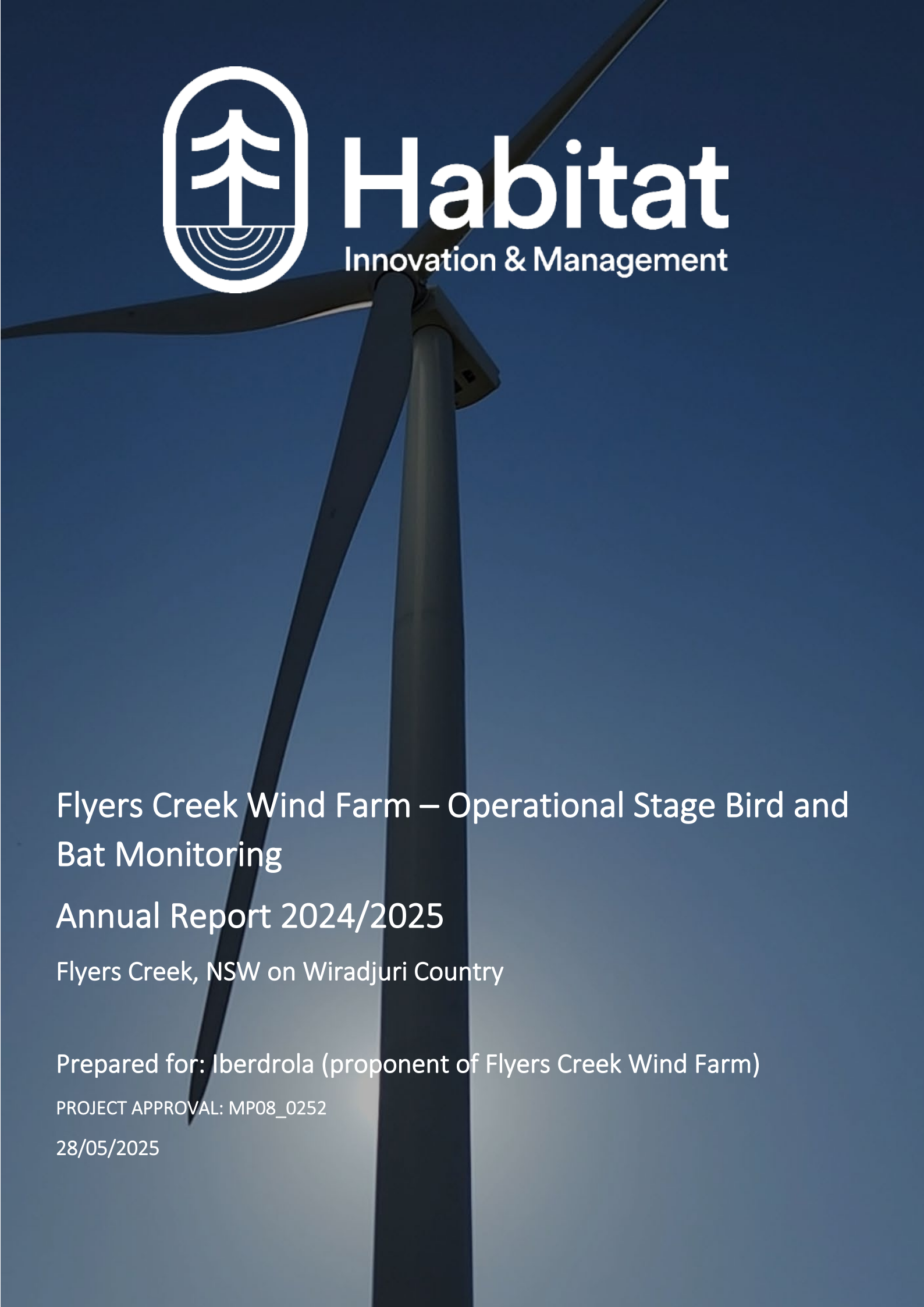

Habitat
Innovation & Management

Flyers Creek Wind Farm – Operational Stage Bird and Bat Monitoring

Annual Report 2024/2025

Flyers Creek, NSW on Wiradjuri Country

Prepared for: Iberdrola (proponent of Flyers Creek Wind Farm)

PROJECT APPROVAL: MP08_0252

28/05/2025

PROJECT NAME	**FLYERS CREEK WIND FARM – OPERATIONAL STAGE BIRD AND BAT MONITORING**	
MONITORING PERIOD	Annual Report 2024/2025	
PROJECT ADDRESS	Flyers Creek, NSW on Wiradjuri Country	
PREPARED FOR	Iberdrola (proponent of Flyers Creek Wind Farm)	
AUTHOR/S	Mick Callan, Mikayla Green	
DATE PREPARED	Annual Report 2024/2025	
REVIEW	Technical	QA
	Carl Tippler	Courtney Longhurst
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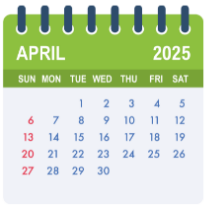
At a Glance



Monitoring conducted: May 2024 - April 2025

No. of turbines searched each month: 19

No. of carcasses found: 86

Raptors recorded: 164; Species: 6

Migratory birds recorded: 1; Species: 1

Impact triggers: 4

No. of issues/potential issues: 14

Contents

Figures

Tables

Glossary of abbreviations

Acronym	Description
BBAMP	Bird and Bat Adaptive Management Plan
BCS	Biodiversity, Conservation and Science group of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW)
DPE	NSW Department of Planning and Environment
FCWF	Flyers Creek Wind Farm
WTG	Wind Turbine Generator
WFM	Wind Farm Monitoring (app)

1 Introduction

Iberdrola (proponent of Flyers Creek Wind Farm) engaged Habitat Innovation and Management Pty Ltd to implement commissioning stage monitoring and monthly monitoring during the operational stage of the Flyers Creek Wind Farm (FCWF) project, at Flyers Creek, NSW on Wiradjuri Country. The monitoring is being conducted in accordance with the Flyers Creek Wind Farm Bird and Bat Adaptive Management Program (BBAMP) (Nature Advisory, 2020) and is outlined in this Annual Report.

Commissioning stage monitoring was not required under the BBAMP, or the FCWF approvals, but was completed for five months from December 2023 to April 2024 inclusive, as part of due diligence environmental management by the project proponent. Monthly monitoring work will be completed over a period of two years from the commencement of the operational stage of the FCWF.

This is the first Annual monitoring report for the initial 12 months of operational stage monitoring conducted from May 2024 to April 2025.

During the operational stage the monitoring effort is inclusive of:

- Targeted carcass searches (full searches to 100 m and follow-up pulse searches to 60 m)
- Incidental raptor surveys
- Incidental migratory bird surveys

Additional works completed during the project to date include:

- Operational bird utilisation surveys
- Scavenger trials
- Detectability (observer) trials

This report is broken into the following components:

- Summary of previous reporting (monthly monitoring)
- Monitoring results
- Incidental carcass finds
- Analysis and comparison of results

Fieldwork for monthly monitoring surveys from May 2024 to April 2025 was undertaken by Habitat Innovation and Management ecologists Mick Callan, Liam Doherty, James Taylor, Mikayla Green and Stefanie Jones. This report has been prepared by Mick Callan, Director and Principal Ornithologist, Habitat Innovation and Management with the assistance of ecologists Mikayla Green and Liam Doherty.

2 Monthly reporting

2.1 Monitoring reports from initial 12 months

Commissioning stage monitoring was not required under the BBAMP, or the FCWF approvals, but was completed for five months from December 2023 to April 2024 inclusive:

- Flyers Creek Wind Farm Commissioning Stage Bird and Bat Monthly Monitoring Report December 2023
- Flyers Creek Wind Farm Commissioning Stage Bird and Bat Monthly Monitoring Report January 2024
- Flyers Creek Wind Farm Commissioning Stage Bird and Bat Monthly Monitoring Report February 2024
- Flyers Creek Wind Farm Commissioning Stage Bird and Bat Monthly Monitoring Report March 2024
- Flyers Creek Wind Farm Commissioning Stage Bird and Bat Monthly Monitoring Report April 2024

Monthly monitoring work will be completed over a period of two years following commencement of the operational stage for the FCWF. The following monitoring reports have been completed to date from the initial 12 months of monitoring and will be summarised in this annual report:

- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report May 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report June 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report July 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report August 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report September 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report October 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report November 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report December 2024
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report January 2025
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report February 2025
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report March 2025
- Flyers Creek Wind Farm Operational Stage Bird and Bat Monthly Monitoring Report April 2025

In addition to the monthly monitoring reports, the following Impact Trigger Reports have been prepared and submitted following impact triggers being reached for White-striped Freetail Bat (*Austronomus australis*) and Yellow-bellied Sheathtail Bat (*Saccolaimus flaviventris*).

- Flyers Creek Wind Farm January Impact Trigger Report – White-striped Freetail Bat
- Flyers Creek Wind Farm February Impact Trigger Report – White-striped Freetail Bat

- Flyers Creek Wind Farm March Impact Trigger Report – White-striped Freetail Bat
- Flyers Creek Wind Farm March Impact Trigger Report – Yellow-bellied Sheathtail Bat

2.2 Monitoring methods

2.2.1 Carcass Searches

On-site bird and bat strike monitoring of turbines is conducted in accordance with Section 4.4.2 Search Protocol from the Flyers Creek Wind Farm Bird and Bat Adaptive Management Program (BBAMP) (Nature Advisory, 2020). Operational stage carcass search monitoring comprises a full search out to 100 m with pulse searches (repeat searches to 60 m) undertaken within several days to detect additional mortality of bats and birds. Each monthly monitoring period requires 19 turbines to be searched, representing 50% of the total 38 turbines at the FCWF (Figure 1). It is specified that this is to include those in the north portion of the layout (turbines 1-8).

The order of turbines to be searched is to be randomised each month during which time each turbine will be searched out to 100 m, comprised of 6 m circular transects out to 60 m (inner search zone) and then every 12 m out to 100 m (outer search zone), noting that the final circular transect is completed at 96 m from the wind turbine generator (WTG) tower. All carcasses detected are recorded and collected in accordance with the BBAMP.

