Jawoyn Country Bush Blitz

Diurnal Lepidoptera

Merlemerle - Butterflies and Moths

31 March to 10 April 2025

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A Dingy Grass-dart *Suniana lascivia larrakia* sunning itself on a blade of grass in a distinctive hesperid pose at Site JA9. (Photo: J. Archibald)

Nomenclature and taxonomy used in this report is consistent with:

The Australian Faunal Directory (AFD)



A newly emerged Meadow Argus *Junonia villida villida* basking in the early morning light at Site JA19 (Photo: J. Archibald)



A male Lyell's Swift *Pelopidius lyelli lyelli* feeding on *Dicarpidium* flowers at Site 152 (Photo: A. Webb)

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Abstract

A diurnal Lepidoptera fauna survey was carried out on Jawoyn Country, incorporating Nitmiluk National Park, in the central Top End over eleven days in March and April 2025. This survey was part of the Bush Blitz program of biodiversity surveys across Australia. Twenty sites were sampled encompassing a range of habitats. A total of 44 diurnal Lepidoptera species were recorded. As no previous dedicated surveys had been made in this area, these records establish a baseline list of diurnal Lepidoptera for this region. Of these 44 species, two were sampled for the first time in the area, although food plant mapping had predicted their presence. Overall, Jawoyn Country appears to support a moderate diversity of diurnal Lepidoptera fauna, but further surveys need to be conducted to ascertain what additional species are present in this region.

1. Introduction

Within the insects, butterflies are perhaps the best-known group owing to their spectacular appearance, diversity (including high levels of endemism) and generally conspicuous behaviour. They also play key roles as ‘flagships’ and ‘bio-indicators’ for inventory and monitoring for conservation and land management (Braby and Williams 2016). However, the Australian butterfly fauna still remains to be fully documented, with species discovery and description about 90% complete, spatial distributions still to be accurately mapped, and aspects of the biology of some species still unknown (Braby 2016). Programs such as the Bush Blitz biodiversity surveys assist in filling gaps in knowledge of Australian lepidoptera fauna.

Jawoyn Country covers approximately 55,000 square kilometres of land in the central Top End. It incorporates Nitmiluk National Park, the southern section of Kakadu National Park, the southwestern corner of Arnhem Land, and land stretching down to around Mataranka. This region contains the southern end of the Arnhem Land sandstone escarpment and various other habitats such as tropical open woodlands, swamps, paperbark and riparian forests, and covers the headwaters for several major Top End watercourses.

No targeted surveys of diurnal Lepidoptera have been carried out on Jawoyn Country in the past meaning there is no species baseline list and consequently conservation and land management plans cannot currently consider this fauna.

This report summarises the results of an eleven-day targeted survey of diurnal butterflies and moths on Jawoyn Country in March and April 2025. It complements diurnal Lepidoptera data from previous Bush Blitz surveys across the Top End (Fish River Station, Wongalara Sanctuary, Judbarra National Park, Bradshaw Field Training Area, and Groote Eylandt), to create a baseline upon which future scientific, Ranger and citizen science surveys can build.

2. Methods

2.1 Site selection

Twenty sites were sampled, including one Standard Survey Site (SSS2). The timing of the survey coincided with the end of an average Wet Season over the Top End of the Northern Territory. This meant that sampling occurred during what is normally a peak of lepidopteran activity and abundance, and this proved to be the case. Due to constraints of accessibility to most areas on Jawoyn Country (escarpment country, lack of roads, and areas closed for cultural reasons), two helicopters were shared across a large biological survey team and used extensively to access most sites. Due to the difficulty of gaining access to Jawoyn Country and the lack of any previous sampling, sites were targeted primarily in the more remote and

escarpment areas which could not be reached by vehicles, with lowland areas being accorded less sampling pressure. As the Lepidoptera were sampled as part of a multi-taxa team (with Fish and Odonata), sites targeted included representative aquatic habitats across the survey area as this allowed maximum efficiency of sampling; nonetheless adjacent terrestrial habitat was also sampled at each site across a wide area of the study region. A summary of sampling sites is shown in Table 1.

Incidental records of diurnal Lepidoptera across the survey area, both by observation and specimens, made by other Bush Blitz teams are included in the results.

