the protection and conservation management of the area's native plant and animal communities and their habitats will become even more important.

1.2 The Green Bluff to South Moonee Forest Project

In 2009 Lindy Davis formed the Green Bluff Landcare Moonee Beach Team to begin restoring and regenerating Banksia woodland, threatened littoral rainforest and swamp oak forest, swamp sclerophyll forest and endangered *Themeda triandra* headland grassland after historical disturbance by cattle grazing, mineral sand (rutile) mining (behind North Sapphire Beach) and extensive weed incursion. In that time, much has been achieved and many people have been able to see firsthand the results of Lindy and her team's bushland restoration and the local biodiversity that make Green Bluff and South Moonee Forest special.

In 2016 funding was won from the NSW Environmental Trust's Restoration and Rehabilitation Program to continue bushland restoration works at Green Bluff and the edge of South Moonee Forest. This extended the original Green Bluff bushland regeneration project area from 6.7 ha to 8.8 ha and included 1 ha of targeted revegetation works following weed removal and treatment.

In addition to the restoration works, the funding allowed, for the first time, systematic monitoring of bird communities present in Green Bluff and South Moonee habitats which included 5 endangered ecological communities. This component of the project targeted sites that had been previously regenerated, were proposed for regeneration and/or revegetation, and reference or control sites where no regeneration or restoration was planned. A small team of local volunteers were trained by a local professional ornithologist to survey each site for birds over two winters and two early summers. Two field workshops were also completed and well attended by the local community.

This document reports on the results of systematic bird surveys undertaken at 15 sites in Green Bluff and South Moonee Forest from August 2017 to December 2018. It also provides a range of recommendations to protect, conserve, enhance and monitor bird communities and their habitat over at least the next 10 years at Green Bluff and South Moonee Forest.

1.3 Objectives

The project aims to protect and increase the amount, condition and connectivity of habitat for 47 threatened fauna and flora species and 5 endangered ecological communities at Green Bluff and South Moonee Forest.

Specifically, the project will:

- Protect 8.8 ha of remnant native vegetation including endangered *Themeda triandra* headland grassland, littoral rainforest, swamp oak floodplain forest, swamp sclerophyll forest and coastal saltmarsh;
- Regenerate 7 ha of headland grassland, swamp oak forest and swamp sclerophyll forest;
- Plant 1 ha of new native forest, woodland and grassland;
- Monitor bird abundance, species richness and habitat use at regeneration, revegetation and control sites throughout South Moonee Forest and Green Bluff using trained volunteers from the local community.

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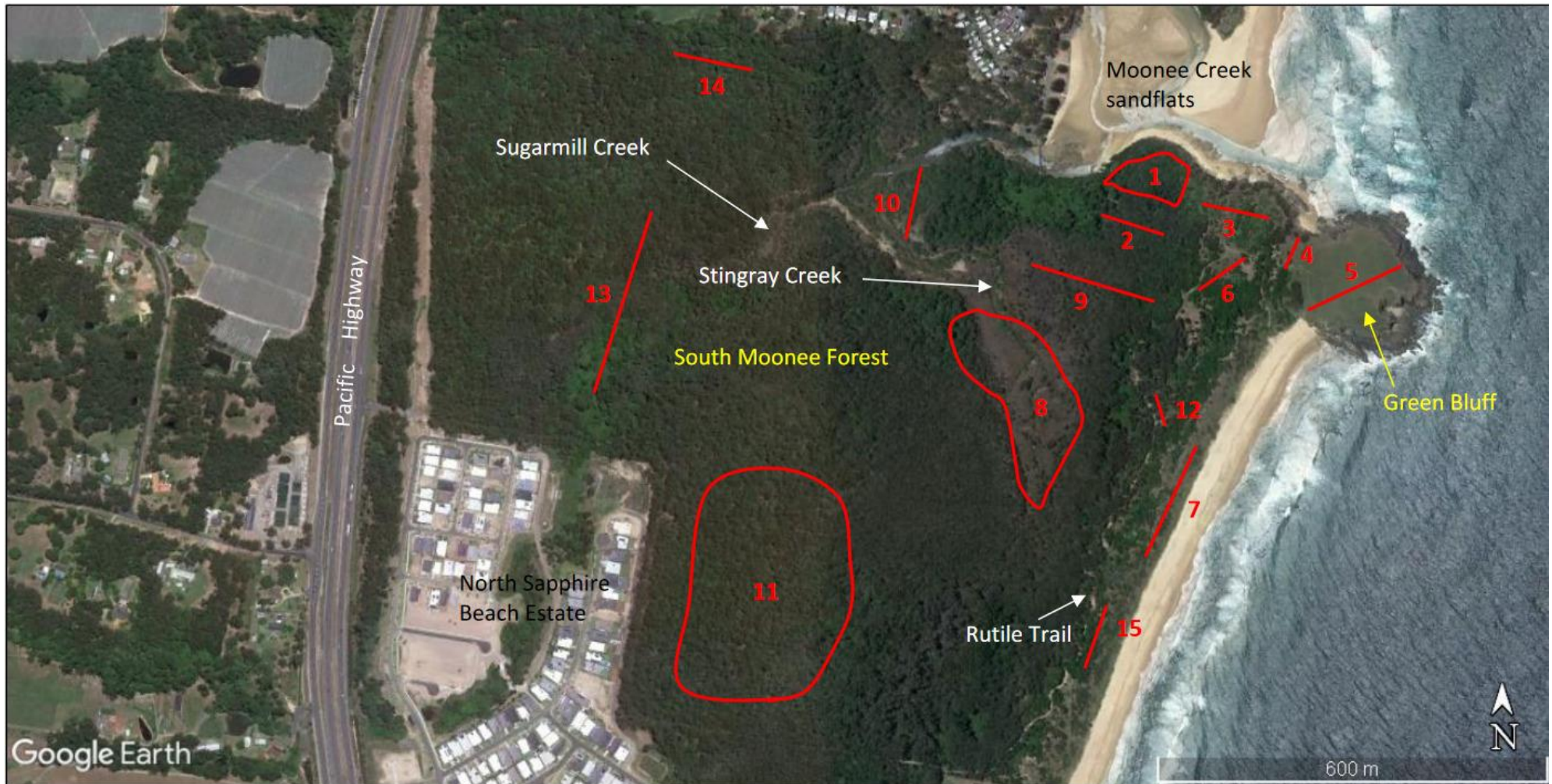
- Describes the relative abundance, species richness, habitat use and conservation significance of bird communities surveyed in remnant, regenerated and planted native vegetation in the study area;
- Provides new data on bird communities present in remnant, regenerated and revegetated habitats. This will help inform the ongoing bushland restoration program at Green Bluff and in parts of South Moonee Forest;
- Establishes a baseline for future monitoring of avifaunal response to bush regeneration, restoration and revegetation over time;
- Contributes to our current knowledge of the ecology and conservation of forest, woodland, grassland and wetland birds in regenerating and remnant habitats on the NSW mid-north coast.

2. Location and methods

2.1 Location and surveyed sites

The study area comprises Green Bluff and South Moonee Forest, located approximately 15 km north of Coffs Harbour on the mid-north coast of NSW (Figure 1 and see the key for all sites surveyed for birds on the following page). The Green Bluff headland occurs within a Crown Reserve, now administrated by NSW Department of Planning, Industry and Environment. South Moonee Forest is in the process of being included within Coffs Coast Regional Park and is managed by NSW National Parks and Wildlife Service, following its recent transferral from the Roads and Maritime Services. The study area adjoins Moonee Beach Nature Reserve and Moonee Beach township to the north and North Sapphire Beach housing estate to the south. To the west, the area is flanked by Pacific Highway and West Moonee and West Sapphire rural residential areas.

Figure 1: Location of the study area including all sites surveyed for birds by InSight Ecology and the Moonee Bird Team, winter 2017-summer 2018. Moonee Beach township occurs to the north and North Sapphire residential area to the south. Base image: Google Earth 2019.



Key to surveyed sites shown in Figure 1:

1 Littoral Rainforest EEC (area-search) **2** Swamp Oak/Swamp Sclerophyll Forest EEC **3** transect through bush regeneration zone **4** transect through proposed revegetation zone **5** transect through Themeda Grassland EEC on Green Bluff **6** transect through existing revegetation and regeneration zone **7** transect along beach hind-dune **8** Swamp Oak Floodplain Forest EEC, sedgeland and swamp paperbark forest west of Stingray Creek (area-search) **9** transect through littoral rainforest, Swamp Oak Floodplain Forest EEC and sedgeland **10** transect in Coastal Saltmarsh EEC and mangrove forest **11** South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest **12** transect in lantana removal site along Rutile Trail **13** Upper Sugarmill Creek transect **14** Northern tributary of Sugarmill Creek transect **15** Rutile Trail south transect

A total of 15 sites were surveyed in the project. Table 1 provides GPS locations and descriptions of all sites surveyed for avifauna throughout the project.

Table 1: GPS location data for all sites surveyed and photopoints established by InSight Ecology in the Green Bluff-South Moonee Forest project study area, August 2017 – December 2018. Photo-points were established at Sites 1-12 in August 2017 and Sites 13-15 in December 2017. Coordinates of waypoints and photo-points are given as decimal degrees in latitude (S = south) and longitude (E = east). These are based on Map Datum WGS 84 and Zone 56J of the Universal Transverse Mercator (UTM) coordinate system.

Site number	Site name and method	Waypoint name	Waypoint location	Photopoint number	Photopoint location	Field notes
1	Littoral rainforest EEC (area search)	MO1A	30.21232° 153.15909°	1A	30.21232° 153.15909°	W end, yellow tape on <i>Smilax australis</i> vine just in from small track
		MO1B	30.21222° 153.15942°	1C	30.21222° 153.15942°	brush box patch, yellow tape on rainforest tree 34m W of 1A
		MO1C	30.21212° 153.15964°	1D	30.21247° 153.15973°	yellow tape on swamp oak 24.3m from 1B
		MO1D	30.21247° 153.15973°	1E	30.21267° 153.15953°	nr old turkey mound, yellow tape on leaning rainforest tree 41.1m from 1C
		MO1E	30.21271° 153.15958°			vine thicket, scrubwrens, yellow tape on tall sheoak, 39.8 m from 1D
		MO1F	30.21245° 153.15904°			nr W end, yellow tape on small rainforest tree 53.2m W of 1E, lantana
2	Coastal swamp oak forest EEC and swamp sclerophyll forest near walkway (transect)	MO2A	30.21298° 153.15910°	2A	30.21298° 153.15910°	W end of transect, yellow tape on tree heath in swamp sclerophyll EEC
		MO2B	30.21307° 153.15942°	2B	30.21307° 153.15942°	32.3m from 2A, yellow tape on

Site number	Site name and method	Waypoint name	Waypoint location	Photopoint number	Photopoint location	Field notes
						swamp oak nr bottle pile
		MO2C	30.21334° 153.15985°	2C	30.21334° 153.15985°	E end of transect, 83.3 m fr 2A, yellow tape on rainforest tree at edge swamp oaks & senna
3	Transect through bush regeneration area north of main walking track	MO3A	30.21268° 153.16013°	3A	30.21268° 153.16013	W end of transect, bush regen area, yellow tape on N side 3m tall fruiting lillypilly
		MO3B	30.21285° 153.16057°	3B	30.21285° 153.16057°	46.5 m from 3A, yellow tape on planted sheoak
		MO3C	30.21301° 153.16109°	3C	30.21301° 153.16109°	E end of transect, 100m from 3A, yellow tape on 3m rainforest shrub
4	Transect through proposed revegetation area east of lookout	MO4A	30.21332° 153.16182°	4A	30.21332° 153.16182°	N end of transect, yellow tape on sheoak nr cliff above small beach
		MO4B	30.21395° 153.16182°	4B	30.21395° 153.16182°	S end of transect, yellow tape on <i>Banksia integrifolia</i> branch
5	Transect through Themeda Grassland EEC, Green Bluff	MO5A	30.21371° 153.16348°	5A	30.21371° 153.16348°	NE end of transect nr cliff – yellow tape hidden at base Themeda clump just above fishing track
		MO5B	30.21412° 153.16284°	5B	30.21412° 153.16284°	on track to obelisk (no tape)
		MO5C	30.21443° 153.16202°	5C	30.21443° 153.16202°	SW end of transect above cliff nr beach (no tape)
6	Transect through existing headland revegetation and regeneration area	MO6A	30.21361° 153.16096°	6A	30.21361° 153.16096°	yellow tape on banksia between main track and surfers track to beach
		MO6B	30.21381° 153.16058°	6B	30.21381° 153.16058°	short yellow tape low at base of Themeda clump containing Brown Thornbill nest
		MO6C	30.21424° 153.16016°	6C	30.21424° 153.16016°	SW end of transect, in vine & lillypilly regrowth
7	Transect along beach hind-dune	MO7A	30.21734° 153.15942°	7A	30.21734° 153.15942°	S end of transect – yellow tape on <i>Banksia integrifolia</i> branch
		MO7B	30.21581° 153.16034°	7B	30.21581° 153.16034°	N end of transect on hind-dune, yellow tape low on white-flowering old 1.5m tall epacrid-like shrub

8	Swamp oak floodplain forest EEC, swamp paperbark forest, sedgeland and swamp mahogany forest (east side of Stingray Creek) (transect)	MO8A	30.21531° 153.15895°	8A	30.21531° 153.15895°	just off Rutile Trail in senna-removed area
		MO8B	30.21580° 153.15819°	8B	30.21580° 153.15819°	sedgeland, swamp oak, paperbark & some senna
		MO8C	30.21660° 153.15732°	8C	30.21660° 153.15732°	western side of Stingray Ck, yellow tape on paperbark sapling among sedgeland
		MO8D	30.21652° 153.15643°	8D	30.21652° 153.15643°	swamp mahogany (yellow tape) & paperbark forest
		MO8E	30.21482° 153.15602°	8E	30.21482° 153.15602°	yellow tape on rainforest tree beside 1 of 2 mahoganies (both ring-barked)
		MO8F	30.21471° 153.15668°	8F	30.21471° 153.15668°	50m ENE of 8E
9	Transect through paperbark forest, littoral rainforest & swamp oak floodplain forest EECs & sedgeland	MO9A	30.21440° 153.15952°	9A	30.21440° 153.15952°	littoral rainforest patch, yellow tape on tree nr rubbish pile just off Rutile Trail
		MO9B	30.21386° 153.15845°	9B	30.21386° 153.15845°	yellow tape on paperbark in sedgeland & swamp oak
		MO9C	30.21359° 153.15723°	9C	30.21359° 153.15723°	yellow tape on young swamp oak near groundsel bush control area
10	Transect through mangrove forest and coastal saltmarsh EEC	MO10A	30.21357° 153.15680°	10A	30.21357° 153.15680°	yellow tape on mangrove branch nr 9C
		MO10B	30.21363° 153.15579°	10B	30.21363° 153.15579°	mangrove patch
		MO10C	30.21254° 153.15579°	10C	30.21254° 153.15579°	yellow tape on dead eucalypt log across mangroves
11	South Moonee Forest – southern section - dry and moist eucalypt forest with swamp paperbark forest on eastern side (area search)	MO11A	30.21856° 153.15518°	11A	30.21856° 153.15518°	SE cnr, yellow tape on young swamp mahogany next cluster 4 paperbarks in thick Gahnia
		MO11B	30.21784° 153.15276°	11B	30.21784° 153.15276°	SW cnr, yellow tape on younger paperbark nr tree fall & lantana, NE of trailbike track
		MO11C	30.21566° 153.15295°	11C	30.21566° 153.15295°	NW cnr, yellow tape on young swamp mahogany, off track with tape trackside
		MO11D	30.21618° 153.15538°	11D	30.21618° 153.15538°	E cnr, yellow tape on smaller of 3 fire-scarred swamp mahogany in Gahnia & paperbark forest, lots of bandicoot digs

12	Transect in weedy swamp oak forest beside Rutile Trail	MO12A	30.21527° 153.15932°	12A	30.21527° 153.15932°	S end, yellow tape on swamp oak with thick lantana, senna (at time of first survey)
		MO12B	30.21466° 153.15987°	12B	30.21466° 153.15987°	N end, yellow tape on swamp oak with thick lantana, senna (at time of first survey)
13	Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest with rainforest shrubs and trees, weedy creekline and dry eucalypt forest (300 m-long transect)	MO13A	30.21571° 153.15080°	13A	30.21571° 153.15080°	SE end, yellow tape @ 2 old branches across snig track, some lantana, senna, cunjevoi
		MO13B	30.21554° 153.15082°	13B	30.21554° 153.15082°	yellow tape on bangalow palm off snig track
		MO13C	30.21418° 153.15074°	13C	30.21396° 153.15073°	in bed of upper Sugarmill Creek, thick senna & lantana on banks
		MO13D	30.21305° 153.15103°	13D	30.21305° 153.15103°	NW end, yellow tape on ironbark in dry eucalypt forest patch on shelf above creek
14	South Moonee Forest – northern section - transect along tributary of Sugarmill Creek, south of Moonee Beach urban area, impacted by BMX track that has eroded creek banks	MO14A	30.20995° 153.15051°	14A	30.20995° 153.15051°	N end, yellow tape on planted tree on creek flat, at lantana edge
		MO14B	30.21027° 153.15042°	14B	30.21027° 153.15042°	yellow tape nr 150 years+ old <i>Angophora costata</i> , S bank of tributary
		MO14C	30.21044° 153.15186°	14C	30.21044° 153.15186°	E end, nr old fencepost of former private lands on S bank of creek
15	Rutile Trail – southern transect (130 m long)	MO15A	30.21820° 153.15852°	15A	30.21820° 153.15852°	S end, yellow tape on sapling nr Rutile Trail
		MO15B	30.21719° 153.15904°	15B	30.21719° 153.15904°	N end, yellow tape on rainforest sapling nr old-growth <i>Cryptocarya triplinervis</i> var. <i>triplinervis</i> tree in hind-dune

2.2 Methods

2.2.1 Review of past land use, bush regeneration and faunal surveys

A review of the history of land use and bush regeneration at Green Bluff and South Moonee Forest was undertaken prior to the start of the bird monitoring component of the project. This included discussions and field inspections with Lindy Davis and her Green Bluff Landcare Moonee Beach team and a site meeting with Peta Fairbairn (Bush Dynamics) and Pia Dollmann (Coffs Harbour Regional Landcare).

No systematic surveys of avifauna have been previously undertaken in the study area. Discussions with John Turbill and Mark Graham revealed past fauna survey work had been undertaken in South Moonee Forest during earlier (c. 2003-04) impact assessment work for the

Pacific Highway Upgrade Program. Old transect tape was occasionally found during surveying for the current project at Sites 11 and 13. There was a lack of published scientific papers and other literature for the study area.

The NSW Wildlife Atlas (BioNet) was consulted for historical flora and fauna records within a 1 km radius of the study area. Regional and sub-regional connectivity modelling work undertaken by Department of Planning, Industry and Environment (formerly NSW Office of Environment and Heritage) was also reviewed.

2.2.2 Site selection

Sites were selected to survey bird communities present in forest, woodland and grassland habitats at regenerated sites (Sites 3, 4 and 6), sites proposed for regeneration (Sites 2, 9, 12 and 15) and revegetation (Sites 2, 4 and 12), and reference sites where no intervention was planned (Sites 1, 5, 7, 8, 10, 11, 13 and 14).

Site selection was also based on the need to survey bird communities across the diverse range of different habitats present in the study area. These included leaf litter and fallen woody debris, dense ground cover including lantana and senna thickets and native and exotic grass swards, understorey shrubs and vine tangles, canopy trees and vines, and aquatic habitats.

2.2.3 Field surveying and survey effort

Terrestrial bird species were systematically surveyed at each site in the study area over four distinct periods. These included two predominantly non-breeding seasons (8 – 11 August 2017 and 30 July to 3 August 2018) and two breeding seasons (11-15 December 2017 and 10-14 December 2018). In the first two of these periods, a total of 12 sites were surveyed. In the third and fourth surveys, 3 additional sites were surveyed – Sites 13, 14 and 15.

Bird species that utilised aquatic habitats in or near surveyed sites were also recorded. These included open or standing water, beach and dunal areas, rock platforms, tidal sand/mudflats, mangroves, fringing trees, shrubs, sedgeland, rushland and grasses, fallen logs and rocky embankments or small escarpments along creeks. Parts of Stingray Creek and Sugarmill Creek were surveyed in Sites 8, 10 and 13.

Two different standard methods were used to survey birds in the study area. Point-count transects, varying in length from 80 (Site 12)-300 (Site 13) metres, were used in regenerated and reference sites (see Figure 1). The area-search technique (Loyn 1987; InSight Ecology 2012a, b, 2018a, b, 2019a) was used to sample bird communities present in reference sites including Sites 1, 8 and 11 (see Figure 1). This involved surveying by steadily walking a loop route in which different forward and return legs, separated where possible by a distance of 80-100 metres where possible, were taken through the main habitats present at each site. Both techniques avoided recording the same bird twice, particularly flocking, group-foraging, and fast or very frequently moving species such as Rainbow Lorikeet, Australasian Figbird, White-cheeked Honeyeater, Topknot Pigeon, Welcome Swallow, and Brown Gerygone (in winter). This also helped to avoid committing the same error with more sedentary species such as Golden Whistler and Brown Thornbill. These species tend to remain in specific areas for periods of time, scanning for shrub-based prey.

All birds observed or heard at a site or along a line transect were recorded, including individuals flying over the site. Data recorded included the species present, number of individuals observed, date, time, behaviour (ie. foraging/feeding, courting, calling, mobbing, resting, flying), use of habitat, and other relevant information such as age, species composition and condition of revegetation and remnants, weather, and interactions with other birds. Nomenclature used was consistent with Christidis and Boles (2008). Observations were made by a trained group of volunteers working closely with an experienced ornithologist (A.H.). A.H. used a pair of Zeiss 10x40BT® binoculars fixed to a Pro-Harness® chest strap. All records were vetted by A.H. prior to acceptance as confirmed site records.

Surveys were generally conducted in the main morning (winter c. 0730-1030 hours, summer c. 0600-0930 hours) and afternoon (winter c. 1500-1700 hours, summer c. 1600-1900 hours) bird foraging periods (survey sessions) on each survey day. Surveying generally avoided windy or wet weather.

A total of 59 bird field survey sessions were completed in the study area. Of these, a total of 29 sessions were conducted in winter and 30 sessions in summer. A total of 50.25 hours (3.35 hours per site) were spent surveying birds in the study area. The total survey effort per site was similar in winter (103.9 minutes or 1.73 hours) and summer (118 minutes or 1.96 hours). The number of volunteers varied between 1 and 5 per survey session. A total of 9 local community volunteers participated in the bird surveys.

2.2.4 Habitat assessment

A number of habitat characteristics were assessed at each surveyed site. These included the main vegetation community present, dominant plant species, age and structure of vegetation community, degree of leaf litter, habitat and habitat condition features – standing dead trees, trees with hollows, trees with mistletoe, fallen timber and rocks, unhealthy habitat features – dead/dying/mistletoe-infested trees, introduced shrubs and grasses, observations of other fauna, land use history, site impacts/threats and site restoration history.

Still photographs were taken of the surveyed sites using a Nikon D3200 (Nikkor 55-300 mm lens) digital SLR camera. These provided reference points for future monitoring of regeneration and revegetation sites as well as habitat condition in remnant and planted sites. This work also photographed some birds present and their use of habitat. Some of the volunteers contributed their own photographs of the site and its avifauna. All images were stored on a standard 500GB ATA HDD and backed up to a 500GB external HDD.

3. Results

3.1 Bird communities, habitats and habitat use in the study area

Bird communities and habitats of the study area were species-rich and taxonomically diverse, reflecting the high floristic diversity, structural complexity and quality of native vegetation communities present. This was despite past disturbance of these habitats by logging, sand mining, cattle grazing, rubbish dumping and trail bike activity and recent tree vandalism and dog and cat incursion. These impacts have occurred mostly along access trails in the northern and eastern sectors and in parts of South Moonee Forest itself.

A total of 1,677 individual birds from 110 species and 46 families were recorded during the study. Most (85.5% or 94 species) of these birds utilised terrestrial habitats while 14.5% (16 species) were predominantly aquatic species. Appendix 1 lists all bird species recorded in the study area during the project. This record provides important baseline information on the abundance, composition and structure of bird communities surveyed in the study area during the project.