The turbines searched monthly since the turbines went operational are:

- T01
- T02
- T03
- T04
- T05
- T06
- T07
- T08
- T13
- T17
- T19
- T20
- T22
- T23
- T24
- T27
- T35
- T36
- T38

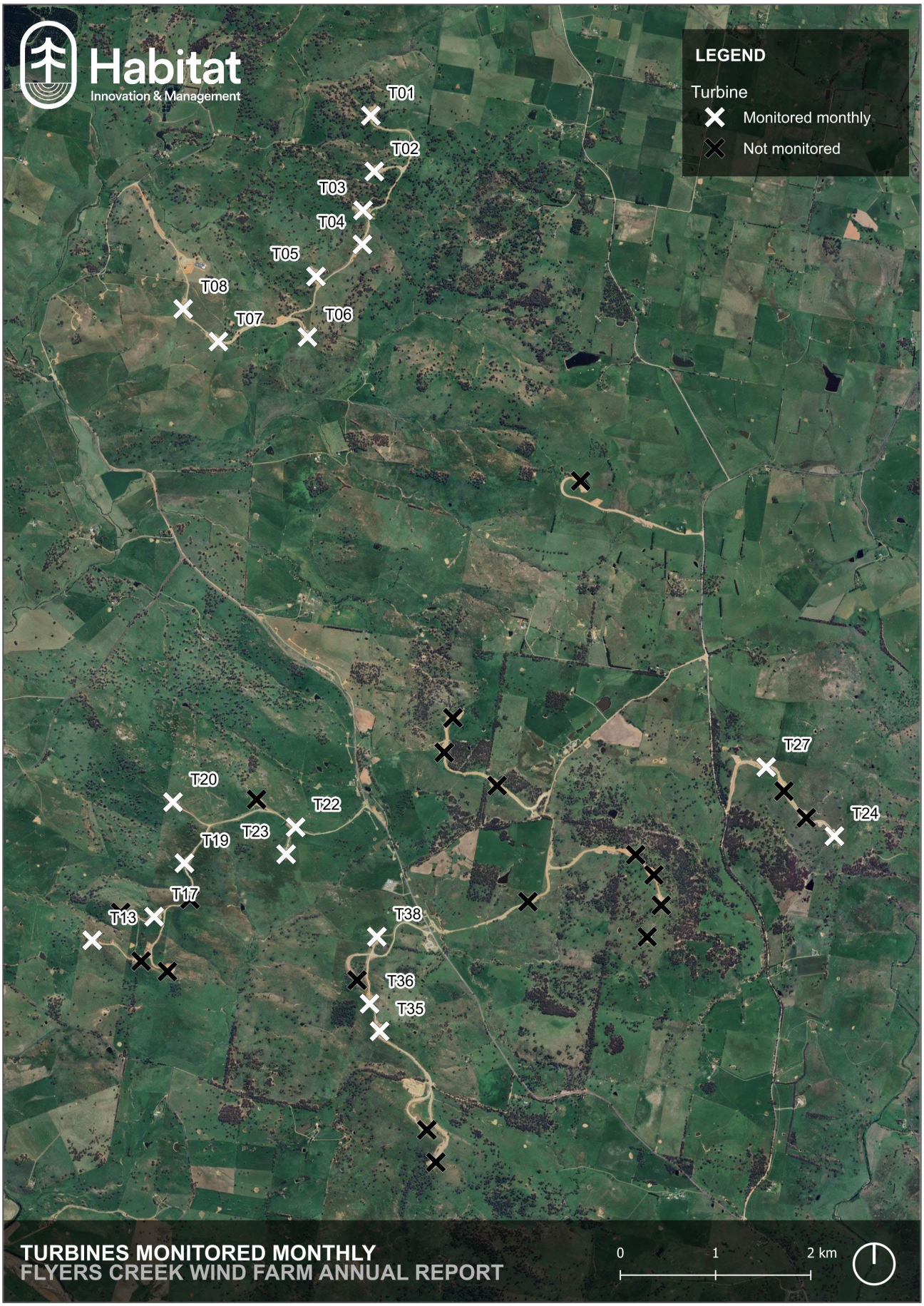


Figure 1: Turbines monitored monthly for bird and bat carcasses at Flyers Creek Wind Farm

2.2.2 Variation from the BBAMP

It is noted the use of paper data sheets is specified in the BBAMP, which then have the risk of errors during data transfer to a computer. We instead are using our custom Habitat Innovation and Management Wind Farm Monitoring (WFM) app to record data which is uploaded live to the cloud and stored immediately within our online database. This minor change is considered an improvement to the minimum requirements detailed in the BBAMP and was not objected to by DPE (BCS group) in their letter to the Site Manager – Flyers Creek Wind Farm dated 30 April 2024.

2.2.3 Monitoring Equipment

Equipment used for the carcass searches includes:

- Garmin Etrex SE handheld GPS navigators
- Habitat Innovation and Management WFM app for data collection via various mobile phone devices
- Digitech Mini Scale – for recording carcass weights of microbats

Live weather data is recorded at the beginning of each transect, including temperature, humidity, wind direction and wind speed using the Weatherzone app.

It is noted that our methodology provided in the tender (Provision of Consulting Services for Implementation of the BBAMP – Flyers Creek Wind Farm, Wiradjuri Country) prepared for Flyers Creek Wind Farm (Habitat Innovation and Management, 2023) specifies that, georeferenced map sets with pre-determined transects would be used to navigate the transects in the field using a hand-held tablet. Given that the GPS units that we are using provide a greater level of features compared to previous models, including providing live data back to our office, we have used them to record the transects and to provide the mapped transects included in the Appendices.

2.2.4 Raptor Searches

Monitoring of birds of prey (raptors) is conducted in accordance with Section 4.1.1 Birds of Prey (Raptors) from the BBAMP. This incidental monitoring involves searching for raptors during carcass searches by scanning the surrounds and the sky every minute or so. Raptors observed whilst travelling between search sites are also recorded.

Observed raptor flights are plotted on a map in the field with all available observations recorded including flight behaviour, heights, direction and the time that the observation commenced and finished, as well as any observed perching locations. This is completed in accordance with Section 5.3 of the BBAMP.

It is noted that our methodology provided in the tender (Provision of Consulting Services for Implementation of the BBAMP – Flyers Creek Wind Farm – Wiradjuri Country) prepared for Flyers Creek Wind Farm (Habitat Innovation and Management, 2023) specifies that georeferenced map sets will be used to record raptor flight

paths in the field. Data are recorded via Avenza Maps on mobile devices in the field and directly uploaded to the cloud for preparation of maps in the office using the Avenza mapping software.

Information recorded from each sighting includes:

- Date
- Location
- Time
- Observation period
- Species
- Number of birds
- Flight behaviour and flight path
- Notable perching or nesting locations if apparent.

2.2.5 Raptor Roosts/perches

Raptor roosts are recorded and mapped in accordance with Section 5.3 of the BBAMP to identify structures or trees that are regularly used for perching by birds of prey. Where the roost sites are located within 300 m of wind turbines and are regularly used as roost sites, consideration should be given to removing the perch to reduce the level of bird activity near wind turbines. Raptor roosts recorded to date, including those recorded during the commissioning stage monitoring, have been included with data including species use of the roost, date of use, nearest turbine and location of the roost.

2.2.6 Migratory Bird Searches

Monitoring of migratory birds is conducted in accordance with Section 4.1.2 Migratory Species from the BBAMP. This incidental monitoring involves searching for migratory birds during carcass searches by scanning the sky every minute or so during turbine carcass searches.

Migratory birds observed whilst travelling between search sites are also recorded.

Observed migratory bird flights are plotted on a georeferenced map in the field (using Avenza Maps on mobile devices) with all available observations recorded including number of birds, flight behaviour, heights, direction and the time that the flights were recorded.

3 Monthly Monitoring Results

3.1 Commissioning stage monitoring

During the commission stage of the Flyers Creek Wind Farm monthly monitoring events occurred from December 2023 to April 2024. Each survey event was conducted across a single day with full searches conducted (no pulse searches). During commissioning stage monitoring a total of 26 turbine searches were completed. Across the five months a total of 11 carcasses were recorded, with no incidental carcasses recorded during this period. The carcasses comprised of 2 birds and 9 microbats of various species as listed below:

- Australian Raven (*Corvus coronoides*) x 2
- White-striped Freetail Bat (*Austronomus australis*) x 4
- Gould's Wattled Bat (*Chalinolobus gouldii*) x 1
- Large Forest Bat (*Vespadelus darlingtoni*) x 1
- Little Broad-nosed Bat (*Scotorepens greyii*) x 2
- Little Forest Bat (*Vespadelus vulturnus*) x 1

As these carcass finds were recorded outside of the operational phase monitoring, they have not been included in the overall data below or the carcass modelling.

3.2 Carcass searches

The carcass search monitoring was conducted monthly from May 2024 to April 2025. In total, 86 bird and bat carcasses were recorded, including 31 bird carcasses and 55 bat carcasses. There was a significant increase in carcass finds during the warmer months of the year – October to March (Figure 2). This is represented by an increase in both bird and bat carcasses.

The distribution of carcasses recorded across turbines at Flyers Creek Wind Farm are shown in Figure 2. WTG 20 had the most carcasses recorded during monitoring over the 12 months with 11 carcasses being found. Nine of the 11 carcasses recorded at WTG 20 were White-striped Freetail Bats (*Austronomus australis*). WTG 38 also had a high number of carcasses with 10 being recorded over the 12 month monitoring period. Of the 10 carcasses, six were White-striped Freetail Bats.

As shown in Figure 4, where several carcasses have been recorded during monthly monitoring, there tends to be large numbers of bats or birds, not both. Carcasses have also been incidentally recorded by Flyers Creek Wind Farm Staff, Contractors and Habitat Innovation Ecologists at nine extra turbines that aren't included in the monthly monitoring (Figure 3, Figure 4).

White-striped Freetail Bats were the most common carcass type recorded during the 2024/2025 monitoring period with a total of 27 carcasses being collected (Figure 5). More detail regarding White-striped Freetail Bats in included in the Impact Triggers section of this report (Section 5.5).

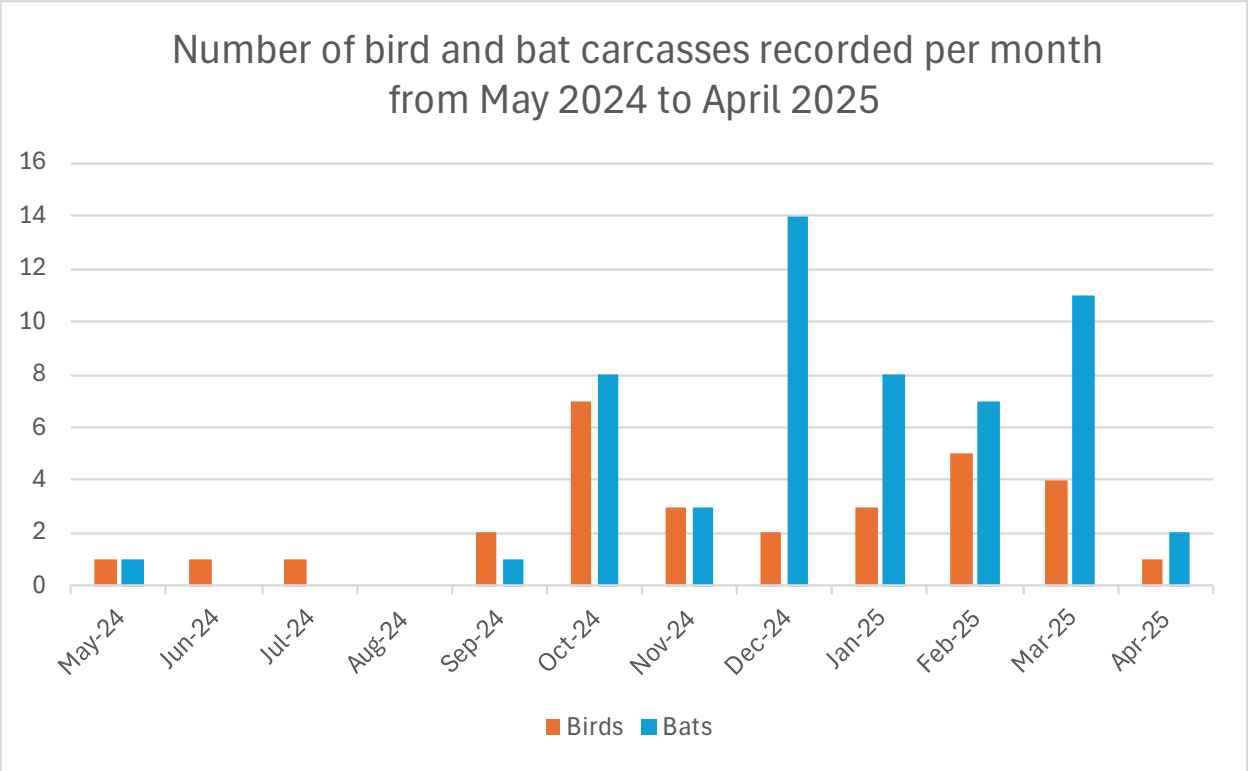


Figure 2: Bird and bat carcass finds during turbine monitoring from May 2024 to April 2025.