Table 1. Diurnal Lepidoptera Sampling Sites, Jawoyn Country, GDA94 datum

Site	Latitude (S)	Longitude (E)	Location	Date
JA01	-14.47690	132.26082	Base Camp, Katherine Showgrounds.	1-10 April 2025
JA02	-14.17474	132.18521	Creek crossing 750m NW of Edith Falls	31 March 2025
JA03	-14.17996	132.18912	Leliyn-Edith Falls Main Pool area	31 March 2025
JA04	-13.91447	133.23883	Waterhouse River headwaters	1 April 2025
JA05	-13.80881	133.16255	Central Katherine River tributary	1 April 2025
JA06	-14.33611	132.42314	Helipad, Gorge Road, near Nitmiluk NP	1 & 10 April 2025
JA07	-14.24787	132.91522	11km E on Blue Drum Road, E of Manyallaluk Road	2 April 2025
JA08	-14.24608	133.03216	Fire trail East of Blue Drum Rd	2 April 2025
JA09	-14.18448	132.97952	Eva Creek tributary	3 April 2025
JA10	-14.13711	133.13422	Waterhouse River west branch, headwaters	3 April 2025
JA11	-14.14662	132.28299	Sandy Camp, Edith River, Jatbula Trail	4 April 2025
JA12	-14.04056	132.30667	Upper Ferguson River, above falls	6 April 2025
JA13	-14.11604	132.37427	17 Mile Creek above falls, Jatbula Trail	6 April 2025
JA14	-14.25251	132.43628	Top of Biddlecombe Cascades	7 April 2025
JA15 &15/2	-13.76430	133.12007	Escarpment tributary, mid reaches of Katherine River	7 & 9 April 2025
JA16	-14.12915	132.51357	Crystal Falls Creek headwaters	8 April 2025
JA17	-13.82136	132.37646	Douglas Springs south branch	8 April 2025
JA18	-13.75618	133.13527	Escarpment tributary, mid reaches of Katherine River	9 April 2025
JA19	-14.47547	132.92952	Dook Creek headwaters	10 April 2025
SSS2	-14.17717	132.19403	Sweetwater Pool Walk, Leliyn, Nitmiluk NP	10 April 2025

2.2 Survey techniques

All sites sampled comprised an area of approximately 1.5–2.0 ha. Diurnal Lepidoptera were recorded using visual observations or collected using a standard entomological sweep net (400mm internal diameter). Specimens retained as vouchers were placed in glassine envelopes, frozen overnight, and set out on pinning boards the next evening. Due to a lack of processing time near the end of the survey, some specimens were pinned and air dried in May 2025. Sampling effort varied per site, but was typically around 2 to 3 hrs, either in the late morning or early afternoon when butterfly activity was at its greatest. However, as most sites were accessed by helicopter, available survey time was often dictated by helicopter scheduling.



A selection of pinned and dried butterflies from Jawoyn Country (Photo: J. Archibald)

2.2.1 Methods used at standard survey sites

Standard Survey Site 2 (SSS2) was sampled as per the standard method prescribed for these sites. One collector sampled for 60 minutes within the site boundaries. All species of Lepidoptera detected were recorded with one voucher specimen being collected and processed as described in 2.2 above.

SSS2 was located on the eastern slope of a rocky hillside with an open woodland habitat that had been recently burnt and had begun to regenerate. Sampling at the site was carried out between 1515 and 1615 hours (the hottest part of the day). There were no plants in flower and the site was approximately 500 metres from the closest water source. Due to these factors the only Lepidoptera recorded were not residential but transiting through the site. Just 100 metres away on the western side of the hill there was a diverse range of Lepidoptera species present as there was an abundance of flowering herbs as this area had not been recently burnt.

Standard Survey Site 1 (SSS1) was not sampled during this survey.