Coastal blackbutt, littoral rainforest, swamp oak, swamp paperbark and swamp sclerophyll forest, *Banksia integrifolia* woodland, mangrove forest, *Themeda triandra* headland grassland/herbland, dunal shrubland and grassland, sedgeland, saltmarsh, mud/sand flats and rocky platforms provided important foraging, roosting, refuge and breeding habitat for these species. The nationally critically endangered Swift Parrot (Record 130, Appendix 1) was recorded foraging in flowering swamp mahogany in winter 2018 at Site 11.

Previously disturbed edges of the main walking trail to the headland and along Rutil Trail contained infestations of introduced Lantana *Lantana camara*, Winter Senna *Senna septemtrionalis*, Molasses Grass *Melinis minutiflora* and Rhodes Grass *Chloris gayana*. These provided foraging, refuge and potential nest sites for birds of the dense understorey and ground-cover vegetation such as White-browed Scrubwren, Eastern Whipbird and Australian Logrunner. Some species foraged for seeds, fruits, nectar and/or insects in these patches including Red-browed Finch, Little Shrike-thrush, Silvereye, Lewin's Honeyeater, Variegated Fairy-wren, Large-billed Scrubwren, Olive-backed Oriole and White-cheeked Honeyeater. Some of these patches had been recently removed or were scheduled for removal in the project's bushland regeneration program. Infestations of introduced Groundsel Bush *Baccharis halimifolia* had been previously removed from sedgeland and swamp oak forest at Site 8.

Forty-four (44) bird species or 40% of all (110) bird species recorded in the project were detected breeding or were likely to be breeding in a diverse suite of habitats provided by these different vegetation communities. These included 5 threatened species - Rose-crowned Fruit-Dove, Eastern Osprey, Australian Pied Oystercatcher, Sooty Oystercatcher and Little Lorikeet and 10 species of local and/or regional conservation significance (see Section 3.3).

The threatened *Themeda triandra* headland grassland (Site 5) provided insect prey for Australasian Pipit, Red-backed Fairy-wren (along the western margins near Site 4), White-throated Needletail (a non-breeding summer migrant from the northern hemisphere), White-faced Heron, as well as for several coastal species moving between foraging habitat north and south of Green Bluff. These included Brahminy Kite, the threatened Sooty Oystercatcher and Eastern Osprey and the locally conservation-significant White-bellied Sea-Eagle.

Wetland, riparian and mangrove forest habitats, surveyed at Sites 8, 10, 13 and the eastern part of Site 11, provided foraging and breeding resources for a diverse range of bird species. These included Brown Quail, Pheasant Coucal, Swamp Harrier, Red-backed Fairy-wren, Variegated Fairy-wren, Brown Thornbill, Scarlet Honeyeater, Brown Honeyeater (in mangrove forest along Stingray Creek at Site 10), Mistletoebird, Spangled Drongo and Dollarbird. Other species such as Noisy Friarbird, Red Wattlebird, Little Wattlebird, White-cheeked Honeyeater, Black-faced Cuckoo-shrike, Olive-backed Oriole and Australasian Figbird were regularly detected flying between these sites on the eastern side of Stingray Creek and flowering paperbarks and other trees in South Moonee Forest on the western side of this creek.

Sand/mudflat and rocky platform habitats along Moonee Creek and lower Sugarmill Creek were foraged over by the critically endangered (in NSW) Beach Stone-curlew, critically endangered (nationally) Far Eastern Curlew, and Australian Pied Oystercatcher and Sooty Oystercatcher, both threatened in NSW. Common species that also foraged in these habitats included White-faced Heron, Little Egret, Australian White Ibis, Brahminy Kite, Crested Tern, Welcome Swallow and Willie Wagtail.

Plates 1-15 illustrate the species richness and diversity of bird species and their habitats recorded in the study area during the project.

Plates 1-2: South-west view over South Moonee Forest from Site 6 being regenerated to preserve *Themeda triandra* and other native grassland and shrubland patches (left). View north-west to the coastal range with Moonee Creek estuary in the foreground, from Site 3 bush regeneration works (right). Photos: InSight Ecology



Plates 3-4: White-browed Scrubwren foraged for insects in the thick moist litter of Site 1's littoral rainforest (left – InSight Ecology). Little Shrike-thrush (right) foraged and nested in dense vine tangles in Site 1's littoral rainforest, along the main walking trail and at Sites 6, 12 and 13 (www.tomo-rhino.com).



Plates 5-7: South Moonee Forest (Site 11) – standing dead and living Blackbutt trees provided nest sites for Satin Flycatcher (nested on living branches) and other birds and hollows potentially for owls, possums, bats and reptiles (left, Plate 5); Swamp Mahogany (right – upper image, Plate 6) and Swamp Paperbark (right – lower panel, Plate 7) forest was structurally complex offering dense Cordyline ground and lower layer cover and thick shrub and canopy layers. Photos – InSight Ecology

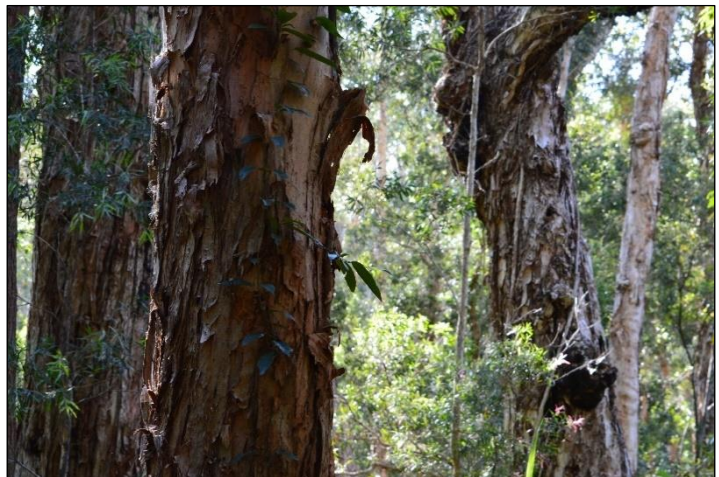


Plate 8: The critically endangered Swift Parrot was recorded foraging in flowering Swamp Mahogany at Site 11 – see Record 130 in Appendix 1. Photo: JJ Harrison, en. wikipedia.org and CCA Share-alike licence



Plate 9: *Themeda triandra* headland grassland EEC at Green Bluff (Site 5), looking east from the edge of Site 4 (regenerating native grassland and Coast Banksia/*Allocasuarina littoralis* woodland). Photo: Julie Lane, 10 December 2018



Plates 10-11: Recently weeded section previously covered in lantana and senna along Rutile Trail adjacent to Site 12 (left). Removal of thick ground cover habitat to promote the return of local native plant species needs to be undertaken in patches or sections at a time to ensure that the preferred habitat of ground-foraging birds like Eastern Whipbird is not affected. Photos: InSight Ecology (left) and Dirk Tomsa (right)



Plate 12: Stingray Creek, looking east from the footbridge, showing Site 1 (littoral rainforest) in right top corner and Moonee Creek sandflats at centre left. Photo: Julie Lane, 2 August 2018



Plate 13: Stingray Creek mudflats and mangroves at Site 10 showing sedgeland and grassland in the centre and left midground and South Moonee Forest at upper right. Photo: Julie Lane, 2 August 2018



Plates 14-15: Thickly vegetated (acacia, tuckeroo, blady grass and other grasses) sand dunes along North Sapphire Beach looking north to Green Bluff (Site 7, left - Plate 14) provided foraging and possibly breeding habitat for Tawny Grassbird (at right – Plate 15), Brown Quail, Silvereye and breeding Red-backed Fairy-wren. Photos: InSight Ecology (Plate 14) and Ken Jones (Tawny Grassbird – Plate 15)



3.2 Bird abundance, species richness and habitat use

3.2.1 Overview

Bird species recorded at each of the 15 sites surveyed during the project are listed below. Appendix 1 provides full details of each record including date (and therefore survey period), time, site description, location, habitat type and habitat use. Species listed as threatened under NSW Biodiversity Conservation Act 2016 and/or Environmental Protection and Biodiversity Conservation Act 1999 are shown in bold with an asterisk. Species listed under migratory bird

protection agreements between Australia and China (CAMBA), Australia and Japan (JAMBA) and/or Australia and Republic of South Korea (ROKAMBA) are indicated by the symbol †. Species of local and/or regional conservation significance are indicated by the symbol ☼. Introduced species are indicated by the symbol ~. Birds that were confirmed to be breeding or were most likely to have bred are indicated in italics. The total number of individual birds, bird species recorded at each surveyed site and breeding species are also provided for each surveyed site. The type of site (reference/control or treatment) is indicated.

3.2.2 Birds recorded at each surveyed site in the study area

Site 1: Littoral Rainforest EEC, located between the main walking trail to headland and Moonee Creek outflow to the ocean. Site type: Remnant littoral rainforest – reference/control site.

<i>Australian Brush-turkey</i> 1	<i>Australian Logrunner</i> ☼ 3
Spotted Dove ~ 2	<i>Eastern Whipbird</i> ☼ 6
Bar-shouldered Dove 4	Black-faced Cuckoo-shrike 1
Rose-crowned Fruit-Dove * 2	Golden Whistler 3
Australian Pied Oystercatcher * 1 (flewover site)	<i>Little Shrike-thrush</i> ☼ 4
Yellow-tailed Black-Cockatoo 2	Grey Shrike-thrush 1
Rainbow Lorikeet 7	Olive-backed Oriole 1
Eastern Koel 1	Rufous Fantail ☼ 1
Sacred Kingfisher 1	<i>Grey Fantail</i> 3
<i>White-browed Scrubwren</i> ☼ 2	Spectacled Monarch ☼ 3
<i>Large-billed Scrubwren</i> 7	<i>Eastern Yellow Robin</i> ☼ 7
Brown Gerygone 1	Welcome Swallow 2
<i>Brown Thornbill</i> 3	Bassian Thrush ☼ 1
<i>Lewin's Honeyeater</i> 10	
Little Wattlebird 1	

Total birds recorded: 81

Total bird species recorded: 28, including 2 threatened species and 8 locally/regionally conservation-significant species

Total bird species recorded breeding: 9

Site 2: Coastal Swamp Oak Forest EEC and swamp sclerophyll forest 20 m south of the main walking trail. Site type: Remnant native forest – reference/control site.

<i>Australian Brush-turkey</i> 2	Regent Bowerbird ☼ 1
Brown Cuckoo-Dove 2	<i>Variegated Fairy-wren</i> 7
Rainbow Lorikeet 2	White-browed Scrubwren ☼ 1
Scaly-breasted Lorikeet 4	Large-billed Scrubwren 1
Horsfield's Bronze-Cuckoo 1	Brown Gerygone 1
Shining Bronze-Cuckoo 1	<i>Brown Thornbill</i> 3
<i>Laughing Kookaburra</i> 2	<i>Striated Pardalote</i> 3
White-throated Treecreeper ☼ 1	Eastern Spinebill 1
<i>Lewin's Honeyeater</i> 8	Eastern Whipbird ☼ 3
Scarlet Honeyeater 1	Black-faced Cuckoo-shrike 1
<i>Golden Whistler</i> 2	Grey Shrike-thrush 1

Olive-backed Oriole 2
Grey Fantail 4
Eastern Yellow Robin 2

Grey Butcherbird 1
Spectacled Monarch 1

Total birds recorded: 60

Total bird species recorded: 27, including 6 locally/regionally conservation-significant species

Total bird species recorded breeding: 8

Site 3: Regenerated forest/woodland with grass swards, vines and isolated tobacco bush, north of the main track to headland. Site type: Regenerated native forest/woodland – treatment site.

Spotted Dove ~ 1
Bar-shouldered Dove 7
White-throated Needletail † 12
White-bellied Sea-Eagle † 1
Yellow-tailed Black-Cockatoo 20
Galah 2
Rainbow Lorikeet 24
Scaly-breasted Lorikeet 5
Noisy Miner 1
White-cheeked Honeyeater 17
Eastern Whipbird 3
Australasian Figbird 18
Pied Currawong 1
Grey Fantail 3
Eastern Yellow Robin 1
Red-browed Finch 9

Regent Bowerbird 1
Red-backed Fairy-wren 3
Variiegated Fairy-wren 8
White-browed Scrubwren 6
Large-billed Scrubwren 4
Brown Thornbill 3
Eastern Spinebill 1
Lewin's Honeyeater 7
Little Wattlebird 9
Blue-faced Honeyeater 2
Golden Whistler 1
Olive-backed Oriole 1
Spangled Drongo 3
Willie Wagtail 1
Welcome Swallow 10

Total birds recorded: 185

Total bird species recorded: 31, included 2 species subject to migratory bird protection agreements and 6 locally/regionally conservation-significant species (included both migratory protection agreement species)

Total bird species recorded breeding: 5

Site 4: Mixed regenerating grassland with blady grass *Imperata cylindrica* and other native grasses, introduced Rhodes grass and molasses grass (removed between summer 2017 and winter 2018 surveys) and isolated *Banksia integrifolia* and black she-oak patches. Site bisects main walking track at entrance to Green Bluff *Themeda triandra* grassland. Site type: Regenerating native grassland – treatment site.

Bar-shouldered Dove 1
Brahminy Kite 1
Crested Tern 4 †
Scaly-breasted Lorikeet 5
Brown Honeyeater 3
Silvereye 5
Mistletoebird 1

Dollarbird 2
Red-backed Fairy-wren 5
Variiegated Fairy-wren 5
Little Wattlebird 4
White-cheeked Honeyeater 6
Welcome Swallow 1

Total birds recorded: 43

Total bird species recorded: 13, including 1 migratory bird protection agreement species

Total breeding bird species recorded: 2

Site 5: *Themeda triandra* grassland and herbland on seacliffs EEC at Green Bluff. Site type: Remnant native grassland – reference/control site.

Australasian Gannet 1

Pied Cormorant 5

White-faced Heron 1

Eastern Osprey * 3

Willie Wagtail 1

Australasian Pipit 🌀 3

Sooty Oystercatcher * 4

Crested Tern ‡ 2

Silver Gull 4

Spotted Pardalote 2

Welcome Swallow 2

Total birds recorded: 27

Total bird species recorded: 11, including 2 threatened species, 1 migratory bird protection agreement species and 1 locally/regionally conservation-significant species

Total breeding bird species recorded: 2

Site 6: Revegetated and regenerated native grassland (*Themeda triandra* and other species), shrubland with vines, patches of hind-dune rainforest including lilly pilly, white fig and *Guioa semiglauca* and *Banksia integrifolia* woodland. Site type: Revegetated and regenerated grassland and woodland/forest – treatment site.

Brown Quail 1

Rose-crowned Fruit-Dove * 3

Topknot Pigeon 19

White-throated Needletail ‡ 🌀 60

Swamp Harrier 2

Yellow-tailed Black-Cockatoo 4

Lewin's Honeyeater 3

Little Wattlebird 5

Eastern Whipbird 🌀 4

Cicadabird 🌀 2

Little Shrike-thrush 🌀 3

Pied Currawong 1

Eastern Yellow Robin 🌀 3

Silvereye 2

Red-browed Finch 8

Rainbow Bee-eater 1

Dollarbird 5

Green Catbird 🌀 1

Regent Bowerbird 🌀 4

Variegated Fairy-wren 6

Brown Thornbill 2

Scarlet Honeyeater 1

White-cheeked Honeyeater 11

Black-faced Cuckoo-shrike 2

Varied Triller 🌀 2

Spangled Drongo 1

Rufous Fantail 🌀 2

Grey Fantail 1

Tree Martin 1

Total birds recorded: 160

Total bird species recorded: 29, including 1 threatened species, 1 migratory bird protection agreement species and 9 locally/regionally conservation-significant species (included the 1 migratory bird protection agreement species)

Total breeding bird species recorded: 5

Site 7: Foredune and hind-dune system along South Moonee/North Sapphire Beach, includes dunes and swales of swards of blady grass, marram grass, trailing vines, thickets of *Acacia longifolia*, stunted tuckeroo and patches of introduced bitou bush, asparagus fern and lantana, previously sprayed and some re-establishing. Site type: Remnant grassland/shrubland – reference/control site.

Brown Quail 8	Dollarbird 1
Pied Cormorant 1	<i>Red-backed Fairy-wren</i> 18
Eastern Osprey * 1	<i>Variiegated Fairy-wren</i> 7
White-bellied Sea-Eagle ‡ ☉ 1	<i>White-browed Scrubwren</i> ☉ 2
Brahminy Kite 1	<i>Spotted Pardalote</i> 2
Sooty Oystercatcher * 3	Lewin's Honeyeater 3
Silver Gull 2	Little Wattlebird 2
White-cheeked Honeyeater 2	Black-faced Cuckoo-shrike 1
Australasian Figbird 1	Australian Raven 2
Willie Wagtail 1	Silvereye 5
Tawny Grassbird ☉ 2	Welcome Swallow 4
Australasian Pipit ☉ 4	

Total birds recorded: 74

Total bird species recorded: 23, including 2 threatened species, 1 migratory bird protection agreement species and 4 locally/regionally conservation-significant species (includes 1 migratory bird protection agreement species)

Total breeding bird species recorded: 4

Site 8: Swamp Oak Floodplain Forest EEC with swamp paperbark stands, *Gahnia sieberiana* swards, sedgeland, grasses, mangroves along Stingray Creek and patches of introduced groundsel bush, senna and lantana, previously and recently removed. Site type: Mixed remnant forest and wetland with regenerating understorey – part treatment and part reference/control site.

<i>Brown Quail</i> 2	Scaly-breasted Lorikeet 4
Bar-shouldered Dove 1	Dollarbird 1
Great Cormorant 1	Green Catbird ☉ 1
Pied Cormorant 1	<i>Superb Fairy-wren</i> 6
White-faced Heron 1	<i>Red-backed Fairy-wren</i> 14
Little Egret 1	<i>Brown Thornbill</i> 4
Australian White Ibis 5	Eastern Spinebill 4
Eastern Osprey * 1	<i>Scarlet Honeyeater</i> 3
Whistling Kite 1	Little Wattlebird 1
<i>Brown Honeyeater</i> 11	Eastern Whipbird ☉ 2
Grey Shrike-thrush 1	Australasian Figbird 6
Grey Fantail 2	Silvereye 10
<i>Mistletoebird</i> 4	<i>Red-browed Finch</i> 4

Total bird recorded: 92

Total bird species recorded: 26, including 1 threatened species and 2 locally/regionally conservation-significant species

Total breeding bird species recorded: 8

Site 9: Mixed Littoral Rainforest EEC (eastern end, off Rutile Trail), Swamp Oak Floodplain Forest EEC, swamp paperbark forest and sedgeland; lantana and senna removed between summer 2017 and summer 2018 surveys. Site type: Mixed remnant rainforest and moist forest with regenerating understorey following weeding – part reference/control and part treatment site.

Silver Gull 1	Eastern Spinebill 2
White-throated Treecreeper 🌀 1	Lewin's Honeyeater 2
<i>Variegated Fairy-wren</i> 6	Scarlet Honeyeater 3
<i>White-browed Scrubwren</i> 🌀 2	Brown Honeyeater 5
Spotted Pardalote 1	Golden Whistler 1
Australasian Figbird 4	Olive-backed Oriole 1
Rufous Fantail 🌀 1	Grey Fantail 1
<i>Eastern Yellow Robin</i> 🌀 2	Mistletoebird 1

Total birds recorded: 34

Total bird species recorded: 16, including 4 locally/regionally conservation-significant species

Total breeding bird species recorded: 3

Site 10: Mangrove forest with mudflats and small patches of Coastal Saltmarsh EEC along Stingray Creek near junction with Sugarmill Creek. Site type: Remnant mangrove forest and mudflats – reference/control site.

<i>Australian Brush-turkey</i> 3	Rainbow Lorikeet 16
Pacific Black Duck 2	Musk Lorikeet 3
Wompoo Fruit-Dove * 1	Little Lorikeet * 4
Little Black Cormorant 8	Sacred Kingfisher 1
Pied Cormorant 1	<i>Dollarbird</i> 6
White-faced Heron 5	Regent Bowerbird 🌀 1
Little Egret 2	Variegated Fairy-wren 4
Australian White Ibis 5	Brown Thornbill 3
Royal Spoonbill 1	Spotted Pardalote 2
Beach Stone-curlew * 1	Lewin's Honeyeater 7
Australian Pied Oystercatcher * 4	Yellow-faced Honeyeater 2
Far Eastern Curlew * † 1	Noisy Miner 1
Little Wattlebird 1	<i>Brown Honeyeater</i> 12
Noisy Friarbird 1	Australasian Figbird 5
Olive-backed Oriole 3	Pied Currawong 1
Spangled Drongo 4	Rufous Fantail 🌀 1
Silvereye 2	

Total birds recorded: 114

Total bird species recorded: 33, including 5 threatened species 1 of which is also a migratory bird protection agreement species and 2 locally/regionally conservation-significant species

Total breeding bird species recorded: 4

Site 11: South Moonee Forest – dry and moist remnant and regrowth eucalypt forest with swamp paperbark, swamp mahogany and swamp box *Lophostemon suaveolens* on the lower slopes and floodplain of Stingray Creek; thick *Gahnia sieberiana*, lomandra and cordyline understorey and groundcover in lower areas. Site type: Remnant dry and moist eucalypt, swamp box and swamp paperbark forest – reference/control site.

Wonga Pigeon 🌀 2	Rainbow Bee-eater 3
White-throated Needletail † 🌀 50	Dollarbird 2
Whistling Kite 1	Superb Lyrebird 🌀 1
Glossy Black-Cockatoo * 2	White-throated Treecreeper 🌀 10
Yellow-tailed Black-Cockatoo 2	Variegated Fairy-wren 20
Rainbow Lorikeet 10	White-browed Scrubwren 🌀 20
Scaly-breasted Lorikeet 6	Large-billed Scrubwren 6
Musk Lorikeet 3	Brown Gerygone 2
Swift Parrot * 2	Striated Thornbill 12
Channel-billed Cuckoo 4	Brown Thornbill 8
Fan-tailed Cuckoo 1	Spotted Pardalote 5
Laughing Kookaburra 9	Eastern Spinebill 1
Sacred Kingfisher 5	Lewin's Honeyeater 11
Yellow-faced Honeyeater 17	Scarlet Honeyeater 13
Noisy Friarbird 9	Australian Logrunner 🌀 5
Eastern Whipbird 🌀 6	Black-faced Cuckoo-shrike 6
Cicadabird 🌀 4	Golden Whistler 9
Rufous Whistler 2	Grey Shrike-thrush 7
Australasian Figbird 9	Olive-backed Oriole 6
Australian Magpie 1	Pied Currawong 4
Spangled Drongo 1	Rufous Fantail 🌀 1
Grey Fantail 14	Australian Raven 1
Leaden Flycatcher 🌀 3	Satin Flycatcher 🌀 7
Eastern Yellow Robin 🌀 5	Mistletoebird 1

Total birds recorded: 329

Total bird species recorded: 48, including 2 threatened species, 1 migratory bird protection agreement species and 12 species of local and/or regional conservation significance (includes 1 migratory bird protection agreement species)

Total breeding bird species recorded: 24

Site 12: Mixed *Allocasuarina littoralis*, swamp paperbark and *Banksia integrifolia* woodland with infestations of lantana and senna (removed in autumn-winter 2018), along the eastern edge of Rutile Trail behind dunes. Site type: Regenerating woodland – treatment site.

Brown Quail 1	Fan-tailed Cuckoo 1
Bar-shouldered Dove 3	Rainbow Bee-eater 2
Yellow-tailed Black-Cockatoo 9	Dollarbird 5
Rainbow Lorikeet 9	White-throated Treecreeper 🌀 1
Scaly-breasted Lorikeet 2	Variegated Fairy-wren 2
White-browed Scrubwren 🌀 3	Large-billed Scrubwren 2
Yellow Thornbill 2	Brown Thornbill 2

Eastern Spinebill 3
Little Wattlebird 6
Brown Honeyeater 1
Eastern Whipbird 🌀 2
Australasian Figbird 5
Leaden Flycatcher 🌀 1
Silvereye 19

Lewin's Honeyeater 6
Scarlet Honeyeater 1
White-cheeked Honeyeater 8
Golden Whistler 1
Grey Fantail 6
Eastern Yellow Robin 🌀 5

Total birds recorded: 108

Total bird species recorded: 27, including 5 locally/regionally conservation-significant species

Total breeding bird species recorded: 4

Site 13: Mixed moist and dry sclerophyll forest with lowland rainforest, old-growth swamp paperbark forest, dense vines and shrubs including introduced senna and lantana along upper Sugarmill Creek and pooled sections; thick weed growth along old snig track off trail that borders the northern perimeter of North Sapphire Beach Estate. Site type: Remnant eucalypt forest and rainforest – reference/control site.