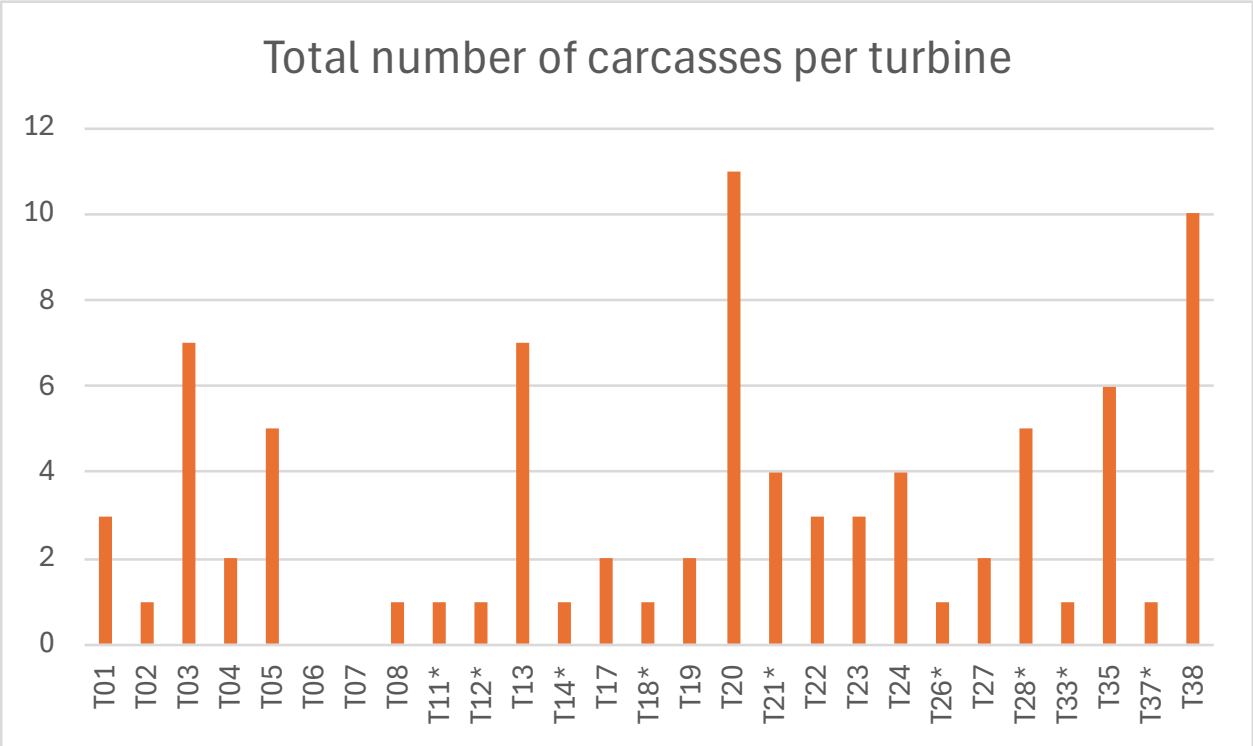


Figure 3: Total number of carcasses recorded in the 12 months of turbine monitoring from May 2024 to April 2025. Carcasses incidentally recorded at turbines not included in monthly monitoring have been marked with a *.

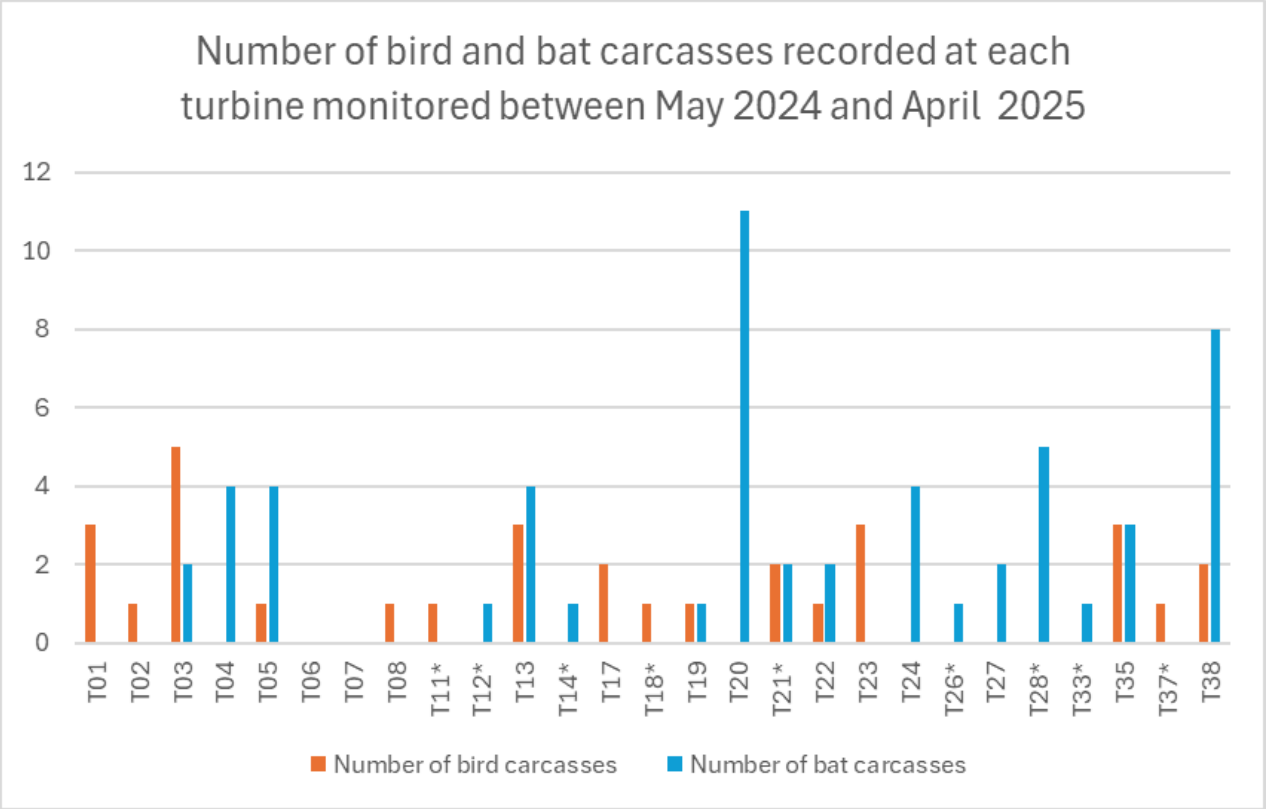


Figure 4: Total bird and bat carcasses recorded in the 12 months of turbine monitoring from May 2024 to April 2025. Carcasses incidentally recorded at turbines not included in monthly monitoring have been marked with a *.

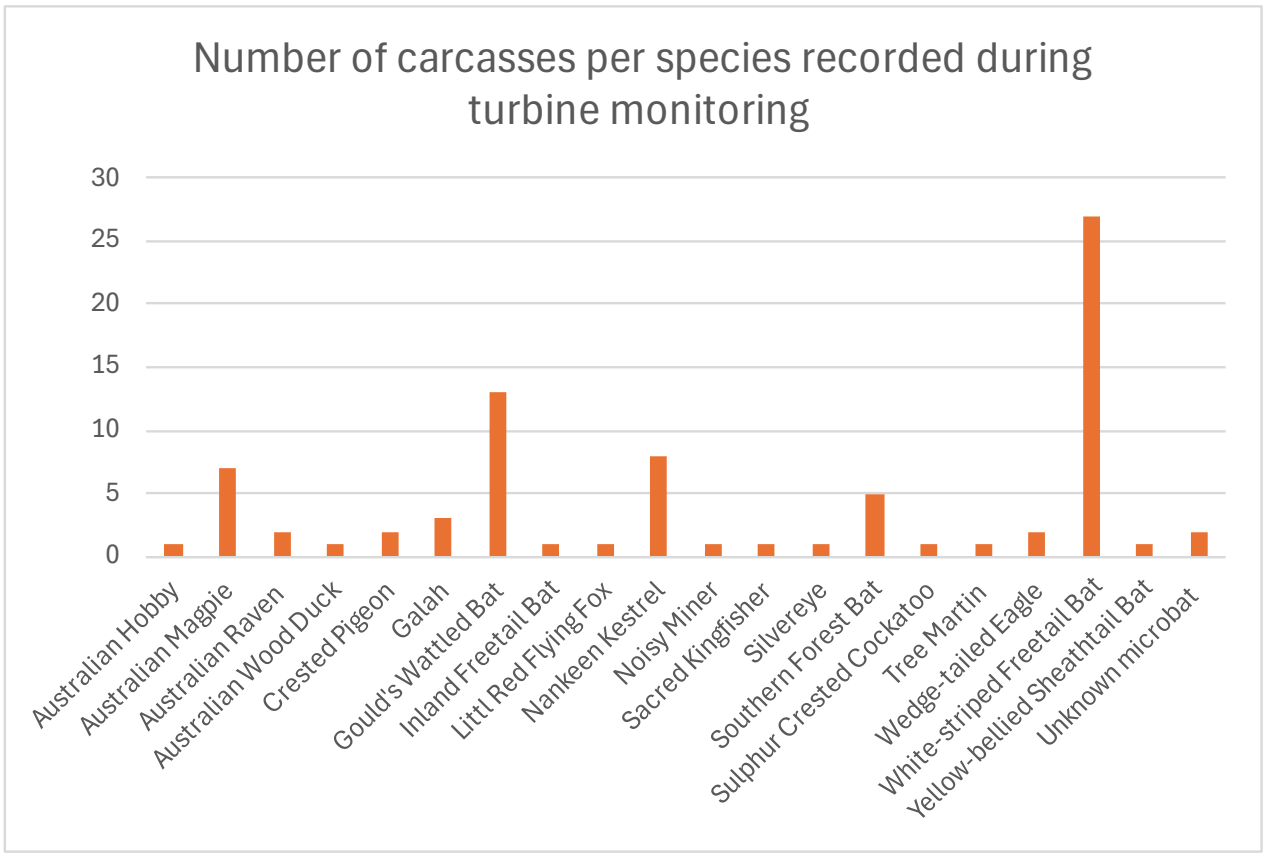


Figure 5: Number of carcasses recorded from May 2024 to April 2025 listed by species type.

3.3 Raptor searches

The raptor search monitoring period was conducted concurrently with the monthly carcass searches from May 2024 to April 2025. In total 164 raptors have been recorded from May 2024 to April 2025 from six different species (Table 1). Raptor species recorded at Flyers Creek Wind Farm include Wedge-tailed Eagle (*Aquila audax*), Nankeen Kestrel (*Falco cenchroides*), Brown Falcon (*Falco berigora*), Peregrine Falcon (*Falco peregrinus*), Black-shouldered Kite (*Elanus axillaris*) and Australian Hobby (*Falco longipennis*). Nankeen Kestrels were the most frequently recorded raptor species with 77 individual sightings over the 12-month period. Wedge-tailed Eagles were also frequently recorded with 67 individual sightings over the 12 months. Only one Australian Hobby and one Peregrine Falcon were recorded during monitoring. Nankeen Kestrels and Wedge-tailed Eagles were often recorded flying in pairs around the wind farm. There appeared to be no seasonal trend of raptor sightings across the wind farm (Figure 6).