2.3 Identifying the collections

Vouchered specimens were identified based primarily on Braby (2000, 2016, & 2018), as well as comparison with material in the Museum and Art Gallery of the Northern Territory (MAGNT) entomological collections. Photos of two specimens taken through a dissecting microscope were sent to Dr. Michael Braby (ANU) for confirmation of identifications for two specimens. The specimen data was assembled in a FileMaker Pro database managed by the Natural Sciences Section at MAGNT and observational data manually added. A copy of this data will ultimately be uploaded to the Atlas of Living Australia (ALA). The data has been recorded to the level of subspecies. Specimens that were not recorded to species level (i.e. where there was uncertainty in identification due to damage) were excluded.

3. Results and Discussion

Forty-four species of diurnal Lepidoptera were recorded on Jawoyn Country. Appendix 1 lists all diurnal Lepidoptera recorded during the Jawoyn Country Bush Blitz. Collections made during this Bush Blitz will result in 126 specimens being added to public collections and 209 records being added to publicly accessible databases. This survey has produced a baseline list of taxa for Jawoyn Country.

3.1 Un-named or not formalised taxa

No un-named or not-formalised Lepidoptera taxa were found on Jawoyn Country.

3.2 Species new to science

In this report, 'species new to science' means species that were not recognised by Western science before this Bush Blitz.

No Lepidoptera species new to science were found on Jawoyn Country.

3.3 Introduced species

No introduced species of Lepidoptera were found on Jawoyn Country.

However, during field work three species of invasive weeds were noted (see Table 2). Mission Grass, Hyptis and Wild Passionfruit are common weeds found across the Top End of the Northern Territory, and the first two are considered Class B weeds under the *NT Weeds Management Act 2001*.

Mission Grass was observed along the verge of roads and tracks near the Leliyn-Edith Falls main pool area, and at the Helipad area on Gorge Road. Both are disturbed sites. This species is easily spread by vehicles and both human and animal activity and needs to be actively controlled to make sure it does not spread any further into Nitmiluk National Park and Jawoyn Country.

Hyptis was observed at six sites within the study area. At most of these sites it was in small stands, but at Site JA19 it covered large areas of open woodland and was so thick its distinctive odour was all-pervasive once the helicopter landed. Surprisingly it was also found at Site JA15 – an area of stone country that is only accessible by helicopter. Hyptis produces large amounts of small square sticky seeds that are easily spread by human and animal activity. It would be advisable to monitor these stands over time to ascertain whether they are spreading.

Wild Passionfruit is not a declared weed but has spread throughout the Top End and semi-arid areas via bird droppings. In good habitat it becomes a woody vine that climbs trees and can smother native vegetation. It is nearly impossible to control due to its dispersal by birds but should be controlled where possible and its spread monitored.

None of these species are likely to cause high impacts on Lepidoptera communities although their control should be prioritised, so they do not spread further through Jawoyn Country.

Fortunately, no evidence of Gamba grass *Andropogon gayanus* was found in the areas of the study zone visited. This Class A and B Declared Weed is spreading across the Top End and causing serious environmental and economic damage.

Two species of feral mammal were recorded during the survey (see Table 2). Although buffalo were only recorded at six sites, large numbers of individuals were seen right across the study area from helicopters as Bush Blitz teams transited between survey sites. Buffalo wallows and channels were also recorded in both lowlands and escarpment country. Neither of these species are likely to cause high impacts on butterfly communities in the short term; however, the propensity of large mammal species, particularly buffalo, to degrade or even destroy sensitive butterfly breeding and refugia habitats around water sources, riparian areas and swamps, as well as assist in the spread of invasive weeds, suggests buffalo control measures or even eradication may be necessary (see Section 5).

Table 2. Introduced species recorded on Jawoyn Country			
Introduced species	**Location sighted/observed**	**Indication of abundance**	**Comments**
Cenchrus polystachios Mission Grass	Noted at Sites JA3 & JA6	Noted in stands along road verges and walking tracks.	Class B Weed – to be controlled under the Act.
Hyptis suaveolens Hyptis	Noted in stands at Sites JA3, JA6, JA11, JA15, JA17, JA19	The largest infestations were at JA19 – other sites had not developed thick stands as yet.	Class B Weed – to be controlled under the Act.
Passiflora foetida Wild Passionfruit	Noted at Sites JA3, JA15, JA19	Random plants but some quite large and smothering native vegetation	Not a Declared Weed but an invasive introduced species that should be controlled.
Bubalus bubalis Water Buffalo	Noted at Sites JA4, JA07, JA08, JA09, JA16, JA19	Wallows and animals sighted all over Jawoyn Country from the air.	Found right across the study area – need controlling to curb environmental degradation and spread of pest weeds
Bos Taurus Feral Cattle	Noted at Site JA19	Single scrub bull sighted	