Brown Cuckoo-Dove 2
Wonga Pigeon 🌀 1
Rose-crowned Fruit-Dove * 1
Brown Goshawk 1
Rainbow Lorikeet 6
Musk Lorikeet 4
Little Lorikeet * 3
Australian King-Parrot 4
Pheasant Coucal 🌀 1
Eastern Koel 1
Channel-billed Cuckoo 2
Brush Cuckoo 1
Laughing Kookaburra 2
Sacred Kingfisher 2
Australian Logrunner 🌀 13
Eastern Whipbird 🌀 10
Cicadabird 🌀 1
Little Shrike-thrush 🌀 2
Olive-backed Oriole 3
Spangled Drongo 6
Leaden Flycatcher 🌀 1
Eastern Yellow Robin 🌀 11

White-throated Treecreeper 🌀 7
Green Catbird 🌀 4
Regent Bowerbird 🌀 1
Variigated Fairy-wren 13
White-browed Scrubwren 🌀 17
Large-billed Scrubwren 10
Brown Gerygone 10
Brown Thornbill 9
Spotted Pardalote 8
Eastern Spinebill 5
Lewin's Honeyeater 20
Yellow-faced Honeyeater 9
Scarlet Honeyeater 15
Blue-faced Honeyeater 6
Noisy Friarbird 1
Black-faced Cuckoo-shrike 4
Golden Whistler 4
Grey Shrike-thrush 2
Pied Currawong 5
Grey Fantail 4
Spectacled Monarch 🌀 2
Mistletoebird 4

Total birds recorded: 238

Total bird species recorded: 44, including 2 threatened species and 13 locally/regionally conservation-significant species

Total breeding bird species recorded: 24

Site 14: Dry blackbutt forest with old *Angophora costata* and turpentine, vines and riparian shrubs and groundcover along a small northern tributary of Sugarmill Creek; includes eroded creekbank area caused by motorbike use; south of Moonee Beach urban area, off Sullivans Road. Site type: Remnant dry blackbutt forest – reference/control site.

<i>Spotted Dove</i> ~ 1	Channel-billed Cuckoo 1
Brown Cuckoo-Dove 1	Laughing Kookaburra 2
Bar-shouldered Dove 1	Satin Bowerbird 4
Eastern Osprey * 2	Superb Fairy-wren 4
Rainbow Lorikeet 7	<i>White-browed Scrubwren</i> ☯ 2
Scaly-breasted Lorikeet 9	Large-billed Scrubwren 6
Little Lorikeet * 20	<i>Brown Gerygone</i> 4
Australian King-Parrot 2	<i>Brown Thornbill</i> 7
<i>Lewin's Honeyeater</i> 5	Blue-faced Honeyeater 4
Noisy Friarbird 2	Australian Logrunner ☯ 1
Eastern Whipbird ☯ 3	Black-faced Cuckoo-shrike 1
Grey Butcherbird 2	Pied Currawong 5
Grey Fantail 2	<i>Eastern Yellow Robin</i> ☯ 2

Total birds recorded: 100

Total bird species recorded: 26 – includes 1 introduced species, 2 threatened species and 4 locally/regionally conservation-significant species

Total breeding bird species recorded: 6

Site 15: Regenerating *Banksia integrifolia* woodland and low hind-dune littoral rainforest of *Cryptocarya triplinervis* var *triplinervis* and tuckeroo with senna and lantana patches (senna and lantana were removed in October 2018); on the eastern side of Rutile Trail south of the access to Site 7. Site type: Regenerating woodland and littoral rainforest – treatment site.

Australian Brush-turkey 1	<i>Lewin's Honeyeater</i> 7
<i>Bar-shouldered Dove</i> 5	Little Wattlebird 3
Noisy Pitta ☯ 1	White-cheeked Honeyeater 5
Brown Thornbill 2	Little Shrike-thrush ☯ 1
Australasian Figbird 2	Silvereye 4
Russet-tailed Thrush ☯ 1	

Total birds recorded: 32

Total bird species recorded: 11, including 3 locally/regionally conservation-significant species

Total breeding bird species recorded: 2.

3.3 Birds of conservation significance

A total of 38 species of conservation significance were recorded during the study. These included 10 species currently listed as threatened under the NSW Biodiversity Conservation Act 2016 and/or the Environmental Protection and Biodiversity Conservation Act 1999. They were Rose-crowned Fruit-Dove, Wompoo Fruit-Dove, Australian Pied Oystercatcher, Sooty Oystercatcher, Eastern Osprey, Beach Stone-curlew, Far Eastern Curlew, Little Lorikeet, Glossy Black-Cockatoo and Swift Parrot.

The Far Eastern Curlew, an intercontinental migratory wader that breeds in Siberia, China and Japan, is listed as critically endangered globally due to the ongoing loss and degradation of key stopover sites to coastal development, particularly along the Yellow Sea (Murray and Fuller 2015; Murray et al. 2015; Piersma et al. 2016; Studds et al. 2017). These are tidal mudflats where migratory waders stop to refuel for their long journeys along the East Asian-Australasian Flyway (Oldland et al. 2009; Murray and Fuller 2015). Individuals of this species have been recorded overwintering (ie. staying behind during their non-breeding season - the Australian summer) in estuaries along the Australian east coast (Oldland et al. 2009), including Moonee Creek (A. Huggett pers. obs.).

The Beach Stone-curlew is critically endangered in NSW, its breeding habitat threatened by recreational vehicles, dogs, foxes, cats and coastal erosion during major storm events (Marchant and Higgins 1993). One bird was recorded during the summer 2017 survey foraging on sand/mudflats in Moonee Creek estuary including opposite the main picnic area prior to and after human and dog activity in the area (Record 80, Appendix 1). It may also have foraged along Stingray Creek up to the mangroves at Site 10. The bird may have been one of two birds recorded in 2017-18 at Sawtell south of Bonville Creek and at Red Rock (D. Cooper, pers. comm.).

Australian Pied Oystercatcher was recorded along Stingray Creek with one record being of a group of 4 birds where a male condition-fed a female (Record 81, Appendix 1). This behaviour indicates breeding intention as the male supplements the female's food intake prior to or soon after mating (Marchant and Higgins 1993). This species has previously attempted to nest in sand dunes along Moonee Beach north of Moonee Creek outflow which have failed due to disturbance by humans and dogs (A. Huggett, pers. obs.). Sooty Oystercatcher was also recorded foraging along rock platforms at Green Bluff (Records 84, 85, Appendix 1) and along South Moonee/North Sapphire Beach (Record 83, Appendix 1). Interpretative signs have been erected at Moonee Beach picnic area to inform beach users of both oystercatcher species and to attempt to enlist their assistance in keeping dogs on leash on the estuary sand/mudflats and beach itself. A targeted conservation strategy exists for both oystercatcher species under Saving Our Species Program (NSW Government 2018).

The nationally critically endangered Swift Parrot was recorded foraging in flowering swamp mahogany at Site 11 (South Moonee Forest – Record 130, Appendix 1) in the winter 2018 survey. Fewer than 2,000 birds of this species are estimated to remain in the wild (Australian Government 2016). The Swift Parrot migrates from its spring-summer breeding grounds in Tasmania to forage in south-east Australian forests and woodlands in winter. A previous record exists for this species in May 2002 along Stingray Creek near Moonee Beach Reserve's southern camping area (A. Huggett, pers. obs.). A national threatened species recovery plan is in place for this species (Australian Government 2019). Swift Parrot nests in tree hollows and a major predator of eggs and nestlings is the Sugar Glider (Australian Government 2019).

Two other threatened bird species recorded in the project were nesting near the study area or showed breeding behaviour. A pair of Eastern Osprey nested in an isolated flooded gum near new houses (North Sapphire Beach Estate) along upper Sugarmill Creek in December 2018 (see Records 66 and 70, Appendix 1). A pair of Rose-crowned Fruit-Dove fed on fruiting *Ficus obliqua*, *Polyscias elegans* and Tuckeroo *Cupaniopsis anacardioides* and courted at Site 6 (Record 36, Appendix 1).

Four species listed under migratory bird protection agreements between Australia and China, Japan and/or Republic of Korea were recorded in the study. These included White-throated Needle-tail, White-bellied Sea-Eagle, Far Eastern Curlew and Crested Tern. Flocks of 12-60 White-throated Needle-tail were recorded soaring above Green Bluff in the summers of 2017 (Record 41, Appendix 1) and 2018 (Record 42, Appendix 1) and above Site 11's eucalypt forest canopy in December 2018 (Record 43, Appendix 1). The Far Eastern Curlew is a non-breeding summer migrant to Australia from Russia and north-east China (Higgins and Davies 1996). The White-throated Needle-tail breeds in Siberia, Mongolia, northern India, north-east China and Japan and migrates during its non-breeding season to Australia (Higgins 1999). A breeding pair of White-bellied Sea-Eagle are known from the Moonee-Sapphire area (D. Cooper, pers. comm.). An individual sea-eagle was recorded flying with a fish over Site 3 at Green Bluff towards South Moonee Forest in December 2017 (Record 71 and also see Record 72, Appendix 1).

A total of 25 species of local and/or regional conservation significance were recorded during the study, representing 22.7% of all bird species detected in the project. These were of conservation significance within the study area because of the extent of loss, fragmentation and degradation of their core habitat both locally and at a regional scale, their occurrence in low numbers, status as habitat specialists, need for large patches of high quality habitat to survive and reproduce, presence of threats such as human, dog and cat incursion into foraging and nesting habitat and predation by European red fox and cat, weed invasion particularly of native grassland and the forest understorey, vandalism of trees and shrubs, loss of tree hollows and other suitable nest sites, removal of or damage to ground foraging and refuge habitat such as fallen hollow logs and thick shrub layers, and impacts associated with climate change including increased bushfire risk, desiccation of littoral rainforest and moist forest leaf litter and groundcover and increased frequency of major storm events.

Locally and/or regionally significant bird species recorded in the study included year-round residents Australian Logrunner, Eastern Whipbird, Little Shrike-thrush, Eastern Yellow Robin, White-browed Scrubwren, White-throated Treecreeper, Wonga Pigeon, Australasian Pipit, Green Catbird, Superb Lyrebird and Tawny Grassbird. Summer migratory species were Spectacled Monarch, Satin Flycatcher, Leaden Flycatcher, Rufous Fantail, Rainbow Bee-eater, White-throated Needle-tail, Varied Triller and Cicacabird. Winter migrants included Noisy Pitta, Bassian Thrush and Russet-tailed Thrush. Nomadic species or those that are known to move over extensive patches of forest and other coastal habitat within the larger Coffs Harbour to Woolgoolga district included Regent Bowerbird, White-bellied Sea-Eagle and Pheasant Coucal.

A total of 12 bird species of local and/or regional conservation significance were recorded breeding at or near surveyed sites in the study. These included Australian Logrunner, Eastern Whipbird, Little Shrike-thrush, Eastern Yellow Robin, White-browed Scrubwren, White-throated Treecreeper, Satin Flycatcher, Leaden Flycatcher, Rainbow Bee-eater, Green Catbird, Cicacabird and Australasian Pipit. Several of the ground and understorey species foraged in thick regrowth around the Aboriginal midden site near the main walking track to the headland. This highlighted the value and importance of retaining this vegetation cover at least in closely-spaced patches during the ongoing bush restoration program in the area (see Section 5).

Plates 16-47 illustrate a suite of threatened bird species, migratory bird protection agreement species and locally/regionally conservation-significant avifauna that were recorded at surveyed sites in the study area. The nationally critically endangered Swift Parrot is shown in Plate 8.

Plates 16-17: Rose-crowned Fruit-Dove is an important disperser of rainforest seeds – top (Plate 16) – male, bottom (Plate 17) – female with bangalow palm fruit. Both photographs by Chris Charles



Plate 18: Far Eastern Curlew is a globally critically endangered species that can overwinter in eastern Australia. It was recorded as a single bird during the study. Photograph: Silva Vaughan-Jones, Hastings Birdwatchers and abc.net.au



Plate 19: White-throated Needletail (formerly Spine-tailed Swift) was recorded in large flocks soaring above Green Bluff and South Moonee Forest during the study (David Cook, COG)



Plate 20: One Beach Stone-Curlew was recorded foraging along Moonee Creek sand and mudflats during early mornings in the December 2017 survey and in June 2019 (also at Stingray Creek). This is a Critically Endangered species in NSW and a highly significant record, possibly the first, for Moonee Beach. Photo taken by InSight Ecology, 12/12/17 (main sandbar opposite northern end of picnic area, at low tide)



Plate 21: A pair of Australian Pied Oystercatcher live almost year-round along Moonee Creek and Stingray Creek below the footbridge. Photo: InSight Ecology, taken 11/12/17 below Stingray Creek footbridge.



Plate 22: Sooty Oystercatcher was the second threatened oystercatcher species recorded in the study and foraged on rocky platforms at Green Bluff (Tom Clark, tomclarkblogspot.com)



Plate 23: White-bellied Sea-Eagle was recorded over Green Bluff and foraging at South Moonee Beach. Photograph by Margarita, thewildlifediaries.com



Plates 24-26: A nesting pair of Eastern Osprey (top – Plate 24) were recorded in an isolated flooded gum beside new houses in upper Sugarmill Creek (below – Plates 25-26) on 12 December 2018. This is likely to have been the same pair detected flying above Site 14 on 13/12/18. Photographs: Viktoria Buckley (Plate 24), InSight Ecology (Plates 25-26)



Plate 27: Wompoo Fruit-Dove is an obligate frugivore taking the fruits of bangalow palm, *Ficus obliqua*, *F. rubiginosa*, *Endiandra*, *Polyscias murrayi*, *Schizomeria ovata* and other rainforest trees, shrubs and vines as well as the introduced camphor laurel. The male has a very distinctive advertising call – “wallack-a-woo”. Photograph: strictfunctor.deviantart.com (Creative Commons Attribution Share-Alike Licence)



Plate 28: Small flocks of Little Lorikeet were recorded flying over Sites 10, 13 and 14 in the winter and summer 2018 surveys (see Records 125-127, Appendix 1). These birds are blossom-nomads, bullet-like in flight and small (15-16.5 cm) in body size. Photograph: birdlife.org.au



Ground-foraging birds of local/regional conservation significance recorded in the project

Plate 29: Noisy Pitta (18-21 cm body size) moves to the coast in autumn/winter and was recorded as one bird foraging in a hind-dune littoral rainforest patch at Site 15 (Record 172, Appendix 1). Photograph: Phil O'Shea



Plates 30-31: Small parties of Australian Logrunner (Plate 30) were recorded foraging and moving along upper Sugarmill Creek (at Site 13) where they were likely breeding, a northern tributary (Site 14) and along upper Stingray Creek floodplain at Site 11. Plate 31 shows typical logrunner habitat in swamp paperbark and flooded gum forest with dense cordyline, bangalow palm and vines and ample leaf litter near water at Site 13. Photographs: birdwallpapers.com (Plate 30, male shown), InSight Ecology (Plate 31)

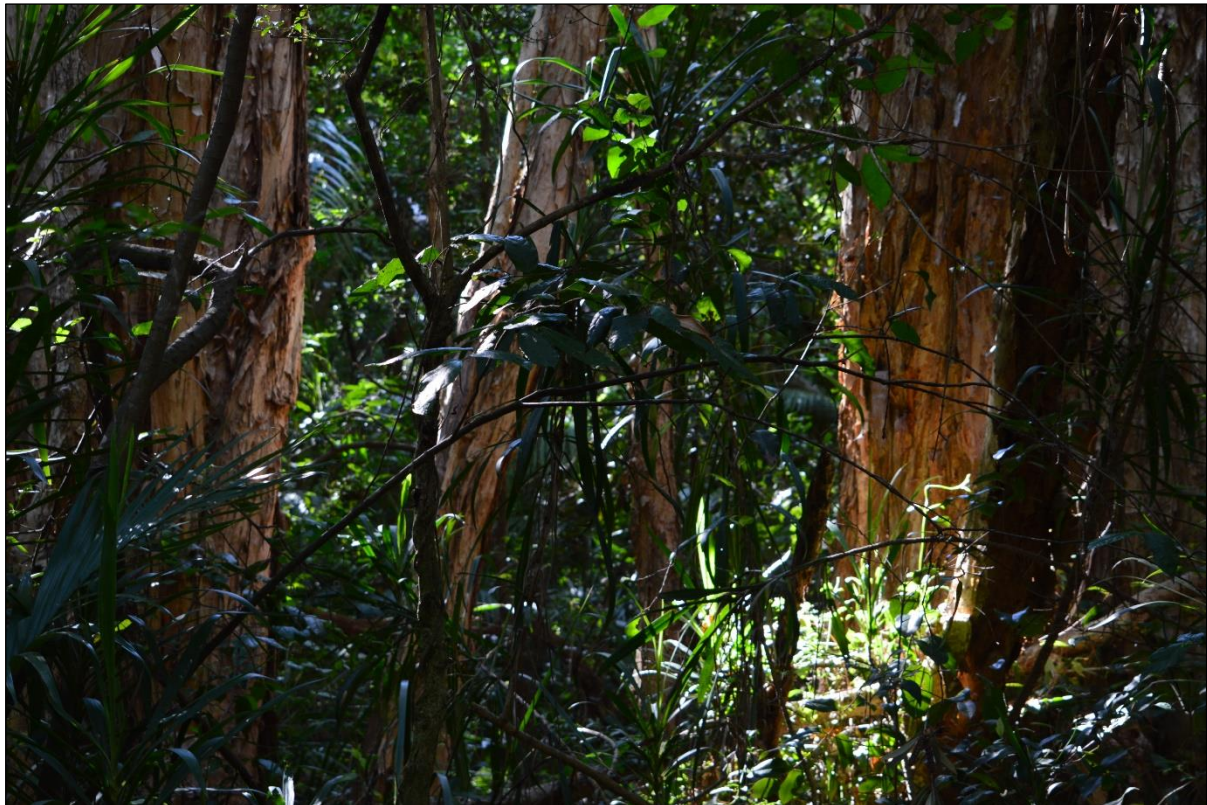


Plate 32: Bassian Thrush is a winter visitor that foraged for invertebrates in leaf litter of littoral rainforest at and near Site 1 in July 2018. Photographed at Moonee, InSight Ecology



Plate 33: Superb Lyrebird is an iconic large insectivorous bird of the forest floor. It has become increasingly rare or has disappeared from most coastal habitats between Coffs Harbour and Corindi/Red Rock (and much of the urbanising NSW coastal fringe) through habitat loss and fragmentation and threats to movement, dispersal and survival/recruitment from roads, dogs, foxes, cats and humans. Fresh characteristic foraging scrapes were recorded in a blackbutt stand at Site 11 (see Record 173, Appendix 1). Photograph: flickr.com



Plates 34-36: Eastern Yellow Robin was relatively frequently recorded in forest and woodland sites with suitable open patches for ground foraging and understorey nest sites. However, this species suffers from high predation of eggs by Pied Currawong, black rat and raven and nestlings by Grey Butcherbird and reptiles (more than 50% of nesting attempts failed in nearby Lower Bucca State Forest - see Huggett 2000). Therefore, its presence in the study area and its fragmented surrounding landscape is of local conservation significance. Photographs: bird sitting on a nest in a cordyline along an ephemeral stream at Moonee (Plate 34 -top, InSight Ecology), adult robin (Plate 35 - middle, Iestyn Taylor) and bird taking an insect on the main track to Green Bluff headland near Site 3 (Plate 36 – below, InSight Ecology taken 9/8/17)





Plate 37: Eastern Whipbird was recorded at sites with thick leaf litter, dense ground cover and fallen woody debris under forest canopies. It requires contiguous patches of moist forest habitat with suitable nesting sites. Given the degree of loss of this habitat type in the local and regional landscape and threats posed by human, dog, fox and cat incursions, this species was assessed to be of local conservation significance in the study area. Photograph: InSight Ecology



Plates 38-39: White-browed Scrubwren is a small bird that forages in leaf litter on the ground and lower shrub layers for insects and breeds from July to December. Although readily recorded at sites with dense leaf litter and low thick vines and shrubs, it suffers predation by cats and requires contiguous areas of suitable habitat which has significantly decreased in the urbanising Moonee Beach area. Care is needed with retaining patches of thick ground and understorey vegetation as habitat for this species during bush regeneration works in the study area. Adults were detected with dependent young at Sites 11 and 13. Photographs: Plate 38 (top) - adult male foraging in littoral rainforest at Site 1, 7/8/17 and Plate 39 (bottom) and male perched atop tobacco bush at Site 3, 7/8/17, both by InSight Ecology



Plates 40-41: Australasian Pipit (top – Plate 40, near Uralla NSW) is a grassland specialist that forages for small insects and nests in grass tufts. Other than *Themeda* grassland on Green Bluff (bottom - Plate 41, 2/8/18) limited suitable habitat occurs in the area and so pipit abundance in the study was low. However, outside the breeding season parties of 4-6 may congregate as were recorded along South Moonee Beach dunal system in December 2017 (Record 644, Appendix 1). Photographs: InSight Ecology



Shrub- and tree-foraging birds of local/regional conservation significance recorded in the project

Plate 42: Green Catbird is an important disperser of rainforest seeds and requires large patches of remnant moist eucalypt and rainforest to survive and reproduce. Sugarmill Creek in South Moonee Forest and littoral rainforest patches surveyed in the study provided important food, shelter and nest sites for a small (estimated at 3-4 birds) breeding population of this obligate frugivore. Photograph: InSight Ecology



Plate 43: Rainbow Bee-eater is a warm season migrant that forages for air-borne insects by flying out from dead branches. It was likely to breeding in sand dunes near Sites 6 and 12. Photograph: Greg Clancy



Plate 44: The adult male Regent Bowerbird adds a spectacular flash of colour to the forest. Females and immature males are mottled brown and black and often forage for rainforest fruit in small parties in autumn/winter. Individuals were recorded foraging in South Moonee Forest and littoral rainforest in the study area. Photograph (adult male): Phil O'Shea



Plate 45: Spectacled Monarch is a small insectivorous flycatcher of the rainforest and moist forest understorey. It is a summer breeding migrant from Queensland. It suffers predation of eggs, nestlings and sometimes sitting adults by black rat, butcherbird and reptiles and requires high quality habitat. Photograph: JJ Harrison, Creative Commons Attribution Share-Alike Licence, commons.wikimedia.org



Plate 46: The warm season breeding migrant Satin Flycatcher nested at two locations in blackbutt forest at Site 11 (South Moonee Forest) in December 2017. Photo (adult male): Lindsay Hansch



Plate 47: Leaden Flycatcher is a small warm season breeding migrant that forages in the shrubby understorey of coastal forests. It was recorded nesting in December 2017 and calling breeding territory in December 2018 in South Moonee Forest (Site 11), foraging along upper Sugarmill Creek (Site 13) and foraging at Site 12. Photo (female shown): Tobias Hayashi



4. Discussion

4.1 Targeting habitat restoration action

Restoring habitat for native fauna and flora affected by habitat loss, fragmentation and degradation is a key goal of biodiversity conservation programs worldwide (see IUCN 2007; Mackey et al. 2010; Saura et al. 2014; Correa Ayram et al. 2016). In landscapes increasingly fragmented by urban and agricultural development such as the Coffs Coast and in the face of the current woodland bird crisis (see Bennett and Watson 2011; Ford 2011), effective restoration action is urgently needed. This work must target specific parts of these landscapes where key taxa still occur and beneficial outcomes for their conservation are achievable – areas where existing habitat can be protected and, if required, regenerated and new habitat for threatened and declining species can be successfully established.

The emphasis in these areas needs to be on providing functional habitat for species still present and those that could be reasonably expected to return over time in response to ongoing habitat rehabilitation and restoration. Functional habitat is habitat of sufficient size, structure and quality or condition to allow target taxa – woodland and forest birds in this project – to survive, successfully reproduce and disperse. In the study area, current bushland regeneration has been underway since 2009 and continues under funds obtained in the current project and through Coffs Harbour Regional Landcare’s ongoing commitment of resources.