As shown in Figure 7 there is a large number of Nankeen Kestrels concentrated from T35 to T38.

Table 1: Number of raptor sightings recorded from May 2024 to April 2025 during turbine monthly monitoring.

Common Name	Scientific Name	Number of raptor sightings
Australian Hobby	*Falco longipennis*	1
Black-shouldered Kite	*Elanus axillaris*	4
Brown Falcon	*Falco berigora*	14
Nankeen Kestrel	*Falco cenchroides*	77
Peregrine Falcon	*Falco peregrinus*	1
Wedge-tailed Eagle	*Aquila audax*	67
Total		**164**

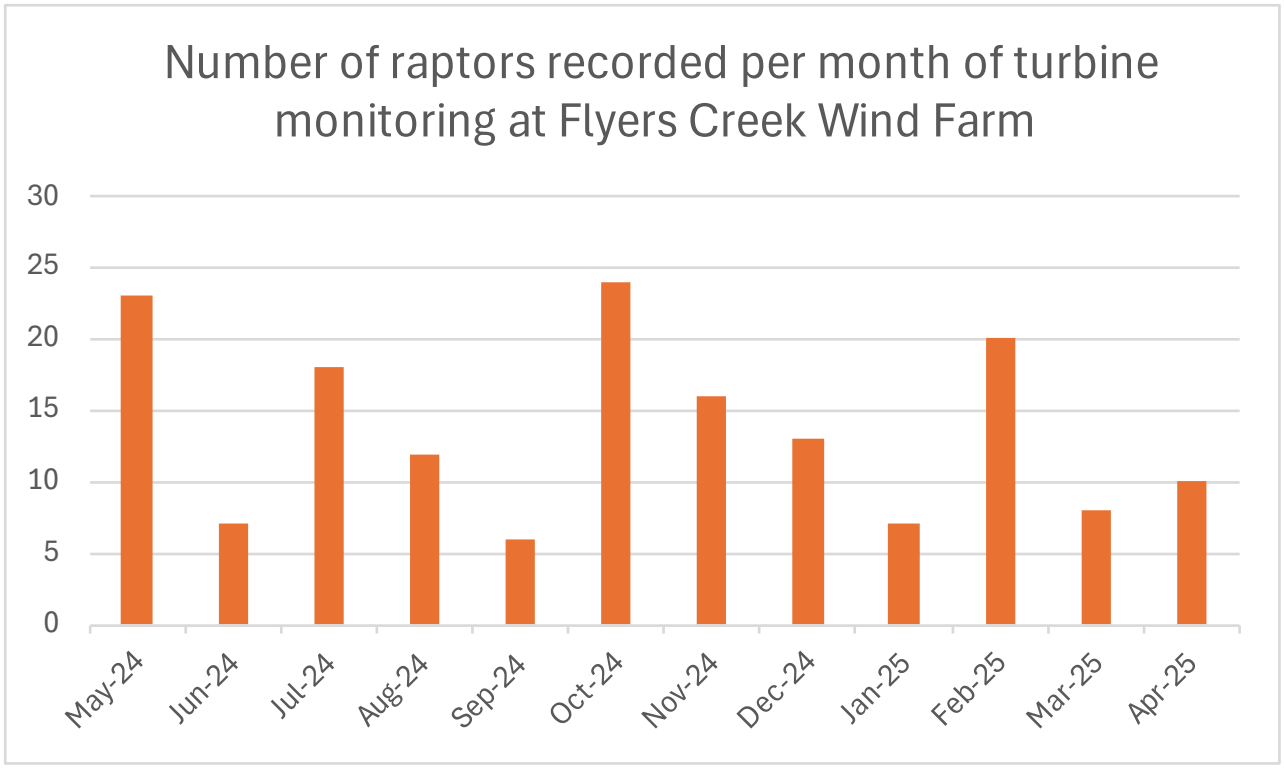


Figure 6: Number of raptors recorded per month of turbine monitoring from May 2024 to April 2025

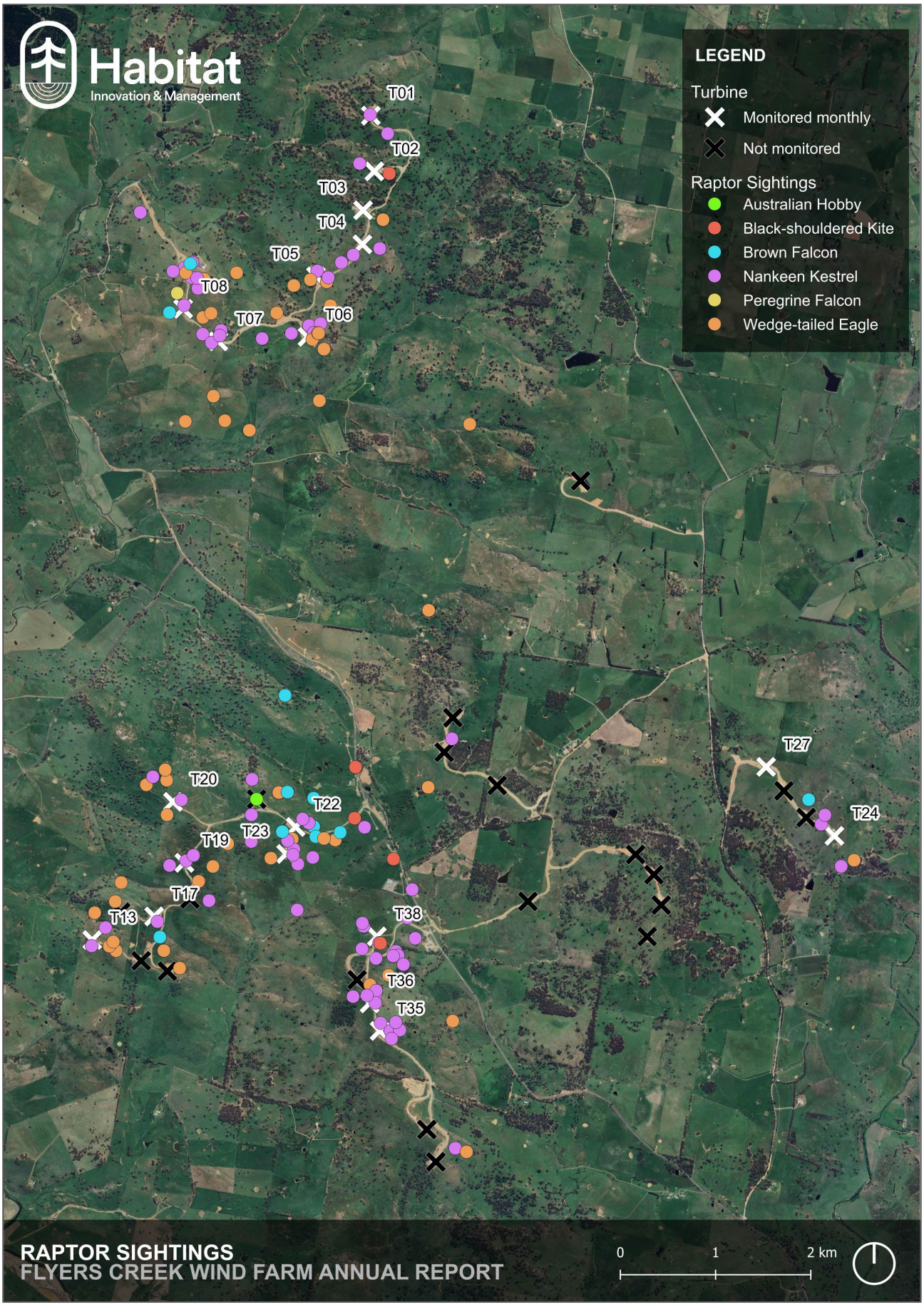


Figure 7: Total spatial records of raptors sighted during monthly turbine monitoring. Each species is colour coded.

3.4 Raptor roosts

In total 18 raptor roosts have been recorded across Flyers Creek Wind Farm since monitoring began (Table 2). These roosts are a combination of stags, stumps, live roost trees and nest trees. Three raptor species have been observed using these roosts, comprised of Nankeen Kestrels, Wedge-tailed Eagles and Brown Falcons. Twenty-five individuals of these species have been observed utilising the recorded roost trees. There have been no records of different species using the same roost location.

Additionally, two Nankeen Kestrels were observed perching on and entering a hatch in the base of the nacelle of Turbine 01 when it was non-operational on 4 April 2025. The raptors were observed circling and inspecting the turbine, taking turns flying in an out of the hatch approximately three times whilst also perching on the blades. No Nankeen Kestrels (live or carcass) were recorded during the following month (May) of monitoring. T01 was non-operational for approximately a month during this period for maintenance. Following the observation by Habitat Innovation staff, the nacelle and nacelle hatch were inspected for both birds and nests, with no evidence of either prior to being made operational again (Figure 8).

Table 2: Roosts/perches in proximity to turbines being utilised by raptor species.

					Observation 1		Repeat Observation	
Roost Tree No.	**Roost Type**	**Coordinates**		**Nearest Turbine**	**Raptor**	**Date**	**Raptor**	**Date**
1	Stag	-33.590149	149.073821	WTG 35	Nankeen Kestrel	28/03/2024	Nankeen Kestrel	05/06/2024
2	Stag	-33.589297	149.073761	WTG 35	Nankeen Kestrel	28/03/2024		
3	Stump	-33.57427	149.051121	WTG 19	Nankeen Kestrel	17/04/2024		
4	Stag	-33.582525	149.043445	WTG 13	Wedge-tailed Eagle	01/05/2024		
5	Stag	-33.581681	149.073181	WTG 38	Nankeen Kestrel	01/05/2024		
6	Stag	-33.58157	149.071877	WTG 38	Nankeen Kestrel	01/05/2024	Nankeen Kestrel	05/06/2024
7	Stag	-33.505426	149.074831	WTG 01	Nankeen Kestrel	01/05/2024		
8	Stag	-33.581527	149.043074	WTG 14	Wedge-tailed Eagle	10/10/2024		
9	Stag	-33.582811	149.075308	WTG 38	Nankeen Kestrel	14/10/2024		
10	Stag	-33.573373	149.052148	WTG 19	Nankeen Kestrel	20/10/2024		
11	Nest Tree	-33.550263	149.078773	WTG 10	Wedge-tailed Eagle	28/10/2024		

12	Roost Tree	-33.517417	149.064724	WTG 05	Wedge-tailed Eagle x 2	04/12/2024		
13	Roost Tree	-33.519603	149.050675	WTG 07	Nankeen Kestrel x2	12/02/2025		
14	Roost Tree	-33.514335	149.046049	WTG 08	Brown Flacon x 2	05/03/2025		
15	Stag	-33.519461	149.052355	WTG 08	Nankeen Kestrel	06/03/2025		
16	Roost Tree	-33.571208	149.06876	WTG 22	Brown Falcon x 2	04/03/2025		
17	Roost Tree	-33.572003	149.06956	WTG 22	Brown Falcon	04/03/2025		
18	Wind Turbine	-33.503597	149.072224	WTG 01	Nankeen Kestrel x 2	04/04/2025		

A single nest tree was recorded during the Superb Parrot surveys in October 2024, with an active Wedge-tailed Eagle nest recorded. This nest tree location is outside of the regular monthly monitoring sites and is clearly marked in Figure 9.