3.4 Threatened species

No diurnal Lepidoptera species found on Jawoyn Country are currently listed as threatened under any of the state, national or international lists of threatened species schedules. These schedules include the Territory Parks and Wildlife Conservation Act, the EPBC Act - List of Threatened Fauna, and the IUCN Red List of Threatened Species.



A newly emerged Purple Oak-blue *Arhopala eupolis asopus* at Site JA14 (Photo: J. Archibald)

3.5 Range extensions

Jawoyn Country is located in the central Top End and incorporates the southwestern end of the Arnhem Land escarpment with associated plant and animal communities. Due to much of this country not being easily accessible there has not been a high level of lepidoptera collecting across the region. Of the 44 species of diurnal lepidoptera recorded on this survey, two species (*Mesodina gracillima* and *Taractrocera ilia*) have not been recorded in this part of the Top End before and represent significant extensions to their geographic range (See Table 3).

The Northern Iris-skipper *Mesodina gracillima* is a reasonably recently described Northern Territory endemic hesperid. It is recorded from several sites across the northern Top End including Cobourg Peninsula and the Tiwi Islands. Braby (2018) states that its geographic range closely reflects the spatial distribution of its larval food plant which is found in eucalypt woodland with a sparse herbaceous understorey on gently sloping terrain. Braby has mapped the plant in southern Jawoyn Country and Site JA07 closely matched the foodplant habitat. The two specimens collected at this site confirm its presence in the area and extend its known range by a little over 100km to the south.

The Northern or Rock Grass-dart (*Taractrocera ilia*) is another Northern Territory endemic hesperid. It is a Stone Country specialist and was previously known only from Western Arnhem Land. Braby (2018) states its geographic range closely reflects the spatial distribution of its larval foodplant which are various species of Resurrection Grass found only on the Arnhem Land plateau. Braby has mapped the plant in Jawoyn Country and Sites JA15 and JA18 are in escarpment country where this grass is found. The eight specimens collected at these two sites confirm its presence on the southern Arnhem Land plateau and extend its known range by a little over 70km to the south.



A Northern or Rock Grass-dart (*Taractrocera ilia*) resting in shadow on a sandstone outcrop at Site JA15 (Photo: J. Archibald)

Table 3. Range extensions or significant infill in distribution records for species			
Species	**Location sighted/observed**	**Distance from nearest known record (km)**	**Comments**
Mesodina gracillima Northern Iris-skipper	JA07	115km SSE of the closest record at 16km NNE of Gunlom Falls, NT	Range extension
Taractrocera ilia Northern Grass-dart	JA15 & JA18	74km SSE of the closest record at a site in Kakadu National Park.	Range extension

3.6 Genetic information

No genetic sampling of any diurnal Lepidoptera species was undertaken, however voucher specimens are suitable and available for tissue subsampling in the future.

4. Information on species lists

A total of 209 records (126 specimens and 83 observations) were made during this survey, representing 44 species of diurnal Lepidoptera. Of these 44 species, voucher specimens were obtained for 41 - the other three records being visual observations. Sampling was carried out in excellent conditions for lepidopteran fauna with mostly warm sunny days (the first two days had rain periods), plenty of flowering plants, and all drainage systems were flowing strongly with fresh clean water from Wet Season rains. Due to these conditions, it is felt that a representative survey of the lepidopteran fauna of Jawoyn Country was achieved.

However, as there has only been opportunistic collecting carried out historically on much of Jawoyn Country with no dedicated surveys of Lepidoptera as such, this survey can only be considered a first baseline study of the Lepidoptera taxa for this region. Results of a review of ALA specimen and observation records ascertained that there are at least 25 extra Lepidoptera species extant in the area that were not recorded on this survey. Further surveys need to be undertaken on Jawoyn Country during different seasons, and in differing habitats to gain a comprehensive record of the Lepidoptera fauna of this region.