The site-specific knowledge needed to inform this work was the focus of the surveying component of this project - determining what bird species remain, where they occur and how they utilise habitat (see Sections 4.2 and 4.3). Systematic surveys undertaken in the project have determined, for the first time, the abundance, species richness and composition of bird communities present at 15 sites in the study area and their use of forest, woodland, grassland and wetland habitats. This has now established an important baseline for future site-based monitoring of bird responses to habitat protection and bushland restoration actions (see Sections 4.3.2 and 5).

4.2 Important bird conservation sites and habitat use

In bird conservation terms, South Moonee Forest was the most important source and breeding area for resident and migratory forest bird species surveyed in the study area. Both sites surveyed in South Moonee Forest – Sites 11 and 13 - provided key foraging, refuge and, for some, nest sites for 67 species or nearly 61% of all bird species recorded in the study. Six (6) of these were listed threatened species including the nationally critically endangered Swift Parrot (non-breeding winter visitor), one was a migratory bird protection agreement species (White-throated Needletail), while a further 18 species were of local and/or regional conservation significance (Section 3.3). The threatened (in NSW) Glossy Black-Cockatoo fed on fruits of Forest Oak *Allocasuarina torulosa* and Black She-Oak *A. littoralis* in blackbutt and ironbark forest at Site 11 (Plates 48-49, next page).

There was evidence to indicate the role of Sugarmill Creek in facilitating bird movement along its thickly vegetated course and adjoining moist forest floodplain to downstream sites near Green Bluff. Small populations of Australian Logrunner, Little Shrike-thrush, the rainforest seed-dispersing Green Catbird and shrub insectivore Spectacled Monarch, suspected to be breeding

at and near Site 13, were detected moving between this upper reach of the creek and lower sites including littoral rainforest at Site 1. Several other species were detected flying to and from South Moonee Forest during surveys at Sites 8 and 10 including Noisy Friarbird, Scarlet Honeyeater, Lewin's Honeyeater, Regent Bowerbird, Spangled Drongo, Channel-billed Cuckoo and Australasian Figbird. Therefore, Sugarmill Creek provided an important local corridor function for bird communities in the study area and, potentially for some species, further west to connect with the coastal range forests behind Sapphire to West Moonee and north to Emerald Heights. In this sense, South Moonee Forest had a significant broader landscape connectivity conservation role. This highlights the importance of protecting and conserving this part of Coffs Coast Regional Park, particularly as the Sapphire to Moonee urban population continues to expand and pressure on the habitats of South Moonee Forest and Green Bluff increases.

Plates 48-49: The threatened (in NSW) Glossy Black-Cockatoo is a highly specialised large granivore that feeds almost exclusively on the fruit of *Allocasuarina torulosa*, *A. littoralis* and other she-oaks but with only very limited records of it taking swamp oak (*A. glauca*) fruit (Higgins 1999). Glossy Black-Cockatoo has become increasingly rare with the ongoing loss of their preferred *Allocasuarina* forest habitat including tree hollow nest sites to urban development and agriculture across its coastal and inland range in NSW, southern Queensland and north-east Victoria (Higgins 1999). An adult pair was recorded feeding in an *A. torulosa* stand in South Moonee Forest (Site 11) on 11/12/18. Photographs: adult male (left – Plate 48) and adult female (right – Plate 49), both by Greg Clancy



The tidal sand and mudflats of Stingray Creek and Moonee Creek and rock platform around Green Bluff were a second important area for bird conservation in and adjacent to the study area. These supported foraging and likely breeding populations of Australian Pied Oystercatcher, Sooty

Oystercatcher, Eastern Osprey (and with potential tree nest sites in South Moonee Forest) and White-faced Heron. The critically endangered (in NSW) Beach Stone-curlew and critically endangered (globally) Far Eastern Curlew were also recorded foraging on these estuarine habitats in early mornings before human and dog activity began.

A third group of sites of significant bird conservation value included *Themeda triandra* and other native grassland and hermland at and near Green Bluff (Sites 4, 5 and 6), thick shrubs *Acacia longifolia* var *sophorae* and tuckeroo (stunted along dune-fronts), small rainforest shrubs and trees *Alectryon coriaceus* and *Acronychia oblongifolia* and grasses along and behind dunes at Site 7 and *Banksia integrifolia*, *Cryptocarya triplinervis* var *triplinervis* and tuckeroo patches in hind-dunes (Sites 12 and 15). Australasian Pipit foraged on Green Bluff and may have nested among the thick upper dune grasses near Site 7, despite some disturbance by dogs running leash-free along South Moonee/North Sapphire Beach. Tawny Grassbird foraged among thick grasses and acacia patches along lower dunes at Site 7. Red-backed Fairy-wren foraged with dependent young in blady grass and introduced Rhodes grass prior to its removal at Site 4 and along Site 7 dunes as did Brown Quail. Two active nests of Spotted Pardalote were detected – one near the northern end of Site 7 in a sandbank and the other in an earthen cliff at the southwest end of Site 5 transect on Green Bluff.

Wetland habitats of sedgeland, swamp paperbark and swamp oak forest at Site 8 on the floodplain of Stingray Creek and mangrove forest and saltmarsh patches at Site 10 were also of bird conservation importance. Breeding populations of Red-backed Fairy-wren, Variegated Fairy-wren, Brown Quail, Brown Thornbill, Scarlet Honeyeater, Olive-backed Oriole and Mistletoebird, the latter foraging on fruiting mistletoe clusters in swamp oak, all utilised Site 8. Brown Honeyeater foraged and nested in mangrove forest at Site 10 the mudflats and saltmarsh patches of which provided food for White-faced Heron, Australian White Ibis, Little Egret and Royal Spoonbill. Both the critically endangered (in NSW) Beach Stone-curlew and globally critically endangered Far Eastern Curlew foraged near this site.

Littoral rainforest at Sites 1 and 9 also provided important food, roost and nest sites for several endemic bird species. Deep litter layers on the forest floor were foraged over by White-browed Scrubwren, Eastern Whipbird, Australian Logrunner and Eastern Yellow Robin and Bassian Thrush. Australian Brush-turkey raked large amounts of leaf and small woody debris into an active mound at the eastern end of the site. The rainforest canopy and vine-laden understorey were foraged through by Little Shrike-thrush, Green Catbird, the threatened (in NSW) Rose-crowned Fruit-Dove, Large-billed Scrubwren, Brown Thornbill, Brown Gerygone, Spectacled Monarch, Rufous Fantail, Grey Shrike-thrush and Lewin's Honeyeater.

4.3 Bird populations and habitat use at restored sites

4.3.1 Treatment sites

The bird surveying component of the project aimed to sample sites that had been regenerated or restored and sites that were being regenerated during the bird survey period. These were termed treatment sites where bird monitoring during the project established reference points against which the value, condition and function of each treated site as bird habitat could be monitored and assessed over time.

Three treatment sites surveyed for birds in the project had yet to be regenerated by the Green Bluff Moonee Beach Landcare team prior to the first round of surveying in August 2017. These were Sites 4, 12 and 15. Work had been completed at Site 12 before the last bird survey in December 2018. Removal of Rhodes grass and molasses grass was still in progress at Site 4 after all bird surveying in the project had been completed. Restoration of Site 15 occurred after completion of the last bird survey (December 2018). The restoration of two other sites surveyed for birds - Sites 3 and 6 - had commenced prior to the first round of bird surveying in winter 2017 and continued throughout the project. Lantana and senna infestations downslope of the western end of Site 2 and towards Site 9 were later removed by late summer 2018-autumn 2019.

4.3.2 Limitations to the interpretation of bird responses to habitat restoration

Evaluating the impact of on-ground actions to regenerate, restore or re-plant habitat for forest and woodland birds requires site-specific monitoring of bird populations and communities over at least 10 years or more (see, for example, Huggett 2000; Whytock et al. 2017; Lindenmayer et al. 2018). In practice, however, it is very difficult to secure adequate funds to allow longer-term studies to occur given the average government program funding period is 2-3 years.

In the current project it was only possible to obtain short-term (2017-2018) data on bird species occurrence, species richness and habitat use at four surveyed treatment sites – Sites 3, 4, 6 and 12 – where restoration had either been completed or was ongoing. This limited the interpretation of bird species' responses to habitat restoration to preliminary, qualitative observations based on a small number (4) of sites over a short period (two years) of time (Section 4.3.3). Also, these results represented only one to two early stages in the growth-cycle response of vegetation to restoration and specifically as habitat for birds of the ground, understorey and lower canopy layers.

Further monitoring of bird populations at these and other sites being restored such as Site 15 and potentially, heavy weed infestations along upper Sugarmill Creek at Site 13, is therefore essential. This will provide the site data needed to determine bird population and community-level responses to the different growth stages of regenerated and revegetated sites over time. It will also allow for the identification of trends in bird species occupancy and utilisation of restored and revegetated sites, particularly for breeding and corridor use (see Section 5). This work will therefore demonstrate how habitat restoration, regeneration and revegetation activities in the study area contribute to improving and increasing functional habitat for forest, woodland and grassland avifauna.

4.3.3 Bird responses to habitat restoration at four sites

Some preliminary responses of bird populations and communities to habitat restoration and regeneration were evident at Sites 3, 4, 6 and 12. These included the utilisation of newly weeded habitats by some birds for foraging, perching, basking, preening and nesting, movement between different habitats by ground and understorey bird species that used revegetated sites as small habitat stepping stones, and the movement of some understorey birds away from lantana, senna and vine-laden sites that had been removed along edges, specifically Rutil Trail. These responses are discussed below.

The reduction of the amount of Blady Grass *Imperata cylindrica* that blanketed Site 3's ground habitat layer provided new foraging opportunities for Eastern Yellow Robin, Eastern Whipbird, White-browed Scrubwren and Bar-shouldered Dove. This work also reduced the potential for predation of ground-foraging birds and small reptiles through ambush by cat, fox and dog at this site. Care will be needed not to remove too much blady grass so that adequate foraging and ground movement cover and protection from predators and human disturbance is still available for Brown Quail, White-browed Scrubwren, Red-backed Fairy-wren, Variegated Fairy-wren and, potentially Tawny Grassbird.

The removal of lantana and some tobacco bush at Site 3 allowed lilly pilly and other native trees and shrubs to grow densely and quickly. These provided food, roost, winter-sunbathing, preening and nest sites for understorey birds including Red-backed Fairy-wren, Large-billed Scrubwren, Brown Thornbill, Grey Fantail, Golden Whistler, Silvereeye and Red-browed Finch as well as Lewin's Honeyeater, Eastern Yellow Robin and White-cheeked Honeyeater. Fruiting *Acmena* and *Syzygium* provided food for Regent Bowerbird, Australasian Figbird and Brown Cuckoo-Dove, as did retained tobacco bush stems.

Recent revegetation at Site 6 facilitated small bird movement between habitat patches from the northern side of the headland south to Site 12 along Rutile Trail. The banksia, acacia and lilly pilly plantings provided small habitat stepping stones that Variegated Fairy-wren, Brown Thornbill, Silvereeye, White-browed Scrubwren and Eastern Yellow Robin used. Brown Thornbill was observed delivering insects to nestlings in a low *Themeda triandra* tuft near acacia regrowth in August 2017. The nest site was marked with yellow flagging tape to reduce the risk of it being trampled during bush regeneration work. The retention and expansion of *Themeda triandra* grassland and other native grasses at Site 6 could be expected to increase seed supplies for Red-browed Finch, Brown Quail and Bar-shouldered Dove.

Although part of standard bush regeneration practice, the removal of lantana, senna and introduced vines at and near Site 12 caused a localised loss of foraging, refuge and potentially nesting habitat for small birds of the understorey. These were Variegated Fairy-wren, White-browed Scrubwren, Large-billed Scrubwren (also a mid-canopy species), Brown Thornbill and Silvereeye. These species were either not recorded or were recorded in lower numbers at this site in the summer 2018 survey (post-removal of lantana, senna and exotic vines) than in the preceding surveys. However, piles of lantana left on the ground nearby were foraged through and possibly nested in by White-browed Scrubwren, Variegated Fairy-wren and Brown Thornbill.

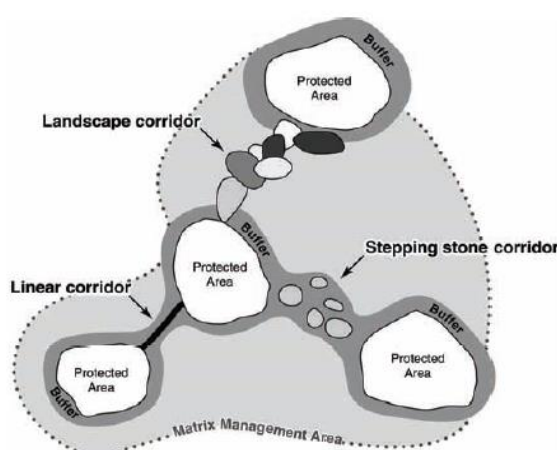
The conversion of Site 4's former tall grassland of Rhodes grass, molasses grass, *Paspalum* and other introduced grasses into native grassland with *Banksia integrifolia*, *Allocasuarina littoralis* and tuckeroo isolates changed the suitability of the site as habitat for some bird species. Tawny Grassbird once foraged at this site utilising the tall dense grasses as cover while foraging and as refuge from raptors and other predators (A. Huggett pers. obs.). Part of the site had been previously burnt in the decade preceding the bird surveys (L. Davis pers. comm.). This would have caused an immediate loss of habitat for Tawny Grassbird, Brown Quail, Red-browed Finch and possibly Australasian Pipit. However, in time, the re-establishment of native grassland cover and improved shelter provided by established banksia, she-oak and tuckeroo would be expected to provide foraging and refuge habitat for Red-browed Finch, Brown Quail, Red-backed Fairy-wren and Bar-shouldered Dove. Tawny Grassbird requires the fire-free maintenance of taller thick

grassland and low shrubland cover (Higgins et al. 2006) such as occurs at Site 7 where this species was recorded during the project.

4.4 Connectivity conservation and restoration design

Restoring habitat for forest, woodland and grassland birds takes time, money, long-term commitment, and science-informed planning and design. The latter needs to be based on an understanding of the concept of ecological thresholds and principles of connectivity conservation for dispersal-limited species in fragmented landscapes (see, e.g., Scotts 2003; Huggett 2005; Radford et al. 2005; Radford and Bennett 2007; InSight Ecology 2016). Figure 2 illustrates some key elements of connectivity conservation planning that should underpin the design of revegetation and regeneration projects for forest and woodland birds and other fauna – core remnants or protected areas, the landscape matrix management area (effectively the study area of local landscape scale restoration projects) and native vegetation acting as habitat stepping stones and linear and landscape corridors.

Figure 2: Some conceptual components of connectivity conservation spatial planning showing four types of revegetation and restoration design – linear corridor, landscape (larger) corridor, habitat stepping stones and buffer zones enhancing and protecting remnants (after Bennett 2004).



The metrics - size, length and width - and spatial arrangement of revegetation corridors and stepping stones has been discussed at length in the applied restoration ecology literature. Some have suggested that the length of corridors and the size of gaps within the corridors are more important than corridor width, based on dispersal studies of woodland bird species across gaps (see Doerr et al. 2011). Others have maintained that Australian woodland and forest bird movement is species-specific and that factoring in adequate corridor size, length, width and strategic landscape position in the design and implementation of revegetation and regeneration projects to re-connect bird populations is recommended (see Huggett 2000; Huggett et al. 2004; Radford and Bennett 2007; Southern New England Landcare 2015; InSight Ecology 2017, 2018a, b).

The current project represents a balance between factoring in these important restoration and revegetation design considerations and what can be realistically achieved on the ground. Practical challenges for many restoration projects are to secure the participation of land

managers and assistance from local communities to do the work, together with enough ongoing funding to support these projects. While the latter is a key constraint, the Avifauna of Green Bluff and South Moonee Forest Project should be viewed as the first stage of an ongoing effort to understand how bird communities respond to habitat regeneration, restoration and revegetation intervention. Further work should build on the results of this baseline monitoring to ensure that bushland regeneration and restoration and bird habitat conservation work closely together to protect, enhance and restore the biodiversity values of the study area (see Section 5).

5. Recommendations

5.1 Overview

The protection and conservation management of the rich avifauna of Green Bluff and South Moonee Forest will require coordinated, adequately resourced and science-informed action to rehabilitate and restore habitat, reduce key threats and address management issues, engage and educate local communities and monitor the performance of treated and reference sites as bird habitat over the longer term. This will be very challenging for public land managers, Coffs Harbour Regional Landcare and Green Bluff Moonee Beach Landcare Team and community volunteers alike as the number of people living and holidaying at Moonee Beach, Sapphire Beach and Emerald Beach continues to significantly increase. This will place increasing pressure on the quality, protection and conservation management of these habitats and their outstanding floral and faunal communities, particularly in the current absence of local parkland available for public recreation at Moonee Beach.

The following recommendations specifically address each of these requirements for protecting, conserving and managing native bird communities and their habitat in the study area over at least the next 10 years. These recommendations and the management issues they address should be worked into a plan of management for South Moonee Forest and Green Bluff given that South Moonee Forest has been recently included in Coffs Coast Regional Park, managed by NSW National Parks and Wildlife Service (NPWS). This will require coordination between NPWS, NSW Department of Planning, Industry and Environment (DPIE), Coffs Harbour and District Local Aboriginal Land Council and Coffs Harbour Regional Landcare. DPIE is responsible for administration of the NSW Crown Holiday Parks Trust which manages Green Bluff and its connecting headland bushland as a Crown land reserve. This area includes Sites 1-6 surveyed for avifauna in the project.

5.2 Monitoring habitat restoration and revegetation sites for avifauna

Further monitoring of the 15 sites surveyed for avifauna in the project is recommended. This will build on baseline monitoring completed in the 2017-2018 program by allowing the identification and analysis of bird population and community-level responses to habitat restoration and revegetation works at 7 of these sites (Sites 2, 3, 4, 6, 7, 12 and 15) over time. This information is essential to be able to accurately demonstrate how funded on-ground restoration actions improve habitat for avifauna, particularly conservation-significant species and, potentially, other fauna. It will also enable bird data to be replicated and compared across seasons and years to help understand how bird communities change over time and under different environmental stressors such as habitat disturbance, fire and climate change-related drought at the 8 control or

reference sites (Sites 1, 5, 8, 9, 10, 11, 13 and 14) now established in the study area. Specific actions recommended to achieve these desired outcomes include:

- Conduct two surveys every year for at least 10 years at each of the 15 sites surveyed in this project – one survey in the bird non-breeding season (winter – first week of August) and one in the bird breeding season (early summer – second week of December). Reverse the order of working of surveys conducted between years so that sites are sampled in reverse order in each alternate survey year;
- Record all bird species detected at each survey site using the same survey method, survey effort, field record system and database deployed in the 2017-2018 surveys;
- In breeding season surveys, aim to obtain confirmed breeding records of bird species at each site where possible, including nest sites, number of young birds detected and number of newly independent young (if possible);
- Utilise the volunteer Moonee Bird Team and train and use other interested community members especially local residents, where possible, to assist in conducting the surveys under the leadership of an experienced professional ornithologist;
- Consideration could be given to adding new sites planned for revegetation and/or regeneration to the total of 15 sites to be monitored. This would increase the amount of data that could be obtained and allow for statistically meaningful analysis of results;
- Take photographs at each site's established photo-points to allow assessment of the effect of growth stage and habitat condition of regenerated and revegetated habitat on bird occurrence, relative abundance, species richness and habitat use over time;
- Produce a short report of the key results of each survey completed and implications for habitat restoration and avifaunal conservation management;
- Promote local media and online publicity of the results of the surveys, particularly as inter-seasonal and breeding data builds for the monitoring project.

5.3 Coordinating and resourcing the restoration effort

Coordinated planning and implementation of best-practice bushland regeneration and restoration needs to recognise the importance of retaining thick understorey and groundcover habitat for small insectivorous and omnivorous birds and other fauna. This can be easily overlooked during the planning and implementing of bushland restoration and rehabilitation projects.

In the study area this means that Coffs Harbour Regional Landcare and Green Bluff Moonee Beach Landcare Team need to work closely and communicate effectively with the Moonee Bird Team to ensure that patches of lantana and understorey vine habitat scheduled for removal are retained in a mosaic pattern, where possible, over the period of planned regeneration at and near a site surveyed for birds. This allows for foraging and potentially nesting habitat of White-browed Scrubwren, Large-billed Scrubwren, Variegated Fairy-wren, Red-backed Fairy-wren, Brown Thornbill and Silvereye to be still available while other patches are progressively removed and preferably new native understorey habitat re-planted. Also, planned removal of lantana and vine patches should be scheduled for the small understorey bird non-breeding season (ie. late autumn-early winter) wherever possible to minimise potential impact on their breeding cycle in the study area.

Adequate resourcing of habitat restoration and bird monitoring components is essential. New funding applications to NSW Environmental Trust's Restoration and Rehabilitation Program are recommended. These should seek funds to continue the valuable work underway by both the landcare and bird monitoring teams in the study area, with a focus on demonstrating the contribution of the restoration effort over time to improving bird habitat and promoting bird survival, reproduction and movement. Other sources of funding should also be considered such as Landcare grants, small environmental grants for community groups and the Norman Wettenhall Foundation grants. The latter program provides funds for bird conservation and on-ground habitat restoration proposals, mostly in NSW and Victoria.

5.4 Engaging and educating local communities

The engagement and education of the Moonee Beach, West Moonee, Heritage Park Estate and North Sapphire Beach communities is an ongoing goal of habitat restoration and bird conservation in the study area. Progress has been achieved but there is a clear need to continue improving local community knowledge of the requirements of bird species and their protection and habitat restoration. There is also a need to increase the engagement and active participation of these communities and the broader region in protecting avifauna and their habitat in South Moonee Forest and Green Bluff.

Mechanisms for achieving these outcomes include conducting field workshops focusing on habitat regeneration and revegetation for conservation-significant bird species, bird monitoring training events, on-site community information sessions and website and social media promotion. These should be integrated with existing Landcare community education and training events as well as through Coffs Harbour City Council's biodiversity management program.

5.5 Reducing key threats and addressing land management issues

Eight key threats to avifauna and their habitats exist in the study area as well as a number of current land management issues that require action to protect and conserve South Moonee Forest and Green Bluff. These include incursion of dogs, cats and humans, predation by European red fox, grazing of planted and remnant native vegetation by European brown hare and macropods, weed incursion, vandalism of littoral rainforest and swamp oak forest EECs and other native vegetation, fire, rubbish dumping, and erosion of *Themeda triandra* headland grassland EEC by human use of multiple walking tracks and parts of South Moonee Forest by trailbikes.

Incursion into planted and remnant grassland, forest, woodland and wetland habitats in the study area by people, unleashed domestic dogs and domestic and feral cats poses significant threats to the survival and reproductive success of birds and other native fauna. Recent observed instances of dogs chasing Australian Brush-turkey, Brown Quail, Bar-shouldered Dove, the threatened Australian Pied Oystercatcher and Eastern Grey Kangaroo highlight the need for improved dog management including enforcing by warnings and fines of the existing on-leash requirement on the sand/mud flats of Moonee Creek and Stingray Creek estuaries, Moonee Beach in Moonee Beach Nature Reserve, Green Bluff headland and walking trails, Rutile Trail and South Moonee Forest. Increased NPWS ranger and other authorised officer patrols of these areas are needed to help promote local and tourist awareness and compliance with this requirement. Current community education and awareness-raising of the threatened fauna and flora reasons for this requirement has been initiated through the project, direct engagement with dog walkers

and others along tracks during the bird surveys and at on-site bird field days and landcare events. Direct control measures to remove feral cats should be considered under a NPWS and Crown land management plan for the study area.

Predation of adult and young birds by European red fox reduces avian reproductive success and recruitment of new birds to offset mortality in bird populations in bushland across Australia. This can threaten the local survival of bird and other fauna species, particularly of those species present in already low numbers and/or are subject to other threats and threatening processes. Control measures such as baiting and den detection and destruction should be considered in parts of the study area such as South Moonee Forest, as part of a management plan for the newly acquired addition to the NPWS estate.

There have been increased reports of European brown hare in natural habitats and along road verges at Moonee Beach and Emerald Beach since 2018. This species voraciously grazes native and introduced vegetation and thus poses a threat particularly to new plantings and regenerating plants at Green Bluff and along Rutile Trail. Management of this species is best undertaken through a coordinated pest management plan for the study area, ideally as part of an overall management plan for Coffs Coast Regional Park and the Crown land reserve. Installation of robust plant guards to reduce herbivory of newly planted sites by Eastern Grey Kangaroo, Red-necked Wallaby and European brown hare should continue.