Roost tree numbers 1 and 6 are the only recorded roosts to have repeat visitation throughout the monitoring period. Both roosts were used by Nankeen Kestrels on the initial and repeat records. Roost tree number 1 is located 64 m south-east of WTG 35. To date two Nankeen Kestrel carcasses have been recorded at WTG 35 in January and February 2025 (carcass numbers 202501-04 and 202502-07). Roost tree number 6 is located 111 m south-west of WTG 38. One Nankeen Kestrel has been recorded at WTG 38 in November 2024 (carcass number 202411-01). In accordance with Section 5.3 of the BBAMP, where continued monitoring indicates that these raptor roosts are directly contributing to turbine strike on Nankeen Kestrels, recommendations will be provided to remove these trees.

The only other correlation between raptor roosts and turbine strikes relates to raptor roost number 4 which is located 301 m south-east of WTG 13. This roost tree was recorded being used by a Wedge-tailed Eagle in May 2024. A Wedge-tailed Eagle carcass was recorded at WTG 13 in July 2024 (carcass number 202408-01). Continued monitoring of the roost tree, raptor sightings and carcass records will dictate whether removal of this roost tree is recommended in the future.

Figure 8: Hatch that Nankeen Kestrels were entering through the base of the nacelle at WTG 01. Image shows inspected hatch area where no nests or birds were present prior to making the turbine operational again.

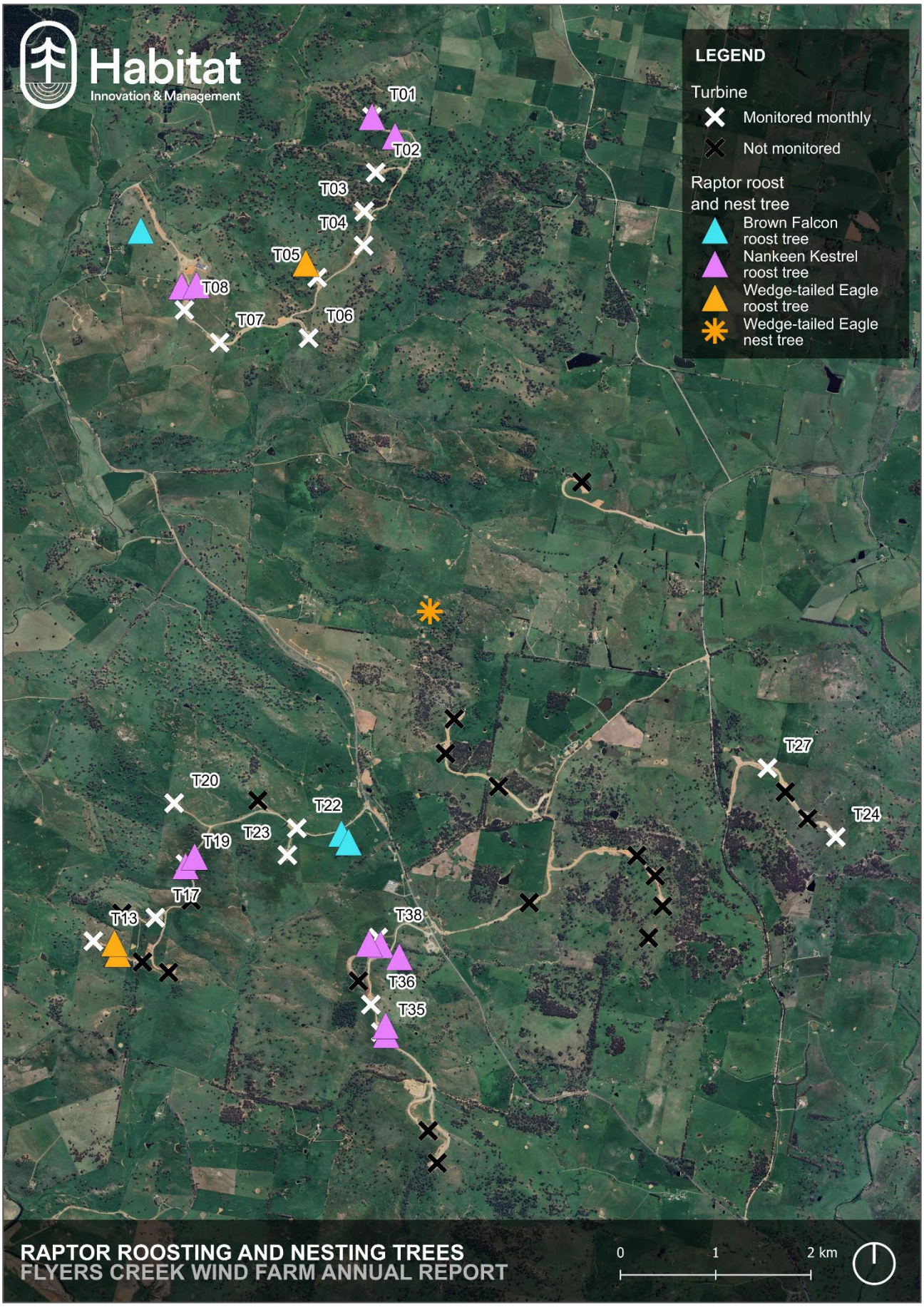


Figure 9: Raptor roost and nest trees recorded during monthly monitoring at Flyers Creek Wind Farm

3.5 Migratory Bird Search

Only one migratory bird species has been recorded at Flyers Creek Wind Farm between May 2024 and April 2025. Approximately eight Rainbow Bee-eaters (*Merops ornatus*) were recorded during travel between collector groups on the afternoon of 13 February 2025. Section 4.1.2 of the BBAMP relates to recording of migratory bird species and is specific to White-throated Needletails as a species of concern that should be monitored, observed, and recorded. This record of Rainbow Bee-eaters has been recorded here as they are a migratory species. However, as the requirements of the BBAMP for migratory species specifically relate to White-throated Needletail, detailed observation and mapping for this species has not been recorded. However, as reference we have included details of the location of the sighting as being in the woodland remnant to the north of Errowanbang Road at coordinates: -33.595522, 149.094627 (Figure 10).

There have been no records of White-throated Needletail (*Hirundapus caudacutus*) to date which is the primary concern relating to migratory birds.

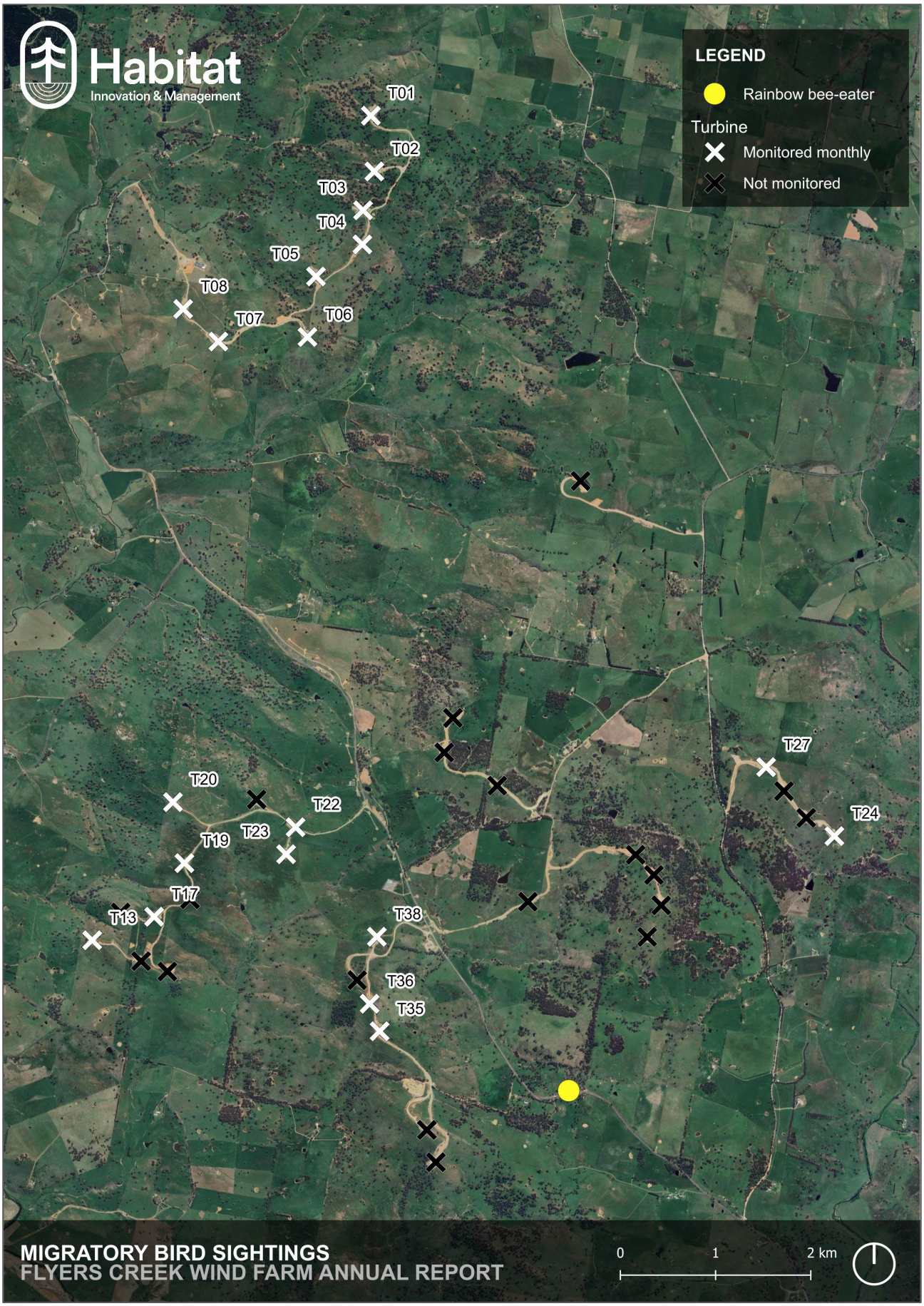


Figure 10: Rainbow Bee-eater sighting location in relation to Flyers Creek Wind Farm turbines

3.6 Incidental Bird Surveys

During monthly monitoring Habitat Innovation staff have conducted incidental monitoring of birds on site at Flyers Creek Wind Farm. This monitoring has been conducted above and beyond the requirements of the BBAMP in order to provide us with a better understanding of the avifauna across the site. Across the 12-month monitoring period 48 bird species were recorded with a full species list included below in Table 3. Of these, Australian Magpie, Australian Raven, Australian Pipit and Galahs have been recorded at every turbine and were the most frequently recorded species.

Two threatened bird species have been recorded during these incidental surveys. Scarlet Robin (*Petroica boodang)* and Dusky Woodswallow (*Artamus cyanopterus cyanopterus*) were recorded at T35 in May 2024 and October 2024 respectively. No carcasses of these species have been recorded since turbine monitoring began in December 2023. Both species are listed as Vulnerable in NSW under the *Biodiversity Conservation Act* 2016 and are not Federally Listed as threatened species.

Of the bird carcasses recorded to date there has been some correlation between birds recorded at turbines during incidental surveys and the same species being impacted by those turbines. Of the 31 bird carcasses recorded, 5 of them have been incidental finds that have not been from turbines that are monitored on a monthly basis and therefore have no survey data. Of the 26 remaining carcass records, 20 of the species impacted by turbine strike have been recorded during incidental bird surveys at the same turbine. Only 6 of the carcass records don't have a direct correlation to the species having been recorded at the same turbine during incidental bird surveys. Of these, the Silvereye (*Zosterops lateralis*) is the only species impacted by turbine strike that was not recorded at all on site during incidental bird surveys.

Table 3: Birds recorded during incidental surveys at each turbine during monthly monitoring.