The relative abundance of the lepidopteran fauna on Jawoyn Country during the survey period can also be outlined. The most abundant species was the Blue Argus *Junonia orithya albicincta* being recorded at 16 of the 20 sites surveyed. The Orange Ringlet *Hypocysta adiante antrius* was second at 13 sites, the Common Crow *Euploea corinna* at 11 sites and the Large Grass-yellow *Eurema hecabe* at 10 sites. As many sites were riparian habitats bordering open eucalyptus woodland (their preferred habitats) this was not an unexpected result. Nine species were only recorded from a single site with a single specimen or observation.

The richest survey site in terms of species diversity was JA15 with 21 species recorded. This site was a spring-fed stream running through escarpment country and falling into a jungly gorge. This site was unburnt and incorporated a diverse range of habitats with no water buffalo interference or damage. Interestingly, the next most species diverse site was JA19 with 18 species recorded. This site was a muddy stream flowing through open eucalypt woodland with some swamp and riparian habitats but exhibited heavy Hyptis infestation with both fire and buffalo damage. This site was the exception as many sites that displayed hot fire damage had seemingly regenerated well and appeared visually to be excellent lepidopteran habitats, but a paucity of species were recorded at them.

The sites with the lowest species diversity with only three species being recorded at each were JA10 and JA16.

Standard Survey Site 2 (SSS2) was located on the eastern slope of a rocky hillside with an open woodland habitat that had been recently burnt and had begun to regenerate. Five species of butterfly were recorded here and as there were no food or water sources present all appeared to be transiting through the site. None of the species recorded were unexpected for this site.



The interestingly named Dusky Knight *Ypthima arctous* found resting in leaf litter at Site JA14 (Photo: J. Archibald)

5. Information for land managers

Jawoyn Country, incorporating Nitmiluk National Park, comprises a large, diverse and relatively intact region that is critical to the integrity and connectivity of the National Reserve System within the Top End and more broadly within the Australian Monsoon Tropics.

In relation to the diurnal Lepidoptera fauna of this area, the major recommendation for land managers is to control the three major factors that contribute to ongoing habitat destruction and degradation in the Top End, namely feral animals, invasive weeds and inappropriate fire regimes.

The main large feral animal recorded on Jawoyn Country during the survey was the Water Buffalo. They were recorded at six of the survey sites but were noted as animals or their sign (wallows) all over the region from the air. They have the propensity to degrade and potentially destroy sensitive habitats around water sources, especially during the late dry season when surface water is scarce. Controlling populations of these feral animals ought to be a priority and will help protect the vegetation in these fragile habitats for all fauna, especially butterflies that use permanent moist areas as refugia during the dry season.

Although there was evidence of weeds in some disturbed areas, and Hyptis was recorded at six sites, weeds were conspicuous by their absence. Wind, vehicles, and human and animal movement (seeds caught in fur and clothing) are the main vectors for weeds. Controlling weeds by physically removing them and using herbicides, careful control of vehicle and human movements through known weed areas, meticulous cleaning of vehicles and clothing that enter Jawoyn Country and controlling weeds already present will help keep weed species under control on the property.

Some vegetation types, such as riparian monsoon forest, paperbark forest and monsoon vine thicket on sandstone escarpments and breakaways, are important habitats for butterflies. These habitats are extremely fire sensitive. Many of the sites visited exhibited evidence of hot destructive fires and as a result low species diversity when sampled. Managers need to ensure that any fuel reduction burns avoid these critical habitats with burns being carried out early in the dry season so that the threat of destructive wildfires is greatly diminished late in the dry season. Attempts should also be made to burn in a mosaic or patchwork pattern so that butterflies may survive in unburnt areas (refuges) from which they can recolonise recently burnt areas. It must be stated that evidence of mosaic burning could be seen across the study region from the air and the above advice is not given as a criticism but in support of what is already being carried out.

Butterflies represent an ideal portal to improved understanding of biodiversity research and conservation, being an active and visual part of habitats and landscapes (country). Butterfly sampling techniques, identification and biology could form component of activities including school education programs, ranger survey capacity building, and two-way learning to document language names and traditional ecological knowledge.