Weed incursion into native bushland is an ongoing threat to the ecological integrity of planted and remnant forest, woodland and grassland habitats in the study area and generally in natural areas. Existing weed management and bush regeneration methods implemented by Green Bluff Moonee Beach Landcare Team should continue. The patch mosaic approach to the removal of lantana and other thick ground cover weeds should be followed to minimise impact on small birds dependent on thick ground and shrub cover, as discussed in Section 5.3.

During the project there were at least three documented instances of vandalism of threatened native plant communities in the study area – littoral rainforest EEC and swamp oak forest EEC. Trunks and branches of trees in a littoral rainforest patch near Site 9 had been cut down and snapped off at a campsite (location: 30.21403°, 153.15952°) prior to the first bird survey in December 2017 (Plates 50-51, page 56). At a second site west of Rutile Trail near Site 8 (location: 30.21531°, 153.15895°), swamp oak and swamp paperbark had been cut down and pieces of dressed timber nailed onto trees prior to the December 2018 survey (Plates 52-53, page 57). Trees and shrubs at a third site beside Rutile Trail had also been cut down and piled along the trail around October 2018. Installation of camera traps may be needed to obtain evidence of these vandals. Ranger patrols would also be helpful in the area.

Fire also poses a threat to birds and their habitat in the study area. A prescribed burn that was undertaken on 29 July 2015 to help eradicate introduced grasses at Site 4 on Green Bluff headland (L. Davis pers. comm.) removed foraging and refuge habitat for the locally conservation-significant Tawny Grassbird. Since then this species has not been recorded on Green Bluff headland. Careful planning and coordination is needed to ensure adequate areas of tall dense grassland habitat are available in the study area for Tawny Grassbird and other species including Brown Quail, Pheasant Coucal, Red-browed Finch and Red-backed Fairy-wren.

Two rubbish dumps were detected during the bird surveying work. One contained asbestos in old building waste and had been cordoned off by warning tape erected by NPWS off Rutile Trail in the south-west corner of the study area at 30.22000°, 153.15179° (Plate 54). The second site was detected during surveying of Site 13 on 15/12/17 at 30.21589°, 153.14972° and had yet to be cordoned off or removed (Plate 55). Both sites require removal using asbestos safety equipment as soon as possible. Significant amounts of plastic, foam, insulation and other building waste strewn through blackbutt forest adjoining North Sapphire Beach Estate in the south-west corner of the study area were removed by members of the Moonee Bird Team during the first three surveys. Appropriate signage is recommended to inform and enlist local community support in reporting rubbish disposal in the area. There is also a need for NPWS to regularly monitor and chainlock a gate that can be addressed directly from Pacific Highway near the arboreal mammal overhead rope bridge. The gate's lock and chain is often removed and this track allows direct dumping access to South Moonee Forest. Remote camera surveillance would be helpful at this location.

Ongoing erosion of *Themeda triandra* headland grassland and herbland EEC has been caused by the creation of multiple walking tracks around and across Green Bluff (Plates 56-58) as the number of people accessing the headland, often walking unleashed dogs, has significantly increased in the past 8 years. The design and installation of a raised boardwalk made of recycled material similar to the existing boardwalk along the trail near Sites 1-3 but fixed to a galvanised metal base is recommended to reduce this impact. The walkway would also allow for the inclusion of wider sections where people can stop and read interpretive signage about the importance and conservation of this EEC and its biodiversity and the ongoing landcare work.

A second area of erosion occurs at Site 14 in the northern part of the study area off Parish Close, Moonee Beach and has been caused by earthworks to construct a trailbike course (Plates 59-60). This has eroded a creek bank and upper slopes and led to the accumulation of plastic drink containers and other waste. It requires professional erosion remediation advice and action to prevent further loss of sediment and pollution of the small tributary of Sugarmill Creek. Appropriate signage is needed to inform and engage the support of local residents that use the area, ideally that the area is now part of NPWS estate.

Plates 50-51: Vandalism of littoral rainforest EEC in the study area caused an incremental loss of foraging and nesting resources for birds and other fauna that utilised these habitats. There has been repeated tree vandalism along and off Rutile Trail with old-growth *Cryptocarya triplinervis* var *triplinervis* growing in a hind dune near Site 7 damaged by initials carved deep into the bark. Photographs: InSight Ecology, 11/12/17



Plates 52-53: The cutting down of swamp paperbark and trees of the threatened Swamp Oak Floodplain Forest EEC, nailing of boards and use of blue-paint graffiti on swamp oaks and swamp paperbarks near the eastern edge of Site 8 off Rutile Trail represents a third known round of ongoing environmental vandalism in the study area. Photographs: InSight Ecology, 11/12/18



Plates 54-55: Rubbish dump sites occurred off Rutile Trail near Site 11 (Plate 54 – upper, with inset showing sign fixed by NPWS) and west of upper Sugarmill Creek near Site 13 (Plate 55 – lower). Both sites require removal using asbestos handling equipment and appropriate disposal. Photographs: InSight Ecology, 15/12/17



Plates 56-58: The creation of multiple walking tracks, some with twin routes side by side, has exposed Green Bluff to erosion and fragmented the threatened *Themeda triandra* grassland and herbland plant community. A raised walkway and interpretive signs are needed to address this management issue. Photographs: InSight Ecology, 8/8/17 (Plates 56 and 57 – upper, looking west to the old lookout and middle) and 20/10/16 (Plate 58 – lower, looking east to the ocean)





Plates 59-60: Excavation of the southern bank and slopes of a tributary of Sugarmill Creek, off Parish Close Moonee Beach, to create a trailbike and possibly mountain bike course has caused erosion and sedimentation of receiving waters and affected tree growth. Photographs: InSight Ecology, 3/8/18





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APPENDIX

Appendix 1: All birds recorded in the Green Bluff to South Moonee Forest - Restoring Key Habitat and Connectivity Project 2016-2019 by InSight Ecology and the Moonee Bird Team, August 2017-December 2018, for Coffs Harbour Regional Landcare Ltd.

~ introduced species, **bold** * listed under NSW Biodiversity Conservation Act 2016 and/or Environment Protection and Biodiversity Conservation Act 1999, **bold** (no asterisk) species listed under China-Australia Migratory Bird Protection Agreement (CAMBA), Japan-Australia Migratory Bird Protection Agreement (JAMBA) or Republic of Korea and Australia Migratory Bird Protection Agreement (ROKAMBA). Time is given in 24-hour format. Location of each record is provided as easting and northing.

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
1	Australian Brush-turkey	<i>Alectura lathami</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest (<i>Casuarina glauca</i>) EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, male with breeding wattle
2	Australian Brush-turkey	<i>Alectura lathami</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	adult male raked active mound on bend of Stingray Creek
3	Australian Brush-turkey	<i>Alectura lathami</i>	30/07/2018	0730-0830	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	2 adult males interacted aggressively near existing mound on bend of Stingray Creek
4	Australian Brush-turkey	<i>Alectura lathami</i>	1/08/2018	1505-1555	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	adult male and owner of mound, obs. territory-calling at waypoint 1A
5	Australian Brush-turkey	<i>Alectura lathami</i>	3/08/2018	1555-1625	1	15	Rutile Trail south transect	30.21719° 153.15904°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/moist forest with senna and lantana, removed in Oct. 2018	sub-adult male foraged near waypoint 15B
6	Brown Quail	<i>Coturnix ypsilophora</i>	12/12/2017	0700-0740	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
7	Brown Quail	<i>Coturnix ypsilophora</i>	12/12/2017	1720-1845	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, sedgeland and mangroves along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & senna (some treated)	called, probably breeding in sedgeland
8	Brown Quail	<i>Coturnix ypsilophora</i>	11/12/2017	1755-1810	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called from edge Rutile Trail
9	Brown Quail	<i>Coturnix ypsilophora</i>	31/07/2018	1515-1615	7	7	Transect along beach dunal system	between 30.21734° 153.15942° & 30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flushed from thick low acacia in hind-dune
10	Brown Quail	<i>Coturnix ypsilophora</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21581° 153.15034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flushed from thick blady grass, marram grass and low acacia in dune system
11	Pacific Black Duck	<i>Anas superciliosa</i>	14/12/2017	1830-1920	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	flew S up Stingray Creek
12	Spotted Dove~	<i>Streptopelia chinensis</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	flew over main track
13	Spotted Dove~	<i>Streptopelia chinensis</i>	11/12/2017	0820-0845	1	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109°	Mixed vine and shrub remnant with plantings and blady grass understorey	called from nr lookout area
14	Spotted Dove~	<i>Streptopelia chinensis</i>	13/12/2018	1630-1720	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Road	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	flew from new housing area to likely nest in tributary vegetation near waypoint 14A

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
15	Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest EEC & swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak/swamp sclerophyll forest	perched near tobacco bush
16	Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	11/12/2017	0750-0805	1	2	Coastal Swamp Oak Forest EEC & swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak/swamp sclerophyll forest	perched, called near tobacco bush
17	Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Road	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged on tobacco bush
18	Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
19	Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	12/12/2018	1645-1820	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
20	Bar-shouldered Dove	<i>Geopelia humeralis</i>	8/08/2017	0825-0905	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called
21	Bar-shouldered Dove	<i>Geopelia humeralis</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, perched

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
22	Bar-shouldered Dove	<i>Geopelia humeralis</i>	11/12/2017	0820-0845	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	pair, male with female, called, perched on dead branch
23	Bar-shouldered Dove	<i>Geopelia humeralis</i>	11/12/2017	0900-0915	1	4	Transect through proposed regeneration/revegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	flewover
24	Bar-shouldered Dove	<i>Geopelia humeralis</i>	11/12/2017	1755-1810	3	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	flewover, 2 perched
25	Bar-shouldered Dove	<i>Geopelia humeralis</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced groundsel bush & some senna	flew through from South Moonee Forest
26	Bar-shouldered Dove	<i>Geopelia humeralis</i>	2/08/2018	0730-0830	4	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	perched in tobacco bush; 2 others sun-basked on dead branches
27	Bar-shouldered Dove	<i>Geopelia humeralis</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged along creek nr old bike course
28	Bar-shouldered Dove	<i>Geopelia humeralis</i>	3/08/2018	1555-1625	2	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	foraged trackside then into site
29	Bar-shouldered Dove	<i>Geopelia humeralis</i>	10/12/2018	0600-0650	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21271° 153.15958°	Littoral rainforest EEC	called, perched, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
30	Bar-shouldered Dove	<i>Geopelia humeralis</i>	10/12/2018	0700-0740	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	perched, sunned on sheoak branch
31	Bar-shouldered Dove	<i>Geopelia humeralis</i>	13/12/2018	0810-0845	3	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	male courted female
32	Wonga Pigeon	<i>Leucosarcia picata</i>	11/12/2018	0605-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flushed from ground foraging upslope nr western boundary with private property
33	Wonga Pigeon	<i>Leucosarcia picata</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flushed under bangalow palms
34	Wompoo Fruit-Dove*	<i>Ptilinopus magnificus</i>	14/12/2017	0850-0855	1	opportunistic record (recorded as Site 10)	edge of South Moonee Forest	not obtained	edge of South Moonee Forest with mangroves	Vulnerable species in NSW , called in the distance - estimated nr. junction Sugarmill & Stingray Creeks
35	Rose-crowned Fruit-Dove*	<i>Ptilinopus regina</i>	10/12/2018	0600-0650	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21267° 153.15953°	Littoral rainforest EEC	called, near E edge (waypoint 1C), fed on fruiting <i>Guioa semiglauca</i>
36	Rose-crowned Fruit-Dove*	<i>Ptilinopus regina</i>	10/12/2018	0850-0910	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, courted and fed on fruiting <i>Ficus obliqua</i> , <i>Polyscias</i>

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
										<i>elegans</i> and Tuckeroo south of waypoint 6C
37	Rose-crowned Fruit-Dove*	<i>Ptilinopus regina</i>	11/12/2018	1820	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	male called nr waypoint 6C
38	Rose-crowned Fruit-Dove*	<i>Ptilinopus regina</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called @ 0700 in old swamp paperbark forest along upper Sugarmill Creek
39	Topknot Pigeon	<i>Lopholaimus antarcticus</i>	12/12/2017	0550-0610	8	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	flock perched on living and dead Banksia branches nr N end of transect towards lookout
40	Topknot Pigeon	<i>Lopholaimus antarcticus</i>	12/12/2017	0700-0740	11	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	flock flew over then landed in top of brushbox - possibly part of flock recorded nearby 11/12/17
41	White-throated Needletail	<i>Hirundapus caudacutus</i>	12/12/2017	0700-0740	60	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	flock of at least 60 birds soared over Green Bluff and transect
42	White-throated Needletail	<i>Hirundapus caudacutus</i>	10/12/2018	0700-0740	12	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	soared above

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43	White-throated Needletail	<i>Hirundapus caudacutus</i>	11/12/2018	0605-0830	50	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flock soared above forest canopy
44	Australasian Gannet	<i>Morus serrator</i>	3/08/2018	1645	1	opportunistic record (recorded as Site 5)	Green Bluff headland	Green Bluff		flewover
45	Great Cormorant	<i>Phalacrocorax carbo</i>	12/12/2017	1720-1845	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover along creek to S
46	Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>	11/12/2017	0650-0740	8	opportunistic record (recorded as Site 10)	Stingray Creek	not taken	mudflat and mangrove margins	flewover
47	Pied Cormorant	<i>Phalacrocorax varius</i>	11/12/2017	0650-0740	1	opportunistic record (recorded as Site 10)	Stingray Creek	not taken	mudflat and mangrove margins	flewover
48	Pied Cormorant	<i>Phalacrocorax varius</i>	2/08/2018	0930-1000	4	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16284°	Themeda grassland and herbland on seacliffs EEC	flewover Green Bluff
49	Pied Cormorant	<i>Phalacrocorax varius</i>	11/12/2018	1720-1810	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover, headed south up Stingray Creek
50	Pied Cormorant	<i>Phalacrocorax varius</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flew south near dunes

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
51	White-faced Heron	<i>Egretta novaehollandiae</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in mangroves and along mudflat
52	White-faced Heron	<i>Egretta novaehollandiae</i>	11/12/2017	0650-0740	2	opportunistic record (recorded as Site 10)	Stingray Creek	30.21363° 153.15579°	mudflat and mangrove margins	foraged in shallows
53	White-faced Heron	<i>Egretta novaehollandiae</i>	30/07/2018	0730-0830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21363° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in mangroves
54	White-faced Heron	<i>Egretta novaehollandiae</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged along Stingray Creek
55	White-faced Heron	<i>Egretta novaehollandiae</i>	2/08/2018	0930-1000	1	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16284°	Themeda grassland and herbland on seacliffs EEC	foraged in grassland/herbland
56	White-faced Heron	<i>Egretta novaehollandiae</i>	10/12/2018	1755-1830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged on mudflats in mangroves
57	Little Egret	<i>Egretta garzetta</i>	11/12/2017	0650-0740	2	opportunistic record (recorded as Site 10)	Stingray Creek	not taken	mudflat and mangrove margins	foraged in shallows
58	Little Egret	<i>Egretta garzetta</i>	11/12/2018	1720-1810	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21471° 153.15668°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover to the west

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
59	Australian White Ibis	<i>Threskiornis molucca</i>	12/12/2017	1720-1845	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak forest with swamp paperbark and mangroves along Stingray Creek	flewover
60	Australian White Ibis	<i>Threskiornis molucca</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	flewover
61	Australian White Ibis	<i>Threskiornis molucca</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover Stingray Creek
62	Australian White Ibis	<i>Threskiornis molucca</i>	10/12/2018	1755-1830	4	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged on mudflats in mangroves
63	Australian White Ibis	<i>Threskiornis molucca</i>	11/12/2018	1720-1810	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover
64	Royal Spoonbill	<i>Platalea regia</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	flewover from S towards estuary
65	Eastern Osprey*	<i>Pandion cristatus</i>	8/08/2017	1025-1040	1	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21371° 153.16348°	Themeda grassland and herbland on seacliffs EEC	adult flewover towards ocean

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
66	Eastern Osprey*	<i>Pandion cristatus</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called, foraged over swamp oak canopy along Stingray Creek
67	Eastern Osprey*	<i>Pandion cristatus</i>	31/07/2018	1515-1615	1	7	Transect along beach dunal system	30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult flew above dunes north to Green Bluff seacliffs
68	Eastern Osprey*	<i>Pandion cristatus</i>	2/08/2018	0930-1000	1	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16284°	Themeda grassland and herbland on seacliffs EEC	adult soared above
69	Eastern Osprey*	<i>Pandion cristatus</i>	10/12/2018	0830-0845	1	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16248°	Themeda grassland and herbland on seacliffs EEC	adult soared over waypoint 5B
70	Eastern Osprey*	<i>Pandion cristatus</i>	13/12/2018	1630-1720	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	flew over tributary, likely pair recorded currently (Dec 2018) nesting along upper Sugarmill Creek in northern end of new housing area (North Sapphire Beach Estate)
71	White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	11/12/2017	0820-0845	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	adult flew over with fish
72	White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	31/07/2018	1515-1615	1	7	Transect along beach dunal system	30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult flew above dunes north to Green Bluff seacliffs

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
73	Whistling Kite	<i>Haliastur sphenurus</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover treetops
74	Whistling Kite	<i>Haliastur sphenurus</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called, foraged over swamp oak canopy
75	Brahminy Kite	<i>Haliastur indus</i>	3/08/2018	1645	1	opportunistic record (recorded as Site 4)				adult flewover headed north to Green Bluff
76	Brahminy Kite	<i>Haliastur indus</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult flew over to forage along beach
77	Brown Goshawk	<i>Accipiter fasciatus</i>	15/12/2017	0650-0830	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21396° 153.15073°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged through moist forest at 0810, along creek and adjoining floodplain
78	Swamp Harrier	<i>Circus approximans</i>	12/12/2017	0550-0610	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	flewover N end of transect
79	Swamp Harrier	<i>Circus approximans</i>	2/08/2018	1505-1535	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	adult foraged above waypoint 6C

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments	
80	Beach Stone-curlew*	<i>Esacus magnirostris</i>	9-15/12/17	0530-0630 daily	1		opportunistic record (also recorded as near Site 10)	Moonee Creek sand and mudflats	not taken	tidal sand and mudflats	Critically Endangered species in NSW , first confirmed record for Moonee Beach, 1 adult bird foraged along sand flats of Moonee Creek at low tide before and during survey period. The bird was present on the main sandbars including near picnic area (photos taken) mostly in the early mornings and late in the day, ie. prior to and after human and dog activity in the area. Also, likely foraged on mudflats near Site 10.
81	Australian Pied Oystercatcher*	<i>Haematopus longirostris</i>	11/12/2017	0650-0740	4		opportunistic record (recorded as Site 10)	Stingray Creek	not taken	mudflat and mangrove margins	Vulnerable species in NSW , male obs. condition-feeding female, 2 other birds in this group of 4 along S bank of Stingray Creek - 1 bird had orange bill indicating immature
82	Australian Pied Oystercatcher*	<i>Haematopus longirostris</i>	10/12/2018	0600-0650	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21212° 153.15964°	Littoral rainforest EEC	adult called, flew over N edge of site near creek	
83	Sooty Oystercatcher*	<i>Haematopus fuliginosus</i>	31/07/2018	1515-1615	3	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult pair flushed by beachwalker, flew north to Green Bluff along beach; third adult flew later north along beach	
84	Sooty Oystercatcher*	<i>Haematopus fuliginosus</i>	2/08/2018	0930-1000	2	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16284°	Themeda grassland and herbland on seacliffs EEC	adults flew over rock platform E end of headland nr waypoint 5B	
85	Sooty Oystercatcher*	<i>Haematopus fuliginosus</i>	10/12/2018	0830-0845	2	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16248°	Themeda grassland and herbland on seacliffs EEC	adults flew over waypoint 5B to rock platform southside	

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments		
86	Far Eastern Curlew*	<i>Numenius madagascariensis</i>	14/12/2017	0540	1		opportunistic record (recorded as near Site 10)		Moonee Creek sand and mudflats	not taken	tidal sand and mudflats	Critically Endangered species in NSW, Australia and globally. Adult bird foraged along sand flats of Moonee Creek at low tide before and during survey period and near Site 10. Also, previously recorded as 1-2 birds during summer non-breeding period 2008-17 at Moonee Creek estuary (A.H. pers. obs.)
87	Crested Tern	<i>Thalasseus bergii</i>	3/08/2018	1645	2		opportunistic record (recorded as Site 5)		opportunistic record	Green Bluff		flewover
88	Crested Tern	<i>Thalasseus bergii</i>	10/12/2018	0805-0820	1	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland – blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates			flewover headland (Site 5)
89	Silver Gull	<i>Chroicocephalus novaehollandiae</i>	12/12/2017	0630-0645	4	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21371° 153.16348°	Themeda grassland and herbland on seacliffs EEC			flewover
90	Silver Gull	<i>Chroicocephalus novaehollandiae</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC – small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21440° 153.15952°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland			flewover to coast
91	Silver Gull	<i>Chroicocephalus novaehollandiae</i>	13/12/2018	0635-0715	2	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales			flew south over dunes

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
92	Glossy Black-Cockatoo*	<i>Calyptorhynchus lathami</i>	11/12/2018	0605-0830	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21818° 153.15268°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult pair fed on <i>Allocasuarina torulosa</i> fruit in drier upslope area
93	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC – small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, flewover
94	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	11/12/2017	1755-1810	9	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	flock flewover S end to forage in banksias behind dunes
95	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	1/08/2018	0730-1030	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover to east, called
96	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	2/08/2018	0730-0830	20	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	flock flewover headed north
97	Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	10/12/2018	0850-0910	4	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, flewover
98	Galah	<i>Eolophus roseicapillus</i>	2/08/2018	0730-0830	2	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109°	mixed vine and shrub remnant with plantings and blady grass understorey	flewover, called
99	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	8/08/2017	0825-0905	2	1	Littoral rainforest EEC – small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, flewover

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
100	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	14/12/2017	1830-1920	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	flewover
101	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover to north
102	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	30/07/2018	0730-0830	10	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, flew west to South Moonee Forest
103	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	31/07/2018	0720-0930	6	13	South Moonee Forest – northern tributary of Sugarmill Creek transect near Moonee Beach village	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flew, called
104	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	1/08/2018	0730-1030	8	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flew, foraged, called in flowering swamp mahogany canopy

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
105	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	1/08/2018	1600-1625	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	flewover
106	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	2/08/2018	0730-0830	5	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	called, flewover
107	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	2/08/2018	0730-0830	19	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109°	mixed vine and shrub remnant with plantings and blady grass understorey	flock flewover towards Site 1
108	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	3/08/2018	0730-0930	4	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	flewover
109	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	3/08/2018	1505-1535	9	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called, flewover
110	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	10/12/2018	0600-0650	5	1	Littoral rainforest EEC – small patch on N side of walkway	30.21271° 153.15958°	Littoral rainforest EEC	called, flewover
111	Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	13/12/2018	1630-1720	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	flewover
112	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	8/08/2017	1500-1545	4	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	fed on fruiting tips of tall swamp oak near main trail

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
113	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover to north
114	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	30/07/2018	0730-0830	4	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, flew
115	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	1/08/2018	0730-1030	4	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover to east
116	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	2/08/2018	0905-0925	5	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland – blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	flewover, called
117	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	3/08/2018	1505-1535	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	perched in <i>Banksia integrifolia</i> at S end of transect, flew
118	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	10/12/2018	0700-0740	5	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	perched, sunned, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
119	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	11/12/2018	1720-1810	4	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover west to South Moonee Forest
120	Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	13/12/2018	1630-1720	9	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	perched, called, flew nr waypoint 14A
121	Musk Lorikeet	<i>Glossopsitta concinna</i>	30/07/2018	0730-0830	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, flew
122	Musk Lorikeet	<i>Glossopsitta concinna</i>	31/07/2018	0720-0930	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flew, called
123	Musk Lorikeet	<i>Glossopsitta concinna</i>	1/08/2018	0730-1030	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover to east nr waypoint 11D