Common name	Scientific name	T01	T02	T03	T04	T05	T06	T07	T08	T13	T17	T19	T20	T22	T23	T24	T27	T35	T36	T38
Australasian Grebe	*Tachybaptus novaehollandiae*			X			X													
Australian Magpie	*Gymnorhina tibicen*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Australian Pipit	*Anthus novaeseelandiae*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Australian Raven	*Corvus coronoides*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Australian White Ibis	*Threskiornis moluccus*															X				
Australian Wood Duck	*Chenonetta jubata*			X																
Black-faced Cuckooshrike	*Coracina novaehollandiae*	X	X			X		X		X	X							X		
Brown Falcon	*Falco berigora*															X				
Common Starling	*Sturnus vulgaris*			X				X	X		X					X	X	X	X	
Crested Pigeon	*Ocyphaps lophotes*																		X	
Crimson Rosella	*Platycercus elegans*	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X		
Diamond Firetail	*Stagonopleura guttata*						X		X											
Dusky Woodswallow	*Artamus cyanopterus cyanopterus*																	X		
Eastern Rosella	*Platycercus eximius*	X	X	X	X	X	X					X	X			X	X	X		
Eurasian Coot	*Fulica atra*						X													
Eurasian Skylark	*Alauda arvensis*															X	X			
Fan-tailed Cuckoo	*Cacomantis flabelliformis*																	X		
Galah	*Eolophus roseicapilla*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Grey Shrikethrush	*Colluricincla harmonica*	X				X				X										
Laughing Kookaburra	*Dacelo novaeguineae*					X										X				
Little Corella	*Cacatua sanguinea*		X																	
Magpie Lark	*Grallina cyanoleuca*		X	X					X	X							X			
Nankeen Kestrel	*Falco cenchroides*		X			X	X			X	X	X	X	X	X	X		X	X	X
Noisy Miner	*Manorina melanocephala*	X	X	X																
Pacific Black Duck	*Anas superciliosa*			X			X													

Peregrine Falcon	*Falco peregrinus*								X											
Pied Currawong	*Strepera graculina*		X	X								X								
Red-browed Finch	*Neochmia temporalis*										X									
Red-rumped Parrot	*Psephotus haematonotus*	X	X		X	X		X	X	X	X					X		X		
Red Wattlebird	*Anthochaera carunculata*		X		X	X	X													
Rufous Songlark	*Megalurus mathewsi*						X	X	X			X		X		X		X		
Scarlet Robin	*Petroica boodang*																	X		
Straw-necked Ibis	*Threskiornis spinicollis*															X	X			
Striated Pardalote	*Pardalotus striatus*		X									X				X		X		
Stubble Quail	*Coturnix pectoralis*										X				X					
Sulphur-crested Cockatoo	*Cacatua galerita*	X	X	X	X	X	X		X	X	X	X	X	X	X	X		X	X	X
Superb Fairywren	*Malurus cyaneus*									X	X							X		
Tree Martin	*Petrochelidon nigricans*										X									
Wedge-tailed Eagle	*Aquila audax*					X	X	X	X	X		X	X	X				X	X	X
Weebill	*Smicornis brevirostris*				X					X										
Welcome Swallow	*Hirundo neoxena*			X																
White-faced Heron	*Egretta novaehollandiae*								X											
White-necked Heron	*Ardea pacifica*					X	X													
White-plumed Honeyeater	*Lichenostomus penicillatus*							X												
White-throated Treecreeper	*Corombates leucophaea*							X												
White-winged Chough	*Corcorax melanorhamphos*																	X		
Willie Wagtail	*Rhipidura leucophrys*		X		X	X		X	X		X		X			X	X			
Yellow-rumped Thornbill	*Acanthiza chrysorrhoa*	X	X					X	X											

4 Carcass Modelling

Monthly monitoring across the Flyers Creek Wind Farm site incorporates monthly carcass searches at 19 of the 38 turbines (50% of turbines monitored). During the initial 12 months of monitoring a total of 86 bird and bat carcasses have been recorded across the site, represented by 31 birds and 55 bats. However, as not all 38 turbines are searched each month, and monitoring typically occurs across only three days of each month, this figure is not representative of the total number of turbine strikes that can reasonably be expected across the 12 month period. In order to calculate the total number of strikes across the wind farm site we have used statistical modelling. The statistical modelling incorporates a range of data including the percentage of turbines searched each month, the searcher efficiency, and scavenging rates (carcass persistence).

4.1 Detectability

Carcass efficiency trials were conducted in October 2024 to identify the detectability rate of carcass searches. The trials were conducted according to the methodology detailed in Section 4.4.4 of the BBAMP. A total of 40 carcasses were used in the trial which was conducted concurrently with the scavenger trials detailed below. Habitat Innovation ecologists James Taylor and Liam Doherty completed the efficiency trials during standard monthly monitoring and were not made aware of the turbines where carcasses were to be placed or the number of carcasses to be placed for the trial. Principal Ornithologist of Habitat Innovation and Management, Mick Callan, coordinated the trial and placed carcasses at specified turbines ahead of standard searches taking place.

A total of 40 carcasses were placed at 10 turbines for the efficiency trials. For each searcher there were a total of 10 bird and 10 bat carcasses placed across 5 turbines, representing 20 carcasses each. Due to a limited number of suitable bird carcasses being available, two Little Red Flying Foxes were used as substitutes for birds as they are more representative of the size of a medium bird. For the purposes of this trial the Little Red Flying Foxes have been included in the data as birds.

To ensure that carcasses were appropriately placed randomly a random number generator was used prior to the trial to provide the location where each carcass should be placed relevant to the turbine. For each of the 40 carcasses to be placed for the trial the random number generator was set to 0 to 360 to provide the direction from the turbine in degrees where the carcass should be place. The random number generator was then set to 0 to 60 to provide the distance in metres from the turbine for the carcass to be positioned. All carcasses for the scavenger trials were to be within the 60 m search zone so this was also used for the efficiency trials to avoid double handling of carcasses.

For each carcass used in the trial, the pre-determined distance and direction from the turbine was located at which point the carcass was thrown into the air to, as best as possible, replicate the impact and landing from a turbine strike. The carcass location was then recorded on a GPS. Searchers were advised to record all carcasses during the search as normal, but to leave the carcasses in situ until the trial was completed. This ensured that there was no distinction between carcasses used for the trial and any new carcasses recorded for monitoring.

Of the 40 carcasses placed for the trial, three were scavenged prior to the searches being conducted. All three scavenged carcasses were microbats leaving the total number of carcasses for the trial at 37 comprised of 20 birds and 17 bats. Results of the efficiency trials are shown below in Tables 4, 5 and 6.

Table 4: Carcass detection efficiency – Total

TOTAL	No. of carcasses	No. of carcasses found	% Efficiency
Birds	20	18	90%
Microbats	17	11	64.71%
Total	37	29	78.38%

Table 5: Carcass detection efficiency - James Taylor

James Taylor	No. of carcasses	No. of carcasses found	% Efficiency
Birds	10	10	100%
Microbats	8	6	75%
Total	18	16	88.89%

Table 6: Carcass detection efficiency - Liam Doherty

Liam Doherty	No. of carcasses	No. of carcasses found	% Efficiency
Birds	10	8	80%
Microbats	9	5	55.56%
Total	19	13	68.42%

4.2 Scavenger Trials

Scavenger trials were conducted in October 2024 to identify how long carcasses persist on site prior to being removed or relocated by scavengers. Methodology used was consistent with 4.4.3 of the BBAMP. A total of 40 carcasses were located across 10 turbines as detailed above in Section 4.1, as the trial was run concurrently with the efficiency trials to minimise carcass handling. A total of 20 microbats, 10 medium sized birds (two Little Red Flying Foxes used as substitutes), and 10 large birds (raptors) were used for the trials.

Following the placement of the carcasses they were monitored daily for 5 days, every 48 hours for the following three days, and then every 3 days until day 18, followed by every 4 days until the end of the 30-day

trial. Each monitoring event recorded if the carcass was present or absent, if the carcass showed evidence of scavenging, and if the carcass had been moved.

Carcasses were initially placed at 10 turbines on 2 October 2024. At the conclusion of the 30-day trial, on 1 November 2024, 11 carcasses of the initial 40 remained. Full results of the carcass trial are presented below in Table 7.

Table 7: Carcass persistence during scavenger trials: * indicates carcass still present at conclusion of trial; # indicates Little Red Flying Fox substituted for medium sized bird

Carcass ID	Bird or Bat	Wind Turbine Generator	Persistence (days until carcass scavenged)	Carcass ID		Wind Turbine Generator	Persistence (days until carcass scavenged)
1	Bat	WTG 27	1	21	Bat	WTG 23	1
2	Bat	WTG 27	3	22	Bird	WTG 23	7
3	Bat	WTG 27	22	23	Bird	WTG 23	30*
4	Bird	WTG 27	1	24	Bat	WTG 22	5
5	Bat	WTG 38	3	25	Bat	WTG 22	2
6	Bat	WTG 38	1	26	Bat	WTG 22	12
7	Bat	WTG 38	2	27	Bird	WTG 22	30*
8	Bird	WTG 38	7	28	Bird	WTG 22	30*
9	Bat	WTG 36	2	29	Bat	WTG 20	1
10	Bat	WTG 36	1	30	Bird #	WTG 20	12
11	Bat	WTG 36	1	31	Bird	WTG 20	30*
12	Bird	WTG 36	3	32	Bird	WTG 20	30*
13	Bird	WTG 36	30*	33	Bat	WTG 19	2
14	Bat	WTG 35	4	34	Bird #	WTG 19	5
15	Bat	WTG 35	22	35	Bird	WTG 19	30*
16	Bat	WTG 35	2	36	Bird	WTG 19	30*
17	Bird	WTG 35	30*	37	Bird	WTG 17	2
18	Bird	WTG 35	30*	38	Bird	WTG 17	30*
19	Bat	WTG 23	7	39	Bird	WTG 13	9
20	Bat	WTG 23	1	40	Bird	WTG 13	3

Mean persistence time was calculated for all carcasses as well as for birds only, and bats only.

- Mean persistence time – all carcasses: 11.85 days
- Mean persistence time – birds: 18.95 days
- Mean persistence time – bats: 4.75 days

4.3 Statistical Analysis

Carcass modelling was completed using methodology published in scientific journals (Korner-Nievergelt, et al., 2011; Korner-Nievergelt, et al., 2015) using the R-package *carcass*.

Calculations of total carcasses were modelled to provide estimates of total number of carcasses, total number of birds, and total number of bats impacted at the wind farm site over the 12-month monitoring period. The modelling was completed separately with the inputs for birds, bats, and total carcasses. Estimated numbers have been calculated with a 95% confidence interval with upper and lower ranges provided. The results of the modelling show a calculated total number of 279 birds and bats are projected to have been impacted by turbine strike across the monitoring period. Results are presented below in Table 8.

Table 8: Modelled carcass numbers projected to have been impacted by turbine strike at FCWF

TOTAL	Lower Limit	Upper Limit	Estimate (95% C.I.)
Birds	62	212	94
Microbats	138	1,001	279
Total	193	666	**279**

Of note is that the total estimate of carcasses is recorded as 279 based on the total searcher efficiency (Table 4), total number of birds and bats recorded during monitoring, and persistence time for all carcasses of 11.85 days. However, when interrogated separately the data shows estimates of 94 bird strikes and 279 microbat strikes which results in a total of 391 carcasses which remains within the provided estimate limits.