Thick stands of the weed Hyptis *Hyptis suaveolens* were found covering acres of land at Site 19 (Photo: J. Archibald)

6. Other significant findings

All significant finding have been recorded in earlier sections of this report.

7. Conclusions

Jawoyn Country supports a moderate diversity of diurnal Lepidoptera that are characteristic of the tropical woodland, riparian, and escarpment communities of northern Australia. Further surveys at other times of year, as well as in differing habitats (especially Stone Country) are likely to identify additional species on the property. This Bush Blitz survey provided an opportunity to survey a relatively unsampled and difficult to access region of the Northern Territory for Lepidoptera fauna resulting in a significant baseline list that can be built on in the future.



A Wattle Blue *Theclinesthes miskini miskini* feeding on a grevillea flower at the base of the escarpment at Site JA17 (Photo: J. Archibald)

Acknowledgements

We thank the Traditional Owners of Nitmiluk National Park and surrounding Jawoyn Country, for permitting us to conduct our surveys on their land. We recognise their ongoing cultural connection to land and country, and pay our respects to Elders past, present and emerging. We thank the Jawoyn Association Aboriginal Corporation for their assistance in helping us conduct our survey and a huge thankyou to all the Jawoyn Rangers without whose help, knowledge, and enthusiasm would have made this Bush Blitz impossible. We also thank Northern Territory Parks & Wildlife Rangers from Nitmiluk National Park, and Warddeken Land

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Jo Harding (Bush Blitz Manager) and report author Jared Archibald swapping notes at Base Camp on the finer points of butterfly preservation.

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Appendices

Appendix 1. List of diurnal Lepidoptera recorded during the Jawoyn Country Bush Blitz

Number of taxa: **44** (including subspecies and varieties but without double counting).

Family	Species	Common name	Species new to science	Threatened (EPBC Act)	Threatened (State/Territory Act)	Introduced species
Papilionidae	*Papilio demoleus sthenelus*	Chequered Swallowtail	No	No	No	No
Hesperiidae	*Mesodina gracillima*	Northern Iris-skipper	No	No	No	No
Hesperiidae	*Pelopidas lyelli lyelli*	Lyell's Swift	No	No	No	No
Hesperiidae	*Taractrocera ina*	No-brand Grass-dart	No	No	No	No
Hesperiidae	*Taractrocera ilia*	Northern Grass-dart	No	No	No	No
Hesperiidae	*Ocybadistes flavovittatus vesta*	Narrow-brand Grass-dart	No	No	No	No
Hesperiidae	*Suniana lascivia larrakia*	Dingy Grass-dart	No	No	No	No
Hesperiidae	*Telicota augias krefftii*	Bright-orange Darter	No	No	No	No
Pieridae	*Catopsilia pomona*	Lemon Migrant	No	No	No	No
Pieridae	*Eurema laeta sana*	Lined Grass-yellow	No	No	No	No
Pieridae	*Eurema herla*	Macleay's Grass-yellow	No	No	No	No
Pieridae	*Eurema smilax*	Small Grass-yellow	No	No	No	No
Pieridae	*Eurema alitha novaguineensis*	Scalloped Grass-yellow	No	No	No	No
Pieridae	*Eurema hecabe*	Large Grass-yellow	No	No	No	No
Pieridae	*Cepora perimale*	Caper Gull	No	No	No	No
Nymphalidae	*Danaus petilia*	Lesser Wanderer	No	No	No	No
Nymphalidae	*Euploea corinna*	Common Crow	No	No	No	No
Nymphalidae	*Acraea terpsicore*	Tawny Coster	No	No	No	No
Nymphalidae	*Junonia orithya albicincta*	Blue Argus	No	No	No	No
Nymphalidae	*Junonia villida villida*	Meadow Argus	No	No	No	No
Nymphalidae	*Junonia hedonia*	Brown Argus	No	No	No	No