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
124	Musk Lorikeet	<i>Glossopsitta concinna</i>	14/12/2018	0715-0845	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover
125	Little Lorikeet*	<i>Glossopsitta pusilla</i>	30/07/2018	0730-0830	4	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in flowering swamp mahogany and flew west
126	Little Lorikeet*	<i>Glossopsitta pusilla</i>	12/12/2018	1645-1820	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flew upstream along Sugarmill Creek, called
127	Little Lorikeet*	<i>Glossopsitta pusilla</i>	13/12/2018	1630-1720	20	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	flock called in flight, flew west along tributary

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
128	Australian King-Parrot	<i>Alisterus scapularis</i>	31/07/2018	0720-0930	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flew, called
129	Australian King-Parrot	<i>Alisterus scapularis</i>	3/08/2018	0730-0930	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	fed on tobacco bush end Sullivans Rd cul-de-sac nr site entry, flew south to forest
130	Swift Parrot*	<i>Lathamus discolor</i>	1/08/2018	0730-1030	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	two birds confirmed foraging in flowering swamp mahogany nr waypoint 11D then flew east
131	Pheasant Coucal	<i>Centropus phasianinus</i>	12/12/2018	0555-0600	1	13	South Moonee Forest – northern tributary of Sugarmill Creek transect near Moonee Beach village	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called towards Sugarmill Creek (downstream)
132	Eastern Koel	<i>Eudynamys orientalis</i>	11/12/2017	0650-0740	1	1	Littoral rainforest EEC – small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, flewover

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
133	Eastern Koel	<i>Eudynamys orientalis</i>	12/12/2018	0555-0600	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
134	Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called blackbutt forest edge
135	Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, flew
136	Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>	11/12/2018	0605-0830	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, mate pursuit

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
137	Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>	13/12/2018	1630-1720	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called in flight over tributary
138	Horsfield's Bronze-Cuckoo	<i>Chalcites basal</i>	1/08/2018	1600-1625	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called
139	Shining Bronze-Cuckoo	<i>Chalcites lucidus</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called frequently
140	Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>	1/08/2018	0730-1030	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called
141	Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>	3/08/2018	1505-1535	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	male called, perched in <i>Banksia integrifolia</i> at S end of transect
142	Brush Cuckoo	<i>Cacomantis variolosus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called from near blackbutt forest

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
143	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	13/12/2017	0650-0830	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, likely nesting – blackbutt forest
144	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	14/12/2017	0555-0935	5	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	group breeding in blackbutt spouts nr trail edge, mobbed by nesting Satin Flycatcher pair nearby
145	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, nesting in swamp mahogany hollow
146	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, likely nesting in ironbark spout in dry eucalypt forest area above creek nr waypoint 13D

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
147	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called, foraged along creek nr old bike track
148	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	10/12/2018	1625-1655	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called, likely nesting
149	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	13/12/2018	1630-1720	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21027° 153.15042°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called
150	Laughing Kookaburra	<i>Dacelo novaeguineae</i>	14/12/2018	0715-0845	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called to the south of waypoint 11C
151	Sacred Kingfisher	<i>Todiramphus sanctus</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called along edge mangroves

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
152	Sacred Kingfisher	<i>Todiramphus sanctus</i>	13/12/2017	0650-0830	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	male called for mate
153	Sacred Kingfisher	<i>Todiramphus sanctus</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	mating pursuits, called in blackbutt forest edge
154	Sacred Kingfisher	<i>Todiramphus sanctus</i>	1/08/2018	1505-1555	1	1	Littoral rainforest EEC – small patch on N side of trk	30.21232° 153.15909°	Littoral rainforest EEC	called, overwintering bird
155	Sacred Kingfisher	<i>Todiramphus sanctus</i>	11/12/2018	0605-0830	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, likely nesting in tree termite nests in blackbutt or swamp mahogany
156	Sacred Kingfisher	<i>Todiramphus sanctus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
157	Sacred Kingfisher	<i>Todiramphus sanctus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged along creek
158	Rainbow Bee-eater	<i>Merops ornatus</i>	11/12/2017	1755-1810	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	perched on dead outer branch, flew to take insects, likely nesting in adjacent hind-dunes
159	Rainbow Bee-eater	<i>Merops ornatus</i>	10/12/2018	0850-0910	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	perched, foraged from dead Banksia branches S of waypoint 6C
160	Rainbow Bee-eater	<i>Merops ornatus</i>	11/12/2018	0605-0830	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged
161	Rainbow Bee-eater	<i>Merops ornatus</i>	14/12/2018	0715-0845	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	perched, flew
162	Dollarbird	<i>Eurystomus orientalis</i>	12/12/2017	0845-0915	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flewover to forest

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
163	Dollarbird	<i>Eurystomus orientalis</i>	11/12/2017	0900-0915	2	4	Transect through proposed regeneration/revegetation zone below lookout	30.21332° 153.16182°	mixed grassland – blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	likely pair perched on dead outer branch of she-oak
164	Dollarbird	<i>Eurystomus orientalis</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	perched, flew
165	Dollarbird	<i>Eurystomus orientalis</i>	14/12/2017	1830-1920	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	perched, flew from dead branches nr N end transect
166	Dollarbird	<i>Eurystomus orientalis</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	nesting in blackbutt forest along trail edge
167	Dollarbird	<i>Eurystomus orientalis</i>	11/12/2017	1755-1810	5	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	flewover N end of transect, perched
168	Dollarbird	<i>Eurystomus orientalis</i>	10/12/2018	0850-0910	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	perched, called from dead Banksia branches S of waypoint 6C
169	Dollarbird	<i>Eurystomus orientalis</i>	10/12/2018	1755-1830	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21363° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	perched dead branch at creek edge, flew
170	Dollarbird	<i>Eurystomus orientalis</i>	11/12/2018	1820	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, foraged, likely nesting

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
171	Dollarbird	<i>Eurystomus orientalis</i>	11/12/2018	1720-1810	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flew south along Stingray Creek
172	Noisy Pitta	<i>Pitta versicolor</i>	2/06/2018	1130	1	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana (removed in Oct. 2018)	adult bird obs. foraging in hind-dune with vines
173	Superb Lyrebird	<i>Menura novaehollandiae</i>	14/12/2018	0715-0845	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21648° 153.15462°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	fresh (earlier in day), distinctive foraging scrapes/raking pattern in leaf litter at past lightly logged blackbutt stand near edge of dense swamp paperbark regrowth stand (photos taken)
174	White-throated Treecreeper	<i>Cormobates leucophaea</i>	13/12/2017	0650-0830	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	male called in blackbutt forest
175	White-throated Treecreeper	<i>Cormobates leucophaea</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, mate pursuits in blackbutts along trail edge

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
176	White-throated Treecreeper	<i>Cormobates leucophaea</i>	14/12/2017	0555-0935	3	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged along old-growth swamp paperbark in wet area with flowering lilies & <i>Gahnia sieberiana</i>
177	White-throated Treecreeper	<i>Cormobates leucophaea</i>	31/07/2018	0720-0930	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in dry eucalypt forest nr waypoint 13D
178	White-throated Treecreeper	<i>Cormobates leucophaea</i>	1/08/2018	0730-1030	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged in swamp box
179	White-throated Treecreeper	<i>Cormobates leucophaea</i>	1/08/2018	1600-1625	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged along swamp oak trunk
180	White-throated Treecreeper	<i>Cormobates leucophaea</i>	10/12/2018	1730-1750	1	9	Transect through Littoral rainforest EEC – small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
181	White-throated Treecreeper	<i>Cormobates leucophaea</i>	11/12/2018	0605-0830	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called in blackbutt forest
182	White-throated Treecreeper	<i>Cormobates leucophaea</i>	11/12/2018	1700-1710	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called, foraged
183	White-throated Treecreeper	<i>Cormobates leucophaea</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called in old flooded gum bark strips
184	White-throated Treecreeper	<i>Cormobates leucophaea</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	pair foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
185	White-throated Treecreeper	<i>Cormobates leucophaea</i>	14/12/2018	0715-0845	3	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	
186	Green Catbird	<i>Ailuroedus crassirostris</i>	12/12/2017	0550-0610	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	male called for mate nr N end of transect toward swamp oak grove
187	Green Catbird	<i>Ailuroedus crassirostris</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in rainforest trees and shrubs along creek, likely breeding nearby (full breeding territory call given by male)
188	Green Catbird	<i>Ailuroedus crassirostris</i>	31/07/2018	0720-0930	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adult male called foraged in ironbark and blackbutt canopy in dry forest nr waypoint 13D, flew to Sugarmill Creek
189	Green Catbird	<i>Ailuroedus crassirostris</i>	11/12/2018	1720-1810	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21471° 153.15668°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called nr Stingray Ck crossing on bend, headed east toward Site 1 area

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
190	Green Catbird	<i>Ailuroedus crassirostris</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
191	Regent Bowerbird	<i>Sericulus chrysocephalus</i>	11/12/2017	0750-0805	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	likely female flew through undercanopy
192	Regent Bowerbird	<i>Sericulus chrysocephalus</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	immature male & female, foraged
193	Regent Bowerbird	<i>Sericulus chrysocephalus</i>	15/12/2017	0650-0830	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adult male perched, flew to creek
194	Regent Bowerbird	<i>Sericulus chrysocephalus</i>	2/08/2018	0730-0830	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	adult male, foraged in tobacco bush, flew
195	Regent Bowerbird	<i>Sericulus chrysocephalus</i>	10/12/2018	1755-1830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21363° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	adult male flew west to South Moonee Forest
196	Regent Bowerbird	<i>Sericulus chrysocephalus</i>	11/12/2018	1820	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	adult male & female foraged nr waypoint 6C

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
197	Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	3/08/2018	0730-0930	4	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	perched, flew south, all 'green' birds
198	Superb Fairy-wren	<i>Malurus cyaneus</i>	12/12/2017	1720-1845	4	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called, foraged, started roosting in low dense swamp oak branches E bank of creek
199	Superb Fairy-wren	<i>Malurus cyaneus</i>	30/07/2018	0915-1040	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called along creek's mudflats
200	Superb Fairy-wren	<i>Malurus cyaneus</i>	3/08/2018	0730-0930	4	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, called, N edge near Parish Close
201	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	11/12/2017	0820-0845	3	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	2 females with 1 fledgling, foraged and fed young bird in blady grass nr N end
202	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	11/12/2017	0900-0915	5	4	Transect through proposed regeneration/revegetation zone below lookout	30.21395° 153.16182°	mixed grassland – blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	family group – 1 male (with caterpillar for young), 1 female & 2 recent fledglings creched in Banksia at S end of transect
203	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	12/12/2017	0845-0915	4	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	group foraged among marram grass and acacia/lantana thickets

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
204	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	12/12/2017	1720-1845	10	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21531° 153.15895°, 30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & senna (some treated)	2 groups: 1 st (4 birds) foraged and moved in swamp oak stands with sedgeland, with 1 juvenile; 2 nd group (6 birds, with young) foraged in new growth sedgeland E bank Stingray Creek
205	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	30/07/2018	0915-1040	4	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called in swamp oak and paperbark forest
206	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	31/07/2018	1515-1615	3	7	Transect along beach dunal system	30.21672° 153.16008°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult male & 2 females foraged, called in thick blady grass, acacia and tuckeroo thickets in swale nr Tawny Grassbird
207	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	31/07/2018	1515-1615	7	7	Transect along beach dunal system	30.21507° 153.16104°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	2 nd group of birds flew between acacia, dianella & flowering scaevola patches along hind-dune
208	Red-backed Fairy-wren	<i>Malurus melanocephalus</i>	13/12/2018	0635-0715	4	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult males and females foraged in low acacia and dead bitou bush along dune swale
209	Variiegated Fairy-wren	<i>Malurus lamberti</i>	8/08/2017	1500-1545	3	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged E end of transect
210	Variiegated Fairy-wren	<i>Malurus lamberti</i>	11/12/2017	1825-1835	4	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	
211	Variiegated Fairy-wren	<i>Malurus lamberti</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	male & female

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
212	Variiegated Fairy-wren	<i>Malurus lamberti</i>	12/12/2017	0845-0915	6	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult female, male & immature bird, foraged in thick low acacia and grasses, and rest of group further N along foredune
213	Variiegated Fairy-wren	<i>Malurus lamberti</i>	11/12/2017	1650-1720	6	9	Transect through Littoral rainforest EEC – small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	4 adult/subadult males and 4 females
214	Variiegated Fairy-wren	<i>Malurus lamberti</i>	14/12/2017	1830-1920	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged along mangrove edge
215	Variiegated Fairy-wren	<i>Malurus lamberti</i>	14/12/2017	0555-0935	4	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged
216	Variiegated Fairy-wren	<i>Malurus lamberti</i>	14/12/2017	0555-0935	3	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	male losing breeding colours, foraged, called in saw sedge (<i>Gahnia sieberana</i>) patch

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217	Variiegated Fairy-wren	<i>Malurus lamberti</i>	14/12/2017	0555-0935	1	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	obs. foraging nr waypoint 11D
218	Variiegated Fairy-wren	<i>Malurus lamberti</i>	31/07/2018	0720-0930	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in Gahnia swards in dry eucalypt forest nr waypoint 13D
219	Variiegated Fairy-wren	<i>Malurus lamberti</i>	1/08/2018	0730-1030	4	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called in thick Gahnia and sedges nr waypoint 11A
220	Variiegated Fairy-wren	<i>Malurus lamberti</i>	1/08/2018	1600-1625	4	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, called – in nearby piles of removed lantana just downslope
221	Variiegated Fairy-wren	<i>Malurus lamberti</i>	2/08/2018	0730-0830	4	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called – 2 adult males, 1 female & 1 indeterminate
222	Variiegated Fairy-wren	<i>Malurus lamberti</i>	3/08/2018	1505-1535	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	both birds flew across Rutile Trail into site, foraged in debris piles

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
223	Variiegated Fairy-wren	<i>Malurus lamberti</i>	10/12/2018	0700-0740	4	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
224	Variiegated Fairy-wren	<i>Malurus lamberti</i>	10/12/2018	0805-0820	5	4	Transect through proposed regeneration/vegetation zone below lookout	30.21395° 153.16182°	mixed grassland – blady grass and Rhode’s grass with <i>Banksia integrifolia</i> and swamp oak isolates	foraged, called in grass and large <i>Banksia integrifolia</i> (waypoint 4B)
225	Variiegated Fairy-wren	<i>Malurus lamberti</i>	10/12/2018	1755-1830	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21363° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, flew, edge of mangroves and in sedges
226	Variiegated Fairy-wren	<i>Malurus lamberti</i>	11/12/2018	0605-0830	3	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, likely bred nearby in dense <i>Gahnia sieberana</i> swards
227	Variiegated Fairy-wren	<i>Malurus lamberti</i>	12/12/2018	0600-0810	5	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
228	Variiegated Fairy-wren	<i>Malurus lamberti</i>	12/12/2018	1645-1820	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called in gahnia patches nr waypoint 13D, included 2 young birds in group so bred in area
229	Variiegated Fairy-wren	<i>Malurus lamberti</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult female perched in banksia nr waypoint 7A
230	Variiegated Fairy-wren	<i>Malurus lamberti</i>	14/12/2018	0715-0845	5	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	group foraged, called, included 2 adult males, 1 female & 2 juveniles, thus bred in area – edge of dry blackbutt forest with gahnia and swamp paperbark forest
231	White-browed Scrubwren	<i>Sericornis frontalis</i>	8/08/2017	0915-0945	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	likely nesting pair – male scolded a lot
232	White-browed Scrubwren	<i>Sericornis frontalis</i>	8/08/2017	0915-0945	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	third bird (male), foraged near E end of transect, used lookout perch
233	White-browed Scrubwren	<i>Sericornis frontalis</i>	11/12/2017	1650-1720	2	9	Transect through Littoral rainforest EEC – small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	adult male & female foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
234	White-browed Scrubwren	<i>Sericornis frontalis</i>	14/12/2017	0555-0935	5	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276° (near)	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, with young birds from lantana patch S side of Rutile Trail west
235	White-browed Scrubwren	<i>Sericornis frontalis</i>	15/12/2017	0650-0830	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adults with young bird foraged nr waypoint 13A
236	White-browed Scrubwren	<i>Sericornis frontalis</i>	31/07/2018	0720-0930	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	male called, adult pair foraged in Gahnia and other grasses in dry eucalypt forest nr waypoint 13D, likely nesting nearby
237	White-browed Scrubwren	<i>Sericornis frontalis</i>	1/08/2018	0730-1030	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult pair foraged in thick Gahnia swards under swamp paperbark and swamp mahogany forest (nr waypoint 11D); likely nesting

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
238	White-browed Scrubwren	<i>Sericornis frontalis</i>	1/08/2018	0730-1030	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	2 nd pair foraged, called, likely nesting in Gahnia sward nr waypoint 11C
239	White-browed Scrubwren	<i>Sericornis frontalis</i>	2/08/2018	0730-0830	3	3	Transect through bush regeneration zone north of main track	30.21268° 153.160137	mixed vine and shrub remnant with plantings and blady grass understorey	adult pair (likely nesting) & 1 other bird, foraged, called, scolded
240	White-browed Scrubwren	<i>Sericornis frontalis</i>	3/08/2018	0730-0930	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	adult pair, likely breeding, male gave territory call; N edge along creek nr Parish Close reserve
241	White-browed Scrubwren	<i>Sericornis frontalis</i>	3/08/2018	1505-1535	3	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	pair + 1 foraged, used old lantana and senna debris piles left after bush regeneration near site, likely nesting nr site
242	White-browed Scrubwren	<i>Sericornis frontalis</i>	10/12/2018	0600-0650	2	1	Littoral rainforest EEC – small patch on N side of walkway	30.21271° 153.15958°	Littoral rainforest EEC	adult pair called, foraged
243	White-browed Scrubwren	<i>Sericornis frontalis</i>	10/12/2018	1625-1655	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21334° 153.15985°	Swamp oak and swamp sclerophyll forest	male called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
244	White-browed Scrubwren	<i>Sericornis frontalis</i>	11/12/2018	0605-0830	3	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called, flew
245	White-browed Scrubwren	<i>Sericornis frontalis</i>	12/12/2018	0600-0810	8	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adults with fledged young, foraged, called – Gahnia and Cordyline patches
246	White-browed Scrubwren	<i>Sericornis frontalis</i>	12/12/2018	1645-1820	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called, flew – creek below main waterhole
247	White-browed Scrubwren	<i>Sericornis frontalis</i>	13/12/2018	0635-0715	2	7	Transect along beach dunal system	30.21581° 153.15034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	male gave territory call in banksia edge, female flushed from lower dune, flew to ridge area

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
248	White-browed Scrubwren	<i>Sericornis frontalis</i>	14/12/2018	0715-0845	8	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	group of adults with 2 juveniles, foraged, called & thus bred in area – edge of dry blackbutt forest and gahnia, swamp paperbark, swamp mahogany & swamp box forest
249	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	8/08/2017	0825-0905	2	1	Littoral rainforest EEC – small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	foraged, likely pair
250	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	11/12/2017	1620-1640	4	1	Littoral rainforest EEC – small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	2 juveniles with parents in vine tangles
251	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	12/12/2017	0750-0830	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called – likely nesting
252	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called
253	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	31/07/2018	0720-0930	6	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called in dense vine tangles near creek

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
254	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	1/08/2018	0730-1030	6	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called, possibly with young from previous season
255	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	2/08/2018	0730-0830	4	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called in vines
256	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	3/08/2018	0730-0930	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21027° 153.15042°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, called
257	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	3/08/2018	0730-0930	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, territory-called along creek nr waypoint 14C
258	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	10/12/2018	0600-0650	1	1	Littoral rainforest EEC – small patch on N side of walkway	30.21212° 153.15964°	Littoral rainforest EEC	called, foraged
259	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	10/12/2018	1625-1655	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
260	Large-billed Scrubwren	<i>Sericornis magnirostra</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called along creek
261	Brown Gerygone	<i>Gerygone mouki</i>	13/12/2017	0650-0830	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
262	Brown Gerygone	<i>Gerygone mouki</i>	31/07/2018	0720-0930	6	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in shrubby edge of dry eucalypt forest nr waypoint 13D
263	Brown Gerygone	<i>Gerygone mouki</i>	1/08/2018	1505-1555	1	1	Littoral rainforest EEC – small patch on north side of track	30.21232° 153.15909°	Littoral rainforest EEC	called, foraged
264	Brown Gerygone	<i>Gerygone mouki</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Road	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
265	Brown Gerygone	<i>Gerygone mouki</i>	10/12/2018	1625-1655	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged
266	Brown Gerygone	<i>Gerygone mouki</i>	12/12/2018	0600-0810	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in bangalow palm patch
267	Brown Gerygone	<i>Gerygone mouki</i>	12/12/2018	1645-1820	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	
268	Brown Gerygone	<i>Gerygone mouki</i>	13/12/2018	1630-1720	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called, foraged along tributary
269	Striated Thornbill	<i>Acanthiza lineata</i>	14/12/2017	0555-0935	4	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged in blackbutts nr trail edge

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
270	Striated Thornbill	<i>Acanthiza lineata</i>	1/08/2018	0730-1030	3	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	obs. taking caterpillar in swamp mahogany upper branches, flew
271	Striated Thornbill	<i>Acanthiza lineata</i>	11/12/2018	0605-0830	5	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called in upslope dry blackbutt forest
272	Yellow Thornbill	<i>Acanthiza nana</i>	3/08/2018	1505-1535	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged in swamp oak canopies
273	Brown Thornbill	<i>Acanthiza pusilla</i>	7/08/2017	1405	1	6	Transect through existing revegetation and regeneration patch	30.21381° 153.16058°	revegetated shrubland with vine tangles, lilly pilly and grasses	active nest in kangaroo grass clump near edge with acacia; bird obs. delivering small insect to nestlings at 1405 hours
274	Brown Thornbill	<i>Acanthiza pusilla</i>	8/08/2017	1500-1545	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged in swamp oak foliage
275	Brown Thornbill	<i>Acanthiza pusilla</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC – small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	foraged, flew
276	Brown Thornbill	<i>Acanthiza pusilla</i>	11/12/2017	0820-0845	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged in lilly pilly and other shrubs

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
277	Brown Thornbill	<i>Acanthiza pusilla</i>	12/12/2017	1720-1845	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21531° 153.15895°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called, top of paperbarks on E edge
278	Brown Thornbill	<i>Acanthiza pusilla</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged nr trail edge
279	Brown Thornbill	<i>Acanthiza pusilla</i>	14/12/2017	0555-0935	2	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called in wet area (swamp sclerophyll forest)
280	Brown Thornbill	<i>Acanthiza pusilla</i>	12/12/2017	0750-0830	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged
281	Brown Thornbill	<i>Acanthiza pusilla</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called in bangalow palm and old-growth swamp paperbark section nr waypoint 13B

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
282	Brown Thornbill	<i>Acanthiza pusilla</i>	30/07/2018	0730-0830	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged, called, flew edge of mangroves with adjacent eucalypt forest's shrub layer
283	Brown Thornbill	<i>Acanthiza pusilla</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called in swamp oak and paperbark forest
284	Brown Thornbill	<i>Acanthiza pusilla</i>	31/07/2018	0720-0930	5	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	male called, likely nesting in dry eucalypt forest nr waypoint 13D or adjacent shrubby bank of Sugarmill Creek; other individuals nearby
285	Brown Thornbill	<i>Acanthiza pusilla</i>	1/08/2018	0730-1030	4	11	South Moonee Forest – dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, likely nesting
286	Brown Thornbill	<i>Acanthiza pusilla</i>	1/08/2018	1505-1555	1	1	Littoral rainforest EEC – small patch on N side of walkway	30.21247° 153.15973°	Littoral rainforest EEC	called, foraged
287	Brown Thornbill	<i>Acanthiza pusilla</i>	1/08/2018	1600-1625	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	chased off Horsfield's Bronze-Cuckoo thus nesting nearby
288	Brown Thornbill	<i>Acanthiza pusilla</i>	2/08/2018	0730-0830	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
289	Brown Thornbill	<i>Acanthiza pusilla</i>	3/08/2018	0730-0930	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21027° 153.15042°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, called
290	Brown Thornbill	<i>Acanthiza pusilla</i>	3/08/2018	0730-0930	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	2 nd pair foraged, called, downstream of old bike course area
291	Brown Thornbill	<i>Acanthiza pusilla</i>	10/12/2018	0850-0910	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called
292	Brown Thornbill	<i>Acanthiza pusilla</i>	11/12/2018	1700-1710	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called
293	Brown Thornbill	<i>Acanthiza pusilla</i>	11/12/2018	1720-1810	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called, foraged in isolated swamp oak nr Stingray Creek
294	Brown Thornbill	<i>Acanthiza pusilla</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	pair called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
295	Brown Thornbill	<i>Acanthiza pusilla</i>	13/12/2018	0810-0845	2	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	foraged, called
296	Brown Thornbill	<i>Acanthiza pusilla</i>	13/12/2018	1630-1720	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21027° 153.15042°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called, foraged along tributary
297	Spotted Pardalote	<i>Pardalotus punctatus</i>	31/07/2018	1645	2	opportunistic record (recorded as Site 7)	South Moonee Beach (N end)	30.21476° 153.16136°	South Moonee Beach	active nest in sand bank beside walking access to north end of South Moonee Beach, birds obs. delivering grass to line nest chamber
298	Spotted Pardalote	<i>Pardalotus punctatus</i>	30/07/2018	0730-0830	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	pair called, foraged
299	Spotted Pardalote	<i>Pardalotus punctatus</i>	31/07/2018	0720-0930	6	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in dry eucalypt forest nr waypoint 13D