5 Discussion

5.1 Bird and Bat Carcasses

A total of 86 carcasses have been recorded during monthly monitoring events and through incidental finds during the reporting period. This figure is inclusive of 31 birds and 55 bats. As shown in Figure 3 and Figure 5, WTG 20 (11 carcasses) and WTG 38 (10 carcasses) had the highest number of carcasses recorded over the 12 months of monitoring summarised in this report. White-striped Freetail Bats were the most frequently recorded species impacted by turbine strike with 27 carcasses recorded, and Gould's Wattled Bats the second most recorded with 13. The two species of birds most impacted are Nankeen Kestrel with 8 recorded carcasses and Australian Magpie with 7.

The modelling included in Section 4.3 of this report calculates that the total number of turbine strikes across the wind farm during the 12 months of monitoring to be 279. This figure takes into account the number of carcasses recorded during modelling, the searcher efficiency, the percentage of all turbines surveyed and the mean carcass persistence time in the field.

5.2 Raptor sightings

In total 164 individual raptor sightings were recorded by Habitat Innovation staff during the monthly monitoring period from May 2024 to April 2025 at Flyers Creek Wind Farm. Nankeen Kestrels and Wedge-tailed Eagles were the most commonly recorded raptor species. This coincides with these two species being the most commonly recorded raptor carcasses on site during turbine monitoring. In total eleven raptor carcasses have been collected in the 12 months of annual reporting, of these eight are Nankeen Kestrels, two are Wedge-tailed Eagles and one is an Australian Hobby. Two Nankeen Kestrel carcasses have been found at WTG 35, this is unsurprising as there is a cluster of five separate Nankeen Kestrel records at WTG 35 and another four records at WTG 36 (the next closest turbine). The two Nankeen Kestrel carcasses recorded at WTG 35 were in consecutive months. WTG 21 is the only other turbine that has had multiple raptor carcasses recorded at it, with one Nankeen Kestrel and one Australian Hobby; these carcasses were recorded seven months apart. Of the eleven raptor carcasses eight were found within the late spring/summer months (October to February), and the other three were recorded in the cooler months of April, May and July.

As shown in Figure 7 and Figure 9, raptor sightings and raptor roosts largely correlate with the turbines surveyed each month.

5.3 Incidental bird sightings

Analysis comparing incidental bird records and carcass records showed that Nankeen Kestrels were the most recorded out of 12 bird carcass species. Nine carcasses have been recorded from May 2024 to April 2025 across eight different turbines. Of these turbines, two were incidental finds by FCWF staff at turbines that are not included in monthly monitoring. Of the other six turbines, Nankeen Kestrels have been incidentally recorded at all but one.

Australian Magpies and Australian Ravens were the next most common bird carcass species with seven and four carcasses respectively. Both species have been incidentally recorded at every turbine in the last 12 months.

Of the other species where carcasses were recorded but the species had not been incidentally recorded at all at the turbine in the 12 months of monitoring, all are singular carcass records of species that have been scarcely recorded at FCWF. Only one Australian Hobby has ever been recorded at FCWF, but it was not at a specific turbine. Crested Pigeons have only been recorded at WTG 36 and not near WTG 03 where the feathers spots were identified. Noisy Miners have only been incidentally recorded at WTGs 01-03, not near WTG 35. Sacred Kingfishers have been recorded on site, but not associated with any turbines, and Silvereyes have not been recorded at FCWF incidentally during the 12 months of monitoring.

Table 9: Comparison of carcasses recorded during monthly monitoring compared to those incidentally recorded at each turbine

Species	Number of carcasses recorded in last 12 months	Recorded incidentally at all turbines carcasses where recorded?	Which turbines were there no incidental finds during monitoring but where a carcass has been found?
Australian Hobby	1	No	T21
Australian Magpie	7	Yes	-
Australian Raven	4	Yes	-
Australian Wood Duck	1	Yes	-
Crested Pigeon	2	No	T03
Crimson Rosella	1	Incidental at turbine that is not monitored	-
Galah	2	Yes	-
Nankeen Kestrel	9	No	T35
Noisy Miner	1	No	T17
Sacred Kingfisher	1	No	T19
Silvereye	1	No	T05
Tree Martin	1	Yes	-

5.4 Threatened Species

The Flyers Creek Wind Farm is situated within the natural range of the Superb Parrot (*Polytelis swainsonii*), with the species being observed previously by local landholders as well as during the proposal stage prior to construction of the wind farm. The Superb Parrot is a threatened parrot species, listed as 'Vulnerable' under both the Commonwealth *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act) and the NSW *Biodiversity Conservation Act* 2016 (BC Act).

Targeted surveys were conducted from 16-20 October 2024 by Habitat Innovation and Management ecologist Liam Doherty to search for Superb Parrots and determine whether they are using the wind farm extent for breeding. In total three Superb Parrot observations were made, all of which were in the northern section of the wind farm, near the office/substation area and remnant woodland area from turbines 1-8. Of these three observations, only one took place within 200m of a turbine. All Superb Parrots observed were flying at or under 30m in height. The only behaviour that was observed was a travel behaviour, with no perching, feeding or nesting behaviours observed. Despite both potential nesting hollows as well as hollows being occupied by other species observed during the survey, there was no evidence in the study area of Superb Parrots utilising the Flyers Creek Wind Farm as a nesting area.

Superb Parrots have also been recorded incidentally on site on two occasions but are not included in Table 3 as the sightings were not associated with turbines. Four Superb Parrots were recorded near the intersection of Track 15 and Gap Road on 20 November 2024, and a single Superb Parrot was recorded in a paddock tree adjacent to Errowangbang road on 11 October 2024.

One Yellow-bellied Sheathtail Bat carcass was recorded at Flyers Creek Wind Farm on 6 March 2025 at T35. Yellow-bellied Sheathtail Bat (*Saccolaimus flaviventris*) is a large and distinctive species of insectivorous microbat which is listed as Vulnerable in NSW under the BC Act. This carcass find resulted in an Impact Trigger Assessment. The assessment of impact concluded that since this is the only carcass of this species to be recorded since monitoring began in December 2023. It is unlikely that the mortality of a single individual will have a significant risk on the local population, although, due to their threatened status rigorous monitoring should continue.

Two other threatened species have been recorded at Flyers Creek Wind Farm in the last 12 months. This includes the Scarlet Robin (*Petroica boodang*) and Dusky Woodswallow (*Artamus cyanopterus cyanopterus*). Both species are listed as Vulnerable in NSW under the BC Act and both species have only been observed once each, both being at T35. Neither of these species have been recorded as carcasses on site and therefore do not appear to be significantly impacted by the presence of Wind Turbines.

No other threatened species have been recorded at Flyers Creek Wind Farm since May 2024.

202503-15 - Yellow-bellied Sheathtail Bat - WTG 35

Image of carcass 202503-15

Wind Turbine Generator: T35
Carcass Location:
Lat: -33.590107 Lon: 149.073244
Elevation: 901 m
Distance from WTG: 29 m
Bearing from WTG: 340°
Impact Triggered: YES

CUMULATIVE STRIKE LIST	MONTH/YR
Australian Magpie	10/2024
Nankeen Kestrel	01/2025
Nankeen Kestrel	02/2025
White-striped Freetail Bat	02/2025
Gould's Wattled Bat	03/2025
Yellow-bellied Sheathtail Bat	03/2025

Image of carcass 202503-15

Image of carcass 202503-15

Figure 11: Record of Yellow-bellied Sheathtail Bat from March 2025 monthly turbine monitoring.

5.5 Impact Triggers

There are two definitions of an Impact Trigger that can be reached during bird and bat monitoring at Flyers Creek Wind Farm. These definitions from the BBAMP (Nature Advisory, 2020) have been included below.

Impact Trigger for Threatened Species:

A threatened bird/bat species (or recognisable parts thereof) listed under the Commonwealth EPBC Act or Biodiversity Conservation Act 2016, is found dead or injured under or close to a wind turbine during any mortality search or incidentally by wind farm personnel. The fatality shall be able to be attributed to the wind farm operations. The significance of any threatened species impacts will be determined at a population scale relevant to that species as part of the decision-making framework outlined in Section 5.1.2. of the BBAMP and submitted in a report to BCS for review.

Impact Trigger for Non-threatened Species:

In any two successive monthly carcass searches, two or more bird or bat carcasses (or parts thereof) of a non-threatened species, other than Ravens, Magpies, White Cockatoos, Corellas, and introduced species, are found at the same turbine (i.e. a total of four or more carcasses of the same species in two successive searches at the same turbine).

Definition of Unacceptable Impact on Non-threatened Species:

- *Where population numbers are known and reported by BCS for the period concerned, the definition of*
- *an unacceptable impact on non-threatened species is any impact that is likely to:*
- *lead to a greater than 50% reduction in the immediate population (i.e., local population, where known)*
- *that utilises the wind farm over a five year period; AND*
- *act in an ongoing way to reduce the wider, regional population (where known) by more than 30% over a five-year period; OR*
- *reduce the total species' population (where known) by more than 10% over a five-year period.*

Where population numbers are not known, the definition of an unacceptable impact on non-threatened species is:

More than four carcasses of one non-threatened species (including raptor species, magpies, ravens, and introduced species) are found during both formal and incidental carcass searches in a two-month period. Note that although the impact trigger does not include ravens, magpies, White Cockatoos, corellas, and introduced

species, detected mortalities for these species will still be recorded and reported as part of the annual reporting process.

From May 2024 to April 2025, four incident triggers were met, these were for both threatened and non-threatened species. Triggers for non-threatened species occurred in January, February and March 2025. They all relate to multiple carcass finds of White-striped Freetail Bats. The singular impact trigger for a threatened species occurred in March 2025 for a Yellow-bellied Sheathtail Bat.

The incident triggers were centred around the following turbines listed in Table 10.

Table 10: Impact trigger summary showing species and turbine numbers

Trigger month	Species for impact trigger	Central turbine of impact trigger
January 2025	White-striped Freetail Bat	T38
February 2025	White-striped Freetail Bat	T20
March 2025	White-striped Freetail Bat	T20
March 2025	Yellow-bellied Sheathtail Bat	T35

White-striped Freetail Bat

In total 27 White-striped Freetail Bat carcasses have been recorded in the 12 months from May 2024 to April 2025. This species is also the focus of three separate incident triggers in the early months of 2025. As the White-striped Freetail Bat is a common and widely distributed species; is known to be impacted by wind turbines in NSW; feeds on flying insects within the RSA; and is likely present and more active within the Central Tablelands region of NSW during summer months; it is expected that this species will continue to be impacted by turbine strike throughout the operational life of FCWF. All the carcasses to date have been recorded during the warmest months of the year (October to March), with no records during winter.

The 27 carcasses recorded of this species represents 31.4% of all carcasses recorded to date and 49.1% of all bat carcasses recorded. When extrapolated to the 279 modelled number of total turbine strikes calculated for the monitoring period at the site, the number of White-striped Freetail Bats impacted across the wind farm site over the initial 12 months of monitoring is 87.6. When extrapolated to the modelled number of 279 bat strikes the number increases to 136.9. These calculated totals represent a significant number of individual bats of the same species.

This data is from a relatively small sample size with only one year of monitoring completed to date. However, the data is consistent with expectations that White-striped Freetail Bats will be more active and at risk of turbine strike during warmer months when insect activity increases and as they migrate south from Queensland. Wind turbine curtailment was a recommended action in response to these triggers to reduce the number of bat strikes at FCWF and is common practice to protect birds and bats in Europe and America (Barré, Froidevaux, Sotillo, Roemer, & Kerbiriou, 2023; Good, et al., 2022; Smallwood & Bell, 2020; Voight,

Kaiser, Look, Scharnweber, & Scholz, 2022; Whitby, O'Mara, Hein, Huso, & Frick, 2024). Further details regarding curtailment is included below in Section 6.1.