Family	Species	Common name	Species new to science	Threatened (EPBC Act)	Threatened (State/Territory Act)	Introduced species
Nymphalidae	*Hypolimnas alimena darwinensis*	Blue-banded Eggfly	No	No	No	No
Nymphalidae	*Hypolimnas bolina*	Varied Eggfly	No	No	No	No
Nymphalidae	*Charaxes sempronius sempronius*	Tailed Emperor	No	No	No	No
Nymphalidae	*Melanitis leda bankia*	Evening Brown	No	No	No	No
Nymphalidae	*Mydosama sirius sirius*	Cedar Bush-brown	No	No	No	No
Nymphalidae	*Hypocysta adiante antirius*	Orange Ringlet	No	No	No	No
Nymphalidae	*Ypthima arctous arctous*	Dusky Knight	No	No	No	No
Lycaenidae	*Arhopala eupolis asopus*	Purple Oak-blue	No	No	No	No
Lycaenidae	*Erina geminus gagadju*	Twin Dusky-blue	No	No	No	No
Lycaenidae	*Erina erina erina*	Small Dusky-blue	No	No	No	No
Lycaenidae	*Candalides urumelia*	Spotted Opal	No	No	No	No
Lycaenidae	*Anthene lycaenoides godeffroyi*	Pale Ciliate-blue	No	No	No	No
Lycaenidae	*Prosotas dubiosa dubiosa*	Purple Line-blue	No	No	No	No
Lycaenidae	*Theclinesthes miskini miskini*	Wattle Blue	No	No	No	No
Lycaenidae	*Catochrysops panormus platissa*	Forget-me-not	No	No	No	No
Lycaenidae	*Zizina otis labradus*	Common Grass-blue	No	No	No	No
Lycaenidae	*Famegana nisa*	Black-spotted Grass-blue	No	No	No	No
Lycaenidae	*Cupido (Everes) lacturnus australis*	Orange-tipped Pea-blue	No	No	No	No
Lycaenidae	*Euchrysops cnejus cnidus*	Spotted Pea-blue	No	No	No	No
Lycaenidae	*Freyeria putli putli*	Jewelled Grass-blue	No	No	No	No
Erebidae	*Argina astrea*	Crotalaria Podborer	No	No	No	No
Erebidae	*Utetheisa lotrix*	Salt & Pepper Moth	No	No	No	No

Family	Species	Common name	Species new to science	Threatened (EPBC Act)	Threatened (State/Territory Act)	Introduced species
Noctuidae	*Idalima metasticta*	Speckled Day-moth	No	No	No	No

Appendix 2. List of Birds recorded during the Jawoyn Country Bush Blitz

Number of taxa: **96**

Genus	Species	Common Name
Dendrocygna	*eytoni*	Plumed Whistling-duck
Tadorna	*radjah*	Radjah Shelduck
Threskiornis	*molucca*	Australian White Ibis
Threskiornis	*spinicollis*	Straw-necked Ibis
Plegadis	*falcinellus*	Glossy Ibis
Ixobrychus	*flavicollis*	Black Bittern
Bubulcus	*coromandus*	Eastern Cattle Egret
Ardea	*pacifica*	White-necked Heron
Egretta	*intermedia*	Intermediate Egret
Microcarbo	*melanoleucos*	Little Pied Cormorant
Anhinga	*novaehollandiae*	Australasian Darter
Hamirostra	*melanosternon*	Black-breasted Buzzard
Accipiter	*fasciatus*	Brown Goshawk
Aquila	*audax*	Wedge-tailed Eagle
Milvus	*migrans*	Black Kite
Haliastur	*sphenurus*	Whistling Kite
Haliaeetus	*leucogaster*	White-bellied Sea-Eagle
Ardeotis	*australis*	Australian Bustard
Grus	*rubicunda*	Brolga
Burhinus	*grallarius*	Bush Stone-curlew
Himantopus	*leucocephalus*	White-headed Stilt
Vanellus	*miles*	Masked Lapwing
Tringa	*glareola*	Wood Sandpiper
Phaps	*chalcoptera*	Common Bronzewing
Ocyphaps	*lophotes*	Crested Pigeon
Petrophassa	*rufipennis*	Chesnut-quilled Rock Pigeon
Geopelia	*placida*	Peaceful Dove
Geopelia	*humeralis*	Bar-shouldered Dove
Centropus	*phasianinus*	Pheasant Coucal
Tyto	*delicatula*	Eastern Barn Owl
Ninox	*connivens*	Barking Owl
Ninox	*boobook*	Southern Boobook
Podargus	*strigoides*	Tawny Frogmouth
Eurostopodus	*argus*	Spotted Nightjar
Aegotheles	*cristatus*	Australian Owlet-nightjar
Apus	*pacificus*	Fork-tailed Swift