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
300	Spotted Pardalote	<i>Pardalotus punctatus</i>	1/08/2018	0730-1030	5	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	males called for mates, foraged in swamp mahogany <i>Eucalyptus robusta</i> and swamp box <i>Lophostemon suaveolens</i>
301	Spotted Pardalote	<i>Pardalotus punctatus</i>	2/08/2018	0930-1000	2	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21443° 153.16202°	Themeda grassland and herbland on seacliffs EEC	pair obs. taking grass into nest burrow in earth bank nr S end of transect (waypoint 5C)
302	Spotted Pardalote	<i>Pardalotus punctatus</i>	2/08/2018	1550-1630	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21359° 153.15723°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	male called for mate in swamp oak
303	Spotted Pardalote	<i>Pardalotus punctatus</i>	12/12/2018	1645-1820	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	pair called, foraged
304	Striated Pardalote	<i>Pardalotus striatus</i>	10/12/2018	1625-1655	3	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21334° 153.15985°	Swamp oak and swamp sclerophyll forest	adult fed 2 juveniles in swamp oak canopy
305	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
306	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	30/07/2018	0915-1040	4	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21531° 153.15895°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	
307	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	31/07/2018	0720-0930	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged, flew
308	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
309	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	2/08/2018	0730-0830	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	perched, flew
310	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	2/08/2018	1550-1630	2	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called in flowering mistletoe on swamp oak
311	Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	3/08/2018	1505-1535	3	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, flew, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
312	Eastern Spinebill	<i>Acanthorynchus tenuirostris</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, flew
313	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	8/08/2017	0825-0905	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called
314	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	11/12/2017	0650-0740	4	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	foraged in flowering brushbox, called, breeding
315	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	8/08/2017	1500-1545	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, called, flew
316	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	11/12/2017	0750-0805	5	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	likely 3 were recorded in Site 1 earlier, mate pursuits, scolding
317	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	8/08/2017	0915-0945	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called, flew
318	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	11/12/2017	0820-0845	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged in vines and lilly pilly
319	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called, flew
320	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	12/12/2017	0845-0915	2	7	Transect along beach dunal system	30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	foraged in low tuckeroo along transect

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
321	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	11/12/2017	1650-1720	2	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called, foraged
322	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	13/12/2017	0650-0830	3	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, likely nesting
323	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	14/12/2017	0555-0935	3	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, likely nesting in swamp sclerophyll forest
324	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	11/12/2017	1755-1810	4	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	flew, called
325	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	15/12/2017	0650-0830	3	13	South Moonee Forest - northern tributary of Sugarmill Creek transect near Moonee Beach village	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, flew, likely nesting along creek nr waypoint 13C

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
326	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21396° 153.15073°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	pair foraged, likely nesting along creek
327	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called near waypoint 13A (old snig track, 100 m in from perimeter fire trail bordering N edge of new housing estate)
328	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	30/07/2018	0730-0830	5	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in flowering small-fruited grey gum and swamp mahogany nr creek and edge of mangroves
329	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	31/07/2018	0720-0930	8	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flew, called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
330	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	1/08/2018	0730-1030	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
331	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged
332	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	1/08/2018	1505-1555	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21247° 153.15973°	Littoral rainforest EEC	called, foraged
333	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	2/08/2018	0730-0830	3	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
334	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	3/08/2018	0730-0930	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	downstream of old bike track course area, foraged, called
335	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	3/08/2018	1505-1535	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
336	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	3/08/2018	1555-1625	2	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	called, foraged
337	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	10/12/2018	0600-0650	4	1	Littoral rainforest EEC - small patch on N side of walkway	30.21212° 153.15964°	Littoral rainforest EEC	called, likely nesting in vine tangle near waypoint 1C, foraged, disputes
338	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	10/12/2018	0700-0740	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understory	called, sunned on sheoak branch
339	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	10/12/2018	0850-0910	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called
340	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	10/12/2018	1625-1655	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called, flew
341	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	10/12/2018	1755-1830	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged edge eucalypt forest and mangroves
342	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	11/12/2018	0605-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called, likely nesting nearby

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
343	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	perched, flew
344	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	12/12/2018	1645-1820	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged, likely nesting
345	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	perched in <i>Cryptocarya triplinervis</i> var <i>triplinervis</i> nr S end of transect
346	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	13/12/2018	0810-0845	5	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	males fought for female thus early breeding activity
347	Lewin's Honeyeater	<i>Meliphaga lewinii</i>	13/12/2018	1630-1720	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
348	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged in blackbutt canopy, called
349	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	14/12/2017	0555-0935	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	pair called, likely nesting in blackbutt forest in core area
350	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	30/07/2018	0730-0830	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in flowering small-fruited grey gum, called
351	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	31/07/2018	0720-0930	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged in ironbark and blackbutt canopy in dry forest nr waypoint 13D

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
352	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	1/08/2018	0730-1030	9	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called; some involved in mate pursuits in paperbark forest nr waypoint 11B
353	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	11/12/2018	0605-0830	4	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, likely nesting
354	Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	12/12/2018	1645-1820	5	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged, likely nesting
355	Noisy Miner	<i>Manorina melanocephala</i>	8/08/2017	0915-0945	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	flewover to E headed for headland banksias
356	Noisy Miner	<i>Manorina melanocephala</i>	30/07/2018	0730-0830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, perched
357	Little Wattlebird	<i>Anthochaera chrysoptera</i>	8/08/2017	0825-0905	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called nr N edge

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
358	Little Wattlebird	<i>Anthochaera chrysoptera</i>	8/08/2017	0915-0945	4	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
359	Little Wattlebird	<i>Anthochaera chrysoptera</i>	8/08/2017	1005-1020	2	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	perched in banksia
360	Little Wattlebird	<i>Anthochaera chrysoptera</i>	12/12/2017	0700-0740	3	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called, flew
361	Little Wattlebird	<i>Anthochaera chrysoptera</i>	11/12/2017	1755-1810	4	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	perched, called, foraged in banksia
362	Little Wattlebird	<i>Anthochaera chrysoptera</i>	30/07/2018	0730-0830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in flowering small-fruited grey gum and swamp mahogany nr creek
363	Little Wattlebird	<i>Anthochaera chrysoptera</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21652° 153.15643°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged in flowering swamp mahogany
364	Little Wattlebird	<i>Anthochaera chrysoptera</i>	31/07/2018	1515-1615	2	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flew nearby aggressively at waypoint 7A
365	Little Wattlebird	<i>Anthochaera chrysoptera</i>	2/08/2018	0730-0830	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
366	Little Wattlebird	<i>Anthochaera chrysoptera</i>	2/08/2018	0730-0830	3	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, perched, sunned

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
367	Little Wattlebird	<i>Anthochaera chrysoptera</i>	3/08/2018	1505-1535	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called in <i>Banksia integrifolia</i> at S end
368	Little Wattlebird	<i>Anthochaera chrysoptera</i>	3/08/2018	1555-1625	3	15	Rutile Trail south transect	30.21820° 153.15852°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana (removed in Oct. 2018)	foraged in <i>B. integrifolia</i> , called
369	Little Wattlebird	<i>Anthochaera chrysoptera</i>	10/12/2018	0850-0910	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called, flew
370	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	12/12/2017	0700-0740	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	male called
371	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	12/12/2017	1720-1845	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, sedgeland and mangroves along Stingray Creek (area search)	30.21531° 153.15895°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called in tops of taller swamp oak & paperbark along E edge of site
372	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	male called for mate
373	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called in flowering mistletoe on swamp oak

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
374	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	31/07/2018	0720-0930	10	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	individuals foraged, flew, called
375	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	1/08/2018	0730-1030	6	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called in flowering swamp mahogany canopy
376	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged in flowering swamp mahogany, called (male)
377	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	2/08/2018	1550-1630	2	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called in flowering mistletoe on swamp oak
378	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	10/12/2018	1625-1655	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21307° 153.15942°	Swamp oak and swamp sclerophyll forest	called, foraged in flowering brushbox

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
379	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	11/12/2018	0605-0830	4	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called, likely nesting nearby
380	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	11/12/2018	1700-1710	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called, foraged
381	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	12/12/2018	1645-1820	5	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged, likely nesting
382	Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	14/12/2018	0715-0845	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, likely breeding
383	Brown Honeyeater	<i>Lichmera indistincta</i>	11/12/2017	0900-0915	2	4	Transect through proposed regeneration/revegetation zone below lookout	30.21395° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	flew to <i>Banksia integrifolia</i>

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
384	Brown Honeyeater	<i>Lichmera indistincta</i>	12/12/2017	1720-1845	3	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, sedgeland and mangroves along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged in mangroves along creek, called, likely nesting
385	Brown Honeyeater	<i>Lichmera indistincta</i>	14/12/2017	1830-1920	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged, called in mangroves
386	Brown Honeyeater	<i>Lichmera indistincta</i>	30/07/2018	0730-0830	5	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in mangroves and flowering swamp mahogany; included 3 calling males
387	Brown Honeyeater	<i>Lichmera indistincta</i>	30/07/2018	0915-1040	5	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called, flew to mangroves
388	Brown Honeyeater	<i>Lichmera indistincta</i>	2/08/2018	0905-0925	1	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	perched, called
389	Brown Honeyeater	<i>Lichmera indistincta</i>	2/08/2018	1550-1630	5	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21359° 153.15723°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called, flew to Stingray Creek mangroves
390	Brown Honeyeater	<i>Lichmera indistincta</i>	3/08/2018	1505-1535	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called, flew
391	Brown Honeyeater	<i>Lichmera indistincta</i>	10/12/2018	1755-1830	4	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21363° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, perched, flew in mangroves

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
392	Brown Honeyeater	<i>Lichmera indistincta</i>	11/12/2018	1720-1810	3	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21652° 153.15643°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged, called & in mangroves
393	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	8/08/2017	0915-0945	8	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	called, perched on dead branch
394	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	8/08/2017	1005-1020	4	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	foraged in flowering banksia
395	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	11/12/2017	1825-1835	4	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, perched, flew
396	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called
397	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	11/12/2017	1755-1810	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called, flew across trail
398	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	31/07/2018	1515-1615	2	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	called, flew into nearby <i>Banksia integrifolia</i> at waypoint 7A
399	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	2/08/2018	0730-0830	9	3	Transect through bush regeneration zone north of main track	30.21285° 153.16057	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
400	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	2/08/2018	1505-1535	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called, flew
401	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	3/08/2018	1505-1535	6	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
402	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	3/08/2018	1555-1625	5	15	Rutile Trail south transect	30.21719° 153.15904°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	called, foraged nr. waypoint 15B
403	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	10/12/2018	0805-0820	2	4	Transect through proposed regeneration/vegetation zone below lookout	30.21395° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	called, flew west to tuckeroo patch
404	White-cheeked Honeyeater	<i>Phylidonyris niger</i>	11/12/2018	1820	3	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, perched, flew
405	Blue-faced Honeyeater	<i>Entomyzon cyanotis</i>	31/07/2018	0720-0930	6	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	small group flew over bangalow and old paperbark forest
406	Blue-faced Honeyeater	<i>Entomyzon cyanotis</i>	2/08/2018	0730-0830	2	3	Transect through bush regeneration zone north of main track	30.21285° 153.16057°	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
407	Blue-faced Honeyeater	<i>Entomyzon cyanotis</i>	3/08/2018	0730-0930	4	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Road	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, called, N edge near Parish Close

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
408	Noisy Friarbird	<i>Philemon corniculatus</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called, likely nesting in blackbutt
409	Noisy Friarbird	<i>Philemon corniculatus</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	male called for mate in blackbutt forest nr trail edge
410	Noisy Friarbird	<i>Philemon corniculatus</i>	14/12/2017	0930-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	obs. with cicada, nr waypoint 11C
411	Noisy Friarbird	<i>Philemon corniculatus</i>	30/07/2018	0730-0830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	foraged in flowering small-fruited grey gum nr creek
412	Noisy Friarbird	<i>Philemon corniculatus</i>	3/08/2018	0730-0930	2	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
413	Noisy Friarbird	<i>Philemon corniculatus</i>	11/12/2018	0605-0830	3	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called in blackbutt forest
414	Noisy Friarbird	<i>Philemon corniculatus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
415	Noisy Friarbird	<i>Philemon corniculatus</i>	14/12/2018	0715-0845	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called, likely nesting in dry blackbutt forest on upper slope
416	Australian Logrunner	<i>Orthonyx temminckii</i>	13/12/2017	0650-0830	5	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538° (near)	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	small group foraged, called, flew in thick <i>Gahnia sieberiana</i> along upper Stingray Creek near Rutile Trail west (N side of track)

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
417	Australian Logrunner	<i>Orthonyx temminckii</i>	31/07/2018	0720-0930	6	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged along Sugarmill Creek banks and adjacent dense vegetation
418	Australian Logrunner	<i>Orthonyx temminckii</i>	31/07/2018	1705	3	1	Littoral rainforest EEC - small patch on N side of walkway	30.21245° 153.15904°	Littoral rainforest EEC	foraged near boardwalk in littoral rainforest in southern edge of Site 1
419	Australian Logrunner	<i>Orthonyx temminckii</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	call detected along moist creekline vegetation nr old Flooded Gum stump opposite bike track at 0905 hrs
420	Australian Logrunner	<i>Orthonyx temminckii</i>	12/12/2018	0600-0810	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	first group called and foraged along upper Sugarmill Creek banks @ 0615
421	Australian Logrunner	<i>Orthonyx temminckii</i>	12/12/2018	0600-0810	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	second group foraged & called further downstream along Sugarmill Ck @ 0615-20

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
422	Eastern Whipbird	<i>Psophodes olivaceus</i>	8/08/2017	0825-0905	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	pair foraged S side of track
423	Eastern Whipbird	<i>Psophodes olivaceus</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, foraged in thick vines
424	Eastern Whipbird	<i>Psophodes olivaceus</i>	8/08/2017	1500-1545	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, called at W end
425	Eastern Whipbird	<i>Psophodes olivaceus</i>	11/12/2017	0750-0805	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	flew low in thick vegetation
426	Eastern Whipbird	<i>Psophodes olivaceus</i>	12/12/2017	0700-0740	3	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	pair duetted, foraged E side of transect nr S end
427	Eastern Whipbird	<i>Psophodes olivaceus</i>	12/12/2017	1720-1845	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21531° 153.15895°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	adult pair foraged near waypoint 8A - lantana/senna edge
428	Eastern Whipbird	<i>Psophodes olivaceus</i>	14/12/2017	0555-0935	4	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged in saw sedge & lomandra patches

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
429	Eastern Whipbird	<i>Psophodes olivaceus</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called
430	Eastern Whipbird	<i>Psophodes olivaceus</i>	31/07/2018	0720-0930	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	likely pair foraged, called near Sugarmill Creek
431	Eastern Whipbird	<i>Psophodes olivaceus</i>	2/08/2018	0730-0830	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	adult pair foraged in revegetation and regenerated shrub/groundcover layer
432	Eastern Whipbird	<i>Psophodes olivaceus</i>	2/08/2018	1505-1535	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called nr waypoint 6C
433	Eastern Whipbird	<i>Psophodes olivaceus</i>	3/08/2018	0730-0930	3	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21027° 153.15042°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, called
434	Eastern Whipbird	<i>Psophodes olivaceus</i>	10/12/2018	0600-0650	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	foraged, called

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435	Eastern Whipbird	<i>Psophodes olivaceus</i>	10/12/2018	0700-0740	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged in dense understorey
436	Eastern Whipbird	<i>Psophodes olivaceus</i>	11/12/2018	1700-1710	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called in recently removed (August 2018) lantana patch
437	Eastern Whipbird	<i>Psophodes olivaceus</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged
438	Eastern Whipbird	<i>Psophodes olivaceus</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	2nd pair foraged, called in thick senna and lantana along Sugarmill Creek
439	Eastern Whipbird	<i>Psophodes olivaceus</i>	12/12/2018	1645-1820	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
440	Eastern Whipbird	<i>Psophodes olivaceus</i>	14/12/2018	0715-0845	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	likely pair foraged, called in thick gahnia under swamp paperbark and mahogany
441	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	11/12/2017	0650-0740	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called
442	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	11/12/2017	0750-0805	1	2	Coastal Swamp Oak Forest and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged
443	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	flewover
444	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	12/12/2017	0845-0915	1	7	Transect along beach dunal system	30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flewover to north
445	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, possibly breeding in blackbutt forest

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
446	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	14/12/2017	0555-0935	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged & likely nesting in tall blackbutt forest
447	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	31/07/2018	0720-0930	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	flew, early mating pursuits, called
448	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	perched, called nr waypoint 14C
449	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	11/12/2018	0605-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
450	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	12/12/2018	1645-1820	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, flew
451	Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	14/12/2018	0715-0845	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	perched, called
452	Cicadabird	<i>Coracina tenuirostris</i>	11/12/2017	1825-1835	2	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	adult with juvenile bird, likely still being fed
453	Cicadabird	<i>Coracina tenuirostris</i>	11/12/2018	0605-0830	3	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, mate pursuits in tall blackbutts and swamp mahogany

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
454	Cicadabird	<i>Coracina tenuirostris</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
455	Cicadabird	<i>Coracina tenuirostris</i>	14/12/2018	0715-0845	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, perched
456	Varied Triller	<i>Lalage leucomela</i>	12/12/2017	0700-0740	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	male and female foraged for caterpillars low in vine edge W side Rutile Trail
457	Golden Whistler	<i>Pachycephala pectoralis</i>	8/08/2017	0825-0905	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	male fed on caterpillar
458	Golden Whistler	<i>Pachycephala pectoralis</i>	11/12/2017	0650-0740	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, foraged
459	Golden Whistler	<i>Pachycephala pectoralis</i>	11/12/2017	1620-1640	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, indeterminate sex
460	Golden Whistler	<i>Pachycephala pectoralis</i>	8/08/2017	1500-1545	2	2	Coastal Swamp Oak Forest and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	male & female foraged, called
461	Golden Whistler	<i>Pachycephala pectoralis</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	adult male called territory

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
462	Golden Whistler	<i>Pachycephala pectoralis</i>	13/12/2017	0650-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult male foraged, called
463	Golden Whistler	<i>Pachycephala pectoralis</i>	14/12/2017	0930-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult male called & foraged in tall rainforest tree & blackbutt nr trailbike track nr waypoint 11C
464	Golden Whistler	<i>Pachycephala pectoralis</i>	31/07/2018	0720-0930	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	immature male and female called, foraged in dry eucalypt forest nr waypoint 13D
465	Golden Whistler	<i>Pachycephala pectoralis</i>	1/08/2018	0730-1030	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult pair, male called territory

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
466	Golden Whistler	<i>Pachycephala pectoralis</i>	1/08/2018	0730-1030	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	2nd adult pair, called, foraged for insects (female took caterpillar) beside old snig track in paperbark and swamp mahogany nr waypoint 11C
467	Golden Whistler	<i>Pachycephala pectoralis</i>	2/08/2018	0730-0830	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	perched, called
468	Golden Whistler	<i>Pachycephala pectoralis</i>	11/12/2018	0605-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult male called, foraged
469	Golden Whistler	<i>Pachycephala pectoralis</i>	11/12/2018	1700-1710	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	adult male foraged
470	Golden Whistler	<i>Pachycephala pectoralis</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
471	Golden Whistler	<i>Pachycephala pectoralis</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged along creek
472	Golden Whistler	<i>Pachycephala pectoralis</i>	14/12/2018	0715-0845	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
473	Rufous Whistler	<i>Pachycephala rufiventris</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult male called & foraged in blackbutt forest c. 80 m N of Rutile Trail west @ 0645
474	Rufous Whistler	<i>Pachycephala rufiventris</i>	11/12/2018	0605-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult male foraged, ate caterpillar in forest oak patch
475	Little Shrike-thrush	<i>Colluricincla megarrhyncha</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	breeding, foraged, called in vine thickets

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
476	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	12/12/2017	0550-0610	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged in vine tangles
477	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	15/12/2017	0650-0830	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged nr waypoint 13A (old snig track)
478	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	1/08/2018	1505-1555	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21271° 153.15958°	Littoral rainforest EEC	called, foraged in vines nr waypoint 1E then flew toward 1F
479	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	10/12/2018	0600-0650	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21247° 153.15973°	Littoral rainforest EEC	foraged, called
480	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	10/12/2018	0850-0910	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, in dense vine tangles nr waypoint 6C
481	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	12/12/2018	1645-1820	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	foraged, called in vine and weed clumps
482	Little Shrike-thrush	<i>Colluricincla megarhyncha</i>	13/12/2018	0810-0845	1	15	Rutile Trail south transect	30.21719° 153.15904°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	foraged low in vines, flew west across Rutile Trail

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
483	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	mate-calling (male)
484	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	11/12/2017	1620-1640	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	adult male foraged
485	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, likely breeding in blackbutt forest
486	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	14/12/2017	0555-0935	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged in blackbutts nr trail
487	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	14/12/2017	0930-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
488	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	15/12/2017	0650-0830	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in dry eucalypt forest nr waypoint 13D
489	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	30/07/2018	0915-1040	1	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	called, foraged
490	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
491	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	1/08/2018	1600-1625	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, called
492	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	11/12/2018	0605-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
493	Grey Shrike-thrush	<i>Colluricincla harmonica</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called
494	Australasian Figbird	<i>Sphecotheres vieilloti</i>	12/12/2017	1720-1845	4	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, sedgeland and mangroves along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover from E to W, called
495	Australasian Figbird	<i>Sphecotheres vieilloti</i>	11/12/2017	1650-1720	3	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called, foraged, flew from beach to SE
496	Australasian Figbird	<i>Sphecotheres vieilloti</i>	14/12/2017	1830-1920	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	flewover into adjacent forest
497	Australasian Figbird	<i>Sphecotheres vieilloti</i>	11/12/2017	1755-1810	5	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	perched, flew west to forage in nearby large fig
498	Australasian Figbird	<i>Sphecotheres vieilloti</i>	2/08/2018	0730-0830	13	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109°	mixed vine and shrub remnant with plantings and blady grass understorey	flock perched, sunned on dead branch of forest oak
499	Australasian Figbird	<i>Sphecotheres vieilloti</i>	10/12/2018	0700-0740	5	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	perched, sunned on dead branches of sheoaks, called & flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
500	Australasian Figbird	<i>Sphecotheres vieilloti</i>	10/12/2018	1730-1750	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21440° 153.15952°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	female perched, flew
501	Australasian Figbird	<i>Sphecotheres vieilloti</i>	10/12/2018	1755-1830	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	perched, called
502	Australasian Figbird	<i>Sphecotheres vieilloti</i>	11/12/2018	1720-1810	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover to west
503	Australasian Figbird	<i>Sphecotheres vieilloti</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	female perched on dead banksia branch nr waypoint 7A
504	Australasian Figbird	<i>Sphecotheres vieilloti</i>	13/12/2018	0810-0845	2	15	Rutile Trail south transect	30.21719° 153.15904°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	females foraged, flew
505	Australasian Figbird	<i>Sphecotheres vieilloti</i>	14/12/2018	0715-0845	9	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flock of mostly immature males and females, foraged near edge of dry blackbutt forest with swamp paperbark, mahogany and box and gahnia lower area
506	Olive-backed Oriole	<i>Oriolus sagittatus</i>	11/12/2017	1620-1640	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21307° 153.15942°	Littoral rainforest EEC	called, perched

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
507	Olive-backed Oriole	<i>Oriolus sagitattus</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21440° 153.15952°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called
508	Olive-backed Oriole	<i>Oriolus sagitattus</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called
509	Olive-backed Oriole	<i>Oriolus sagitattus</i>	14/12/2017	1830-1920	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	flewover into adjacent forest
510	Olive-backed Oriole	<i>Oriolus sagitattus</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called
511	Olive-backed Oriole	<i>Oriolus sagitattus</i>	2/08/2018	0730-0830	1	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	called
512	Olive-backed Oriole	<i>Oriolus sagitattus</i>	10/12/2018	1625-1655	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
513	Olive-backed Oriole	<i>Oriolus sagitatus</i>	11/12/2018	0605-0830	3	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	mate pursuits, calling, likely nesting nearby
514	Olive-backed Oriole	<i>Oriolus sagitatus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	
515	Olive-backed Oriole	<i>Oriolus sagitatus</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21396° 153.15073°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged
516	Olive-backed Oriole	<i>Oriolus sagitatus</i>	14/12/2018	0715-0845	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	preened on branch of swamp mahogany after early morning showers nr old track at 0800

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
517	Grey Butcherbird	<i>Cracticus torquatus</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called
518	Grey Butcherbird	<i>Cracticus torquatus</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	called
519	Grey Butcherbird	<i>Cracticus torquatus</i>	13/12/2018	1630-1720	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged along edge N of waypoint 14A
520	Australian Magpie	<i>Cracticus tibicen</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	flewover, headed east
521	Pied Currawong	<i>Strepera graculina</i>	11/12/2017	1620-1640	1	3	Littoral rainforest EEC - small patch on N side of walkway	30.21301° 153.16109°	Littoral rainforest EEC - small patch on N side of walkway	perched, flew
522	Pied Currawong	<i>Strepera graculina</i>	12/12/2017	0700-0740	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called
523	Pied Currawong	<i>Strepera graculina</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	perched, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
524	Pied Currawong	<i>Strepera graculina</i>	15/12/2017	0650-0830	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	perched, flew
525	Pied Currawong	<i>Strepera graculina</i>	1/08/2018	0730-1030	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
526	Pied Currawong	<i>Strepera graculina</i>	3/08/2018	0730-0930	5	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.20995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	winter foraging flock along edge of forest, flew into adjacent backyards
527	Pied Currawong	<i>Strepera graculina</i>	11/12/2018	0605-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, perched, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
528	Pied Currawong	<i>Strepera graculina</i>	12/12/2018	0600-0810	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adults attended 2 fledglings on flooded gum branch
529	Spangled Drongo	<i>Dicrurus bracteatus</i>	11/12/2017	1825-1835	1	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	flewover
530	Spangled Drongo	<i>Dicrurus bracteatus</i>	14/12/2017	1830-1920	3	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, perched, foraged
531	Spangled Drongo	<i>Dicrurus bracteatus</i>	15/12/2017	0650-0830	4	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	mate pursuits, breeding along creek
532	Spangled Drongo	<i>Dicrurus bracteatus</i>	30/07/2018	0730-0830	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called, perched; overwintering bird
533	Spangled Drongo	<i>Dicrurus bracteatus</i>	2/08/2018	0730-0830	1	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109°	mixed vine and shrub remnant with plantings and blady grass understorey	overwintering bird, perched, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
534	Spangled Drongo	<i>Dicurus bracteatus</i>	10/12/2018	0700-0740	2	3	Transect through bush regeneration zone north of main track	30.21285° 153.16057	mixed vine and shrub remnant with plantings and blady grass understorey	perched, called, flew
535	Spangled Drongo	<i>Dicurus bracteatus</i>	11/12/2018	0605-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged
536	Spangled Drongo	<i>Dicurus bracteatus</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, flew
537	Rufous Fantail	<i>Rhipidura rufifrons</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	called, foraged
538	Rufous Fantail	<i>Rhipidura rufifrons</i>	14/12/2017	1830-1920	1	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21357° 153.15680°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	perched, flew through mangroves

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
539	Rufous Fantail	<i>Rhipidura rufifrons</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged low in thick <i>Gahnia sieberiana</i> patch in swamp sclerophyll forest
540	Rufous Fantail	<i>Rhipidura rufifrons</i>	10/12/2018	0600-0650	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21267° 153.15953°	Littoral rainforest EEC	called, foraged
541	Rufous Fantail	<i>Rhipidura rufifrons</i>	11/12/2018	1820	2	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	called, foraged in lilly pilly and vines
542	Grey Fantail	<i>Rhipidura albiscapa</i>	8/08/2017	0825-0905	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21307° 153.15942°	Littoral rainforest EEC	called
543	Grey Fantail	<i>Rhipidura albiscapa</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	breeding
544	Grey Fantail	<i>Rhipidura albiscapa</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, called
545	Grey Fantail	<i>Rhipidura albiscapa</i>	11/12/2017	1620-1640	1	3	Littoral rainforest EEC - small patch on N side of walkway	30.21301° 153.16109°	Littoral rainforest EEC - small patch on N side of walkway	called, foraged
546	Grey Fantail	<i>Rhipidura albiscapa</i>	12/12/2017	0700-0740	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, called
547	Grey Fantail	<i>Rhipidura albiscapa</i>	12/12/2017	1720-1845	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, sedgeland and mangroves along Stingray Creek (area search)	30.21531° 153.15895°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged high in swamp oak

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
548	Grey Fantail	<i>Rhipidura albiscapa</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21440° 153.15952°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	foraged in shrub layer
549	Grey Fantail	<i>Rhipidura albiscapa</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, likely nesting
550	Grey Fantail	<i>Rhipidura albiscapa</i>	14/12/2017	0555-0935	4	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, mate pursuits
551	Grey Fantail	<i>Rhipidura albiscapa</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	followed foraging White-throated Treecreeper
552	Grey Fantail	<i>Rhipidura albiscapa</i>	12/12/2017	0750-0830	3	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
553	Grey Fantail	<i>Rhipidura albiscapa</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	followed Golden Whistler pair nr waypoint 11D, called
554	Grey Fantail	<i>Rhipidura albiscapa</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged
555	Grey Fantail	<i>Rhipidura albiscapa</i>	1/08/2018	1600-1625	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, called
556	Grey Fantail	<i>Rhipidura albiscapa</i>	2/08/2018	0730-0830	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called
557	Grey Fantail	<i>Rhipidura albiscapa</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, followed Superb Fairy-wren group, N edge near Parish Close
558	Grey Fantail	<i>Rhipidura albiscapa</i>	3/08/2018	1505-1535	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged, called

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
559	Grey Fantail	<i>Rhipidura albiscapa</i>	10/12/2018	1625-1655	2	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	called, likely nesting
560	Grey Fantail	<i>Rhipidura albiscapa</i>	11/12/2018	0605-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, likely nesting
561	Grey Fantail	<i>Rhipidura albiscapa</i>	11/12/2018	1700-1710	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called, foraged
562	Grey Fantail	<i>Rhipidura albiscapa</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged
563	Grey Fantail	<i>Rhipidura albiscapa</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
564	Grey Fantail	<i>Rhipidura albiscapa</i>	12/12/2018	1645-1820	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, likely nesting
565	Grey Fantail	<i>Rhipidura albiscapa</i>	13/12/2018	1630-1720	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21995° 153.15051°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged, called
566	Grey Fantail	<i>Rhipidura albiscapa</i>	14/12/2018	0715-0845	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged
567	Grey Fantail	<i>Rhipidura albiscapa</i>	14/12/2018	0715-0845	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called
568	Willie Wagtail	<i>Rhipidura leucophrys</i>	8/08/2017	1025-1040	1	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21371° 153.16348°	Themeda grassland and herbland on seacliffs EEC	flew across to lookout (concrete marker/plinth)

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
569	Willie Wagtail	<i>Rhipidura leucophrys</i>	2/08/2018	0730-0830	1	3	Transect through bush regeneration zone north of main track	30.21301° 153.16109°	mixed vine and shrub remnant with plantings and blady grass understorey	perched, called
570	Willie Wagtail	<i>Rhipidura leucophrys</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	perched, called in banksia edge
571	Australian Raven	<i>Corvus coronoides</i>	31/07/2018	1515-1615	2	7	Transect along beach dunal system	30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flew north of waypoint 7B towards Green Bluff
572	Australian Raven	<i>Corvus coronoides</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	perched, called
573	Leaden Flycatcher	<i>Myiagra rubecula</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	breeding pair in blackbutts
574	Leaden Flycatcher	<i>Myiagra rubecula</i>	12/12/2017	0750-0830	1	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	female foraged in sheoak

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
575	Leaden Flycatcher	<i>Myiagra rubecula</i>	11/12/2018	0605-0830	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	foraged, called breeding territory edge of blackbutt forest
576	Leaden Flycatcher	<i>Myiagra rubecula</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called along upper Sugarmill Creek
577	Satin Flycatcher	<i>Myiagra cyanoleuca</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21873° 153.15297°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult pair nesting 15-16 m up in blackbutt branch - nest almost completed at time of survey (0732 hrs)
578	Satin Flycatcher	<i>Myiagra cyanoleuca</i>	14/12/2017	0555-0935	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21566° 153.15295°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	second pair obs. nesting in blackbutt - male obs. delivering small cicadas to 2 nestlings 16 m up in tree

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579	Satin Flycatcher	<i>Myiagra cyanoleuca</i>	11/12/2018	0605-0830	3	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	2 males pursued 1 female, males gave territory-calls
580	Spectacled Monarch	<i>Symposiarchus trivirgatus</i>	11/12/2017	0650-0740	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called
581	Spectacled Monarch	<i>Symposiarchus trivirgatus</i>	12/12/2017	1900-1905	1	2	Coastal Swamp Oak Forest and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	male called, foraged nr main track
582	Spectacled Monarch	<i>Symposiarchus trivirgatus</i>	10/12/2018	0600-0650	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21271° 153.15958°	Littoral rainforest EEC	male territory-called, likely pair and nesting
583	Spectacled Monarch	<i>Symposiarchus trivirgatus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called in thick bangalow palm patch
584	Spectacled Monarch	<i>Symposiarchus trivirgatus</i>	12/12/2018	0600-0810	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged along creek

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
585	Eastern Yellow Robin	<i>Eopsaltria australis</i>	11/12/2017	0650-0740	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called
586	Eastern Yellow Robin	<i>Eopsaltria australis</i>	8/08/2017	1500-1545	1	2	Coastal Swamp Oak Forest and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged, E end
587	Eastern Yellow Robin	<i>Eopsaltria australis</i>	11/12/2017	1620-1640	1	3	Littoral rainforest EEC - small patch on N side of walkway	30.21301° 153.16109°	Littoral rainforest EEC - small patch on N side of walkway	male called breeding territory
588	Eastern Yellow Robin	<i>Eopsaltria australis</i>	11/12/2017	1825-1835	2	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	likely pair foraged in open patches
589	Eastern Yellow Robin	<i>Eopsaltria australis</i>	11/12/2017	1650-1720	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21386° 153.15845°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	male called
590	Eastern Yellow Robin	<i>Eopsaltria australis</i>	13/12/2017	0650-0830	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21618° 153.15538°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, foraged, possibly with young bird nearby
591	Eastern Yellow Robin	<i>Eopsaltria australis</i>	14/12/2017	0555-0935	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called along blackbutt forest edge nr trail
592	Eastern Yellow Robin	<i>Eopsaltria australis</i>	11/12/2017	1755-1810	3	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	2 males, 1 female, mate pursuits

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593	Eastern Yellow Robin	<i>Eopsaltria australis</i>	12/12/2017	0750-0830	2	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	called territory, defended area thus nesting along senna edge
594	Eastern Yellow Robin	<i>Eopsaltria australis</i>	15/12/2017	0650-0830	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	juvenile bird not long out of nest, creched in low vegetation along creek
595	Eastern Yellow Robin	<i>Eopsaltria australis</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adult with recent fledgling - young bird on ground in bangalow palm and old-growth swamp paperbark section nr waypoint 13B
596	Eastern Yellow Robin	<i>Eopsaltria australis</i>	15/12/2017	0650-0830	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21571° 153.15080°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged nr waypoint 13A (old snig track)

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597	Eastern Yellow Robin	<i>Eopsaltria australis</i>	31/07/2018	0720-0930	3	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	adult pair foraged, male territory-called in paperbark and bangalow forest, 3rd bird likely immature male from previous breeding season
598	Eastern Yellow Robin	<i>Eopsaltria australis</i>	1/08/2018	0730-1030	2	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21784° 153.15276°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	adult pair foraged, likely starting breeding
599	Eastern Yellow Robin	<i>Eopsaltria australis</i>	1/08/2018	1505-1555	3	1	Littoral rainforest EEC - small patch on N side of walkway	30.21247° 153.15973°	Littoral rainforest EEC	adult pair foraged nr old turkey mound at waypoint 1D; third bird obs. & possibly son from previous breeding season
600	Eastern Yellow Robin	<i>Eopsaltria australis</i>	1/08/2018	1600-1625	1	2	Coastal Swamp Oak Forest EEC and swamp sclerophyll forest near main track (transect)	30.21298° 153.15910°	Swamp oak and swamp sclerophyll forest	foraged E end of transect
601	Eastern Yellow Robin	<i>Eopsaltria australis</i>	2/08/2018	1505-1535	1	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged, flew nr waypoint 6C
602	Eastern Yellow Robin	<i>Eopsaltria australis</i>	2/08/2018	1550-1630	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21359° 153.15723°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	male territory-called in nearby eucalypt forest to north

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
603	Eastern Yellow Robin	<i>Eopsaltria australis</i>	3/08/2018	0730-0930	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21044° 153.15186°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	male calling territory on E side creek downstream of bike track area
604	Eastern Yellow Robin	<i>Eopsaltria australis</i>	10/12/2018	0600-0650	3	1	Littoral rainforest EEC - small patch on N side of walkway	30.21222° 153.15942°	Littoral rainforest EEC	agitated scolding, likely with 1 fledgling
605	Eastern Yellow Robin	<i>Eopsaltria australis</i>	12/12/2018	0600-0810	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21554° 153.15082°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged
606	Eastern Yellow Robin	<i>Eopsaltria australis</i>	12/12/2018	1645-1820	1	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called in dry eucalypt forest nr waypoint 13D
607	Eastern Yellow Robin	<i>Eopsaltria australis</i>	13/12/2018	1630-1720	1	14	Northern tributary of Sugarmill Creek transect, south of Moonee Beach urban area off Sullivans Rd	30.21027° 153.15042°	dry blackbutt forest with old <i>Angophora costata</i> and turpentine, vines and moist understorey along small creek; motorbike use has eroded creekbanks	foraged along tributary bank

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608	Tawny Grassbird	<i>Megalurus timoriensis</i>	31/07/2018	1515-1615	1	7	Transect along beach dunal system	30.21569° 153.16068° & 30.21672° 153.16008°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	adult male foraged, flew north low through blady grass, marram grass and stunted low dense tuckeroo thickets
609	Tawny Grassbird	<i>Megalurus timoriensis</i>	13/12/2018	0635-0715	1	7	Transect along beach dunal system	30.21581° 153.15034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	flushed bird using 3 people walking in line along dune swale and crest, bird foraged in thick blady grass & <i>Acacia longifolia</i> between waypoints 7A & 7B
610	Silvereye	<i>Zosterops lateralis</i>	11/12/2017	0900-0915	5	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	flewover, called
611	Silvereye	<i>Zosterops lateralis</i>	11/12/2017	1825-1835	2	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged in lantana
612	Silvereye	<i>Zosterops lateralis</i>	12/12/2017	0845-0915	2	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	called, foraged
613	Silvereye	<i>Zosterops lateralis</i>	12/12/2017	1720-1845	7	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, sedgeland and mangroves along Stingray Creek (area search)	30.21531° 153.15895°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & senna (some treated)	foraged in mangroves, flew into swamp oak, called
614	Silvereye	<i>Zosterops lateralis</i>	14/12/2017	1830-1920	2	10	Coastal Saltmarsh EEC and mangrove forest (transect)	30.21254° 153.15579°	mangrove forest with saltmarsh patches and mudflat at junction of Stingray and Sugarmill Creeks	called in mangroves
615	Silvereye	<i>Zosterops lateralis</i>	11/12/2017	1755-1810	4	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21527° 153.15932°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraging, called, flew

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
616	Silvereye	<i>Zosterops lateralis</i>	12/12/2017	0750-0830	15	12	Transect in lantana & senna removal site adjacent to Rutile Trail	30.21466° 153.15987°	Mixed swamp oak and paperbark forest behind dunes, with senna and lantana understorey	foraged in lantana, called
617	Silvereye	<i>Zosterops lateralis</i>	3/08/2018	1555-1625	2	15	Rutile Trail south transect	30.21719° 153.15904°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	foraged, called
618	Silvereye	<i>Zosterops lateralis</i>	11/12/2018	1720-1810	3	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	flewover, called
619	Silvereye	<i>Zosterops lateralis</i>	13/12/2018	0635-0715	3	7	Transect along beach dunal system	30.21734° 153.15942°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	called, foraged in low tuckeroo in dune
620	Silvereye	<i>Zosterops lateralis</i>	13/12/2018	0810-0845	2	15	Rutile Trail south transect	30.21719° 153.15904°	<i>Banksia integrifolia</i> , tuckeroo and <i>Cryptocarya triplinervis</i> regenerating woodland/forest with senna and lantana, removed in Oct. 2018	foraged, called, flew
621	Welcome Swallow	<i>Hirundo neoxena</i>	11/12/2017	0650-0740	2	1	Littoral rainforest EEC - small patch on N side of walkway	30.21232° 153.15909°	Littoral rainforest EEC	called, foraged above
622	Welcome Swallow	<i>Hirundo neoxena</i>	8/08/2017	0915-0945	10	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged, called, soared above
623	Welcome Swallow	<i>Hirundo neoxena</i>	2/08/2018	0905-0925	1	4	Transect through proposed regeneration/vegetation zone below lookout	30.21395° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	foraged

Record Number	Common Name	Scientific Name	Date	Time	Number of Individuals	Site Number	Site Name & Description	Location of Record	Habitat type	Comments
624	Welcome Swallow	<i>Hirundo neoxena</i>	2/08/2018	0930-1000	2	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21443° 153.16202°	Themeda grassland and herbland on seacliffs EEC	foraged over Green Bluff
625	Welcome Swallow	<i>Hirundo neoxena</i>	10/12/2018	0805-0820	1	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	foraged, called
626	Welcome Swallow	<i>Hirundo neoxena</i>	13/12/2018	0635-0715	4	7	Transect along beach dunal system	30.21581° 153.15034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	foraged over dune system and adjacent beach
627	Tree Martin	<i>Petrochelidon nigricans</i>	12/12/2017	0700-0740	1	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	soared
628	Bassian Thrush	<i>Zoothera lunulata</i>	31/07/2018	1705	1	1	Littoral rainforest EEC - small patch on N side of walkway	30.21245° 153.15904°	Littoral rainforest EEC	foraged near boardwalk in rainforest in Site 1
629	Russet-tailed Thrush	<i>Zoothera heinei</i>	10/08/2018	1723	1	opportunistic record (recorded as Site 15)	along Rutile Trail west near Stingray Creek crossing	30.22045° 153.15446°	swamp paperbark and vine forest along upper Stingray Creek	foraged, flew
630	Mistletoebird	<i>Dicaeum hirundinaceum</i>	11/12/2017	0900-0915	1	4	Transect through proposed regeneration/vegetation zone below lookout	30.21332° 153.16182°	mixed grassland - blady grass and Rhode's grass with <i>Banksia integrifolia</i> and swamp oak isolates	flewover, called
631	Mistletoebird	<i>Dicaeum hirundinaceum</i>	30/07/2018	0915-1040	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21580° 153.15819°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	pair called, foraged in flowering mistletoe on swamp oaks

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632	Mistletoebird	<i>Dicaeum hirundinaceum</i>	31/07/2018	0720-0930	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21305° 153.15103°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	called, foraged in dry eucalypt forest nr waypoint 13D
633	Mistletoebird	<i>Dicaeum hirundinaceum</i>	1/08/2018	0730-1030	1	11	South Moonee Forest - dry and moist eucalypt forest and swamp paperbark forest with gahnia, cordyline, lomandra groundcover (area search)	30.21856° 153.15518°	dry eucalypt forest (previously selectively logged, long unburnt) on upper slopes and moist eucalypt forest with swamp paperbark forest (less disturbed) on lower slopes toward upper Stingray Creek	called, flewover to east
634	Mistletoebird	<i>Dicaeum hirundinaceum</i>	10/12/2018	1730-1750	1	9	Transect through Littoral rainforest EEC - small patch on N side of walkway, swamp oak floodplain forest EEC and sedgeland	30.21440° 153.15952°	Mixed littoral rainforest, swamp oak and paperbark forest and sedgeland	perched at lookout in canopy dead swamp oak nr waypoint 9A
635	Mistletoebird	<i>Dicaeum hirundinaceum</i>	11/12/2018	1720-1810	2	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21652° 153.15643°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	female foraged in flowering mistletoe & called in flight
636	Mistletoebird	<i>Dicaeum hirundinaceum</i>	12/12/2018	1645-1820	2	13	Upper Sugarmill Creek transect in old-growth swamp paperbark, flooded gum forest and dry blackbutt and ironbark forest; also bangalow palm, rainforest trees, shrubs and vines, cordyline and gahnia and lantana and senna along old snig tracks	30.21418° 153.15074°	mixed moist and dry sclerophyll forest with rainforest tree and shrub species, swamp paperbark forest (old-growth along creek), riparian vegetation and weeds (lantana, senna, vines) along old snig tracks	pair likely nesting along creek, called, foraged

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637	Red-browed Finch	<i>Neochmia temporalis</i>	11/12/2017	1825-1835	1	6	Transect through existing revegetation and regeneration area	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged on seeding grasses
638	Red-browed Finch	<i>Neochmia temporalis</i>	12/12/2017	0550-0610	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged in seeding grasses nr main track
639	Red-browed Finch	<i>Neochmia temporalis</i>	2/08/2018	0730-0830	7	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013°	mixed vine and shrub remnant with plantings and blady grass understorey	small flock foraged in small opening on seeding grasses
640	Red-browed Finch	<i>Neochmia temporalis</i>	2/08/2018	1505-1535	2	6	Transect through existing revegetation and regeneration patch	30.21361° 153.16096°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged in seeding grasses nr waypoint 6A
641	Red-browed Finch	<i>Neochmia temporalis</i>	2/08/2018	1505-1535	3	6	Transect through existing revegetation and regeneration patch	30.21424° 153.16016°	revegetated shrubland with vine tangles, lilly pilly and grasses	foraged seeding grasses nr Rutile Trail edge
642	Red-browed Finch	<i>Neochmia temporalis</i>	10/12/2018	0700-0740	2	3	Transect through bush regeneration zone north of main track	30.21268° 153.16013	mixed vine and shrub remnant with plantings and blady grass understorey	foraged on seeding grasses, flew
643	Red-browed Finch	<i>Neochmia temporalis</i>	11/12/2018	1720-1810	4	8	Swamp Oak Floodplain Forest EEC, swamp paperbark forest, mangroves and sedgeland along Stingray Creek (area search)	30.21660° 153.15732°	swamp oak floodplain forest with swamp paperbark, mangroves, sedgeland and clumps of introduced Groundsel Bush & some senna	foraged with young birds edge Stingray Creek mangroves
644	Australasian Pipit	<i>Anthus novaeseelandiae</i>	12/12/2017	0845-0915	4	7	Transect along beach dunal system	30.21581° 153.16034°	grassy main dune parallel to South Moonee Beach with patches of thick low acacia in swales	foraged together in small group along beach/foredune ecotone in marram grass and on bare sand
645	Australasian Pipit	<i>Anthus novaeseelandiae</i>	2/08/2018	0930-1000	2	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21443° 153.16202°	Themeda grassland and herbland on seacliffs EEC	foraged intensively over grassland nr waypoint 5C
646	Australasian Pipit	<i>Anthus novaeseelandiae</i>	10/12/2018	0830-0845	1	5	Transect through Themeda grassland and herbland EEC at Green Bluff	30.21412° 153.16248°	Themeda grassland and herbland on seacliffs EEC	foraged in grassland nr waypoint 5B