Genus	Species	Common Name
Eurystomas	*orientalis*	Dollarbird
Dacelo	*leachii*	Blue-winged Kookaburra
Todiramphus	*macleayii*	Forest Kingfisher
Todiramphus	*sanctus*	Sacred Kingfisher
Ceyx	*azureus*	Azure Kingfisher
Merops	*ornatus*	Rainbow Bee-eater
Falco	*cenchroides*	Nankeen Kestrel
Falco	*longipennis*	Australian Hobby
Falco	*berigora*	Brown Falcon
Calyptorhynchus	*banksii*	Red-tailed Black-Cockatoo
Eolophus	*roseicapilla*	Galah
Cacatua	*sanguinea*	Little Corella
Cacatua	*galerita*	Sulphur-crested Cockatoo
Nymphicus	*hollandicus*	Cockatiel
Trichoglossus	*rubritorquis*	Red-collared Lorikeet
Psitteuteles	*versicolor*	Varied Lorikeet
Platycercus	*venustus*	Northern Rosella
Melopsittacus	*undulatus*	Budgerigar
Aprosmictus	*erythropterus*	Red-winged Parrot
Chlamydera	*nuchalis*	Great Bowerbird
Malurus	*lamberti*	Variegated Fairy-wren
Malurus	*melanocephalus*	Red-backed Fairy-wren
Myzomela	*obscura*	Dusky Honeyeater
Lichmera	*indistincta*	Brown Honeyeater
Philemon	*citreogularis*	Little Friarbird
Philemon	*buceroides*	Helmeted Friarbird
Philemon	*argenticeps*	Silver-crowned Friarbird
Entomyzon	*cyanotis*	Blue-faced Honeyeater
Melithreptus	*albigularis*	White-throated Honeyeater
Manorina	*flavigula*	Yellow-throated Miner
Stomiopera	*unicolor*	White-gaped Honeyeater
Ptilotula	*flavescens*	Yellow-tinted Honeyeater
Pardalotus	*striatus*	Striated Pardalote
Pomatostomus	*temporalis*	Grey-crowned Babbler
Artamus	*leucorynchus*	White-breasted Woodswallow
Artamus	*cinereus*	Black-faced Woodswallow
Cracticus	*nigrogularis*	Pied Butcherbird
Cracticus	*tibicen*	Australian Magpie

Genus	Species	Common Name
Coracina	*novaehollandiae*	Black-faced Cuckoo-shrike
Coracina	*papuensis*	White-bellied Cuckoo-shrike
Lalage	*tricolor*	White-winged Triller
Colluricincla	*harmonica*	Grey Shrike-thrush
Colluricincla	*woodwardi*	Sandstone Shrike-thrush
Sphecotheres	*vieilloti*	Australasian Figbird
Oriolus	*flavocinctus*	Yellow Oriole
Dicrurus	*bracteatus*	Spangled Drongo
Rhipidura	*leucophrys*	Willie Wagtail
Rhipidura	*rufiventris*	Northern Fantail
Grallina	*cyanoleuca*	Magpie-lark
Myiagra	*alecto*	Shining Flycatcher
Corvus	*orru*	Torresian Crow
Struthidea	*cinerea*	Apostlebird
Cisticola	*exilis*	Golden-headed Cisticola
Dicaeum	*hirundinaceum*	Mistletoebird
Neochmia	*phaeton*	Crimson Finch
Poephila	*personata*	Masked Finch
Taeniopygia	*guttata*	Zebra Finch
Taeniopygia	*bichenovii*	Double-barred Finch
Lonchura	*flavipyrmna*	Yellow-rumped Mannikin
Lonchura	*castaneothorax*	Chestnut-breasted Mannikin



Outlying mesa at the southern branch of Douglas Springs – Site JA17 (Photo: J. Archibald)