Yellow-bellied Sheathtail Bat

The March incident trigger relating to the Yellow-bellied Sheathtail Bat in March 2025 was flagged as they are a threatened species listed as Vulnerable in NSW under the BC Act. This bat is the only carcass of this species to be recorded since monitoring began in December 2023. It is unlikely that the mortality of a single individual will have a significant risk on the local population, although, due to their threatened status rigorous monitoring should continue.

5.6 Identified Issues/Potential Issues

Over the 12 months of monitoring there has been various issues or potential issues that have been recorded whilst monitoring at FCWF. These issues are included for each turbine at the time of monitoring, with a complete list of identified issues included below:

- Bathurst burr
- Blackberry
- Dead kangaroo
- Dead stags
- High insect activity
- Paddy melons
- Stock carcass
- Thistles
- Timber piles
- Track impeded by cutting, rocks, slopes
- Active machinery works
- Fences
- Piles of broken gyprock on pad
- Shipping containers on pad

These issues have all been flagged with staff from FCWF and have either been resolved or are in the process of being resolved. Weed control is an ongoing issue that will be dependent on seasonal conditions and high insect activity is now being recorded in order to identify any correlation between high insect activity at turbines and turbine strike. Issues such as fences, cuttings, rocks and slopes are included to recognise that the normal survey transects to be walked have been impeded.

6 Mitigation Measures

Mitigation measures at Flyers Creek Wind Farm involves the prevention, avoidance and/or reduction of the risk of an impact trigger occurring or continuing to occur. An 'impact trigger' is defined in as a threshold of impact on birds or bats that triggers an investigation and/or management response. The overall objective of mitigation measures is to ensure that the operation of Flyers Creek Wind Farm does not lead to unacceptable impacts on threatened or non-threatened fauna on site.

6.1 Turbine curtailment

It is proven that turbine curtailment does reduce bird and bat strike frequency. A synthesis study in North America concluded that curtailment reduced turbine strike by 33% with every 1.0 ms−1 increase in curtailment wind speed. They estimated that a 5.0 ms−1 cut-in turbine speed was estimated to reduce total bat fatalities by an average of 62% (Whitby, O'Mara, Hein, Huso, & Frick, 2024). A recent study trialling turbine curtailment in South Australia found similar results, including for White-striped Freetail Bats which the study confirmed as the most frequently recorded bat species on site (Bennett, et al., 2022). Given that all microbat carcasses at FCWF have been recorded between October and March, we recommend a 4.5 ms−1 curtailment from dawn to dusk during these months to be trialled. It was recommended that turbine curtailment is trialled with the same method outlined by Bennett et al in South Australia. T20 and T38 have had the highest strike frequencies to date, therefore it is recommended that turbine curtailment is prioritised at these turbines.

Habitat Innovation and Management staff are working with staff from Flyers Creek Wind Farm to provide practical curtailment measures ahead of the 2025 spring/summer period.

6.2 Removal of carcasses and carrion

Whilst bird and bat wind turbine searches were occurring throughout the monitoring period, any carcasses found – stock, native fauna, or feral animals – were reported to FCWF staff and removed from the 200 m radius surrounding the turbine. Carrion is defined as the decaying flesh of dead animals. Carcasses and carrion can often act as a scavenging food source for predators in the field, such as cats and foxes.

As well as any carcasses being found by monthly bird and bat monitoring, Flyers Creek Wind Farm staff are required to remove any carcasses found within 200 m of a turbine. The following procedures have been adopted.

Designate a suitable person (such as a wind farm employee or landowner) who will undertake the following activities:

1. Site personnel shall notify the Site Manager immediately of any identified carrion within 200 metres of an operating turbine.
2. The Site Manager is responsible for notifying the landowner so that any carcasses and/or remains found that are within 200 metres of turbines, can be collected and disposed of as soon as possible, in a manner that will avoid attracting raptors close to turbines.
3. The Site Manager shall continue to consult with landowners in relation to the appropriate disposal of collected carrion, to be located at least 200 metres away from the closest turbine, whilst still leaving the carrion available as a food source so as to not reduce the habitat quality for raptors.
4. Carcass occurrence and removal will be recorded by the Site Manager.

In the 12-month monitoring period 20 bird and bat carcasses were found by Flyers Creek Wind Farm staff within 200 metres of a turbine. This includes 15 bats and 5 birds of various species including Wedge-tailed Eagle, Nankeen Kestrel, Galah, Sulphur-crested Cockatoo, Gould's Wattled Bats, White-striped Freetail Bats and Southern Forest Bats. Depending on when the carcasses were found compared to the date of the next monitoring event, some carcasses were left for Habitat Innovation staff to collect, and others were recorded and removed by Iberdrola staff.

Occasionally sheep and kangaroo carcasses were also found under or near turbines. These were reported to Iberdrola so that they could notify the landholders for carcass removal.

6.3 Control of Stock

The land that FCWF is situated on is owned by various landholders, the area is farmed with livestock (most often cattle and sheep) under the turbines. Grazing under the turbines reduces the ground layer of vegetation and makes it easier for Habitat Innovation staff when searching for carcasses as extensive vegetation cover can conceal carcasses. Iberdrola has requested that during lambing/calving times of the year that stock are moved to different paddocks so that the presence of newborn animals and increased risk of predation or stock carcasses doesn't attract raptors to the area.

6.4 Pest Management

Rabbits often act as a food source for Australia's raptor species. Rabbits have been incidentally seen around wind turbines at Flyers Creek Wind Farm and a rabbit control program may need to be implemented to remove them as a potential prey species near the wind turbines. Removing potential prey species from near the turbines will help prevent turbine strike to raptor species. Management of rabbits can be in the form of warren destruction, baiting and humane shooting. A rabbit has been recorded at WTG 34, but not in proximity to any timber piles on site.

6.5 Supplementary Mitigation Measures

Timber piles (assumed to be a result of clearing for the WTG pads) have been recorded within 100 m of most turbines surveyed to date. These timber piles have the potential to harvest introduces species such as rabbits and rats which are prey species for many raptor species, including Wedge-tailed Eagles. If the timber piles are harbouring these introduced species, this runs the risk of attracting raptors within the strike zone of the turbines. It has been recommended to Flyers Creek Wind Farm staff and contractors to remove or burn these timber piles. Works to remove these timber piles has commenced and is continuing.

Dense weeds have been recorded at many of the turbine sites. This includes dense stands of thistles, which makes bird and bat monitoring work slower and inefficient whilst potentially hiding carcasses under dense thorns. Weeds of this nature are difficult and uncomfortable to work through and provide a safety risk to staff. This is a seasonal issue and our staff continue to report new infestations and potential issues to FCWF staff for action which is proving to be a workable solution.

Sticky Nightshade is an invasive plant that competes with crops and pastures whilst also being toxic to stock and having large thorns. This weed was recorded by Habitat Innovation staff at several turbines and is now under management from Iberdrola and the landholders with works conducted to spray and remove the weed.

Raptors have been recorded perching on various stags around Flyers Creek Wind Farm. These have been mapped and outlined in Section 3.1 and 3.2 of this report. Stags should continue to be monitored and potentially removed to reduce the risk of raptors in the strike path of the turbines. If dead stags are to be removed, this should carefully be undertaken under the guidance of a qualified ecologist to check any potential hollows, crevices or cracks for native fauna species.

7 Conclusion

Operational monitoring has been completed from May 2024 to April 2025. Each month 19 turbines are searched representing 50% of the turbines on site. Across the 12-month monitoring period there have been a total of 86 carcasses recorded comprised of 31 birds and 55 bats. Additionally, commissioning stage monitoring was conducted from December 2023 to April 2024 resulting in 26 turbines searched and 11 carcasses recorded comprised of 2 birds and 9 bats.

Modelling of carcass numbers across the 12-month period based on percentage of total turbines searched, searcher efficiency, carcass records, and carcass persistence indicates that a total of 279 turbine impacts are likely to have occurred. When the model is run separately for birds and bats, with relevant data included for each, the modelling provides a total number of 94 bird strikes and 279 bat strikes which is a higher total number of 391.

Four impact triggers have been recorded across the monitoring period. Three of these have been non-threatened species impact triggers and all relate to impacts on White-striped Freetail Bats. One threatened species impact trigger has been reached for a Yellow-bellied Sheathtail Bat which is the only record of this species being impacted at the site to date.

The data collected across the initial 12 months of monitoring shows some clear results relating to turbine strike. The majority of turbine strikes recorded have been across the warmer months of the year from October to March with a minimum of 6 carcasses recorded across these months in November 2024, and a maximum number of 16 carcasses recorded in December 2024. Outside of these months the number of carcasses recorded per month ranges from 0 to 3. Turbines WTG 20 and WTG 38 have had the highest rates of turbine strike with 11 carcasses recorded at WTG 20 and 10 carcasses at WTG 38.

White-striped Freetail Bats have been the most impacted species with 27 carcasses recorded which represents 31.4% of all carcasses recorded to date and 49.1% of all bat carcasses recorded. The other species with more than 3 carcass records are Gould's Wattled Bat (13), Nankeen Kestrel (8), Australian Magpie (6), and Southern Forest Bat (5).

A total of 164 raptors of 6 species have been recorded across the site dominated by sightings of Nankeen Kestrel (77) and Wedge-tailed Eagle (67). Raptor sightings across the year show no clear patterns in terms of number of records suggesting that these most commonly recorded species are resident on site. Eighteen raptor roosts have been recorded and mapped with two of these having had repeat use by Nankeen Kestrels. Of note is the identification of a Wedge-tailed Eagle nest and a pair of Nankeen Kestrels entering the nacelle of WTG 01 during a turbine shut down period.

A single migratory bird record consisted of a sighting of approximately 8 Rainbow Bee-eaters in February 2025. No White-throated Needletails have been recorded to date.

Habitat Innovation and Management staff will continue to work with staff from Flyers Creek Wind Farm to provide suitable options for curtailment of targeted turbines prior to October 2025 when it is anticipated that microbat activity will again increase at the site. Additionally, continued monitoring of raptor roosts and carcass strikes – particularly at WTG 38 and WTG 35 – will continue to ensure that impacts to Nankeen Kestrels impacted at these locations are recorded and mitigation actions recommended as required.

Monitoring will continue on a monthly basis through to and inclusive of April 2026 with monthly reports provided. The second annual report will be completed at the conclusion of the monitoring.

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9 Appendices

Table 11: Carcass data from turbine monitoring at Flyers Creek Wind Farm from May 2024 to April 2025

Carcass identifier	Species	Turbine number	Date found	Search type	Bird or bat	Latitude	Longitude	Notes
202405-01	Australian Hobby	T21	1/05/2024	Carcass/pulse	Bird	-33.568341	149.05961	
202405-02	Gould's Wattled Bat	T33	1/05/2024	Incidental	Bat	-33.602613	149.079145	Found by FCWF staff
202406-01	Australian Wood Duck	T03	6/06/2024	Carcass/pulse	Bird	-33.51313	149.071436	
202408-01	Wedge-tailed Eagle	T13	31/07/2024	Incidental	Bird	-33.58133	149.04049	Found by FCWF staff
202409-01	Little Red Flying Fox	T05	4/09/2024	Carcass/pulse	Bat	-33.519132	149.06677	
202409-02	Australian Magpie	T13	4/09/2024	Carcass/pulse	Bird	-33.581373	149.040484	
202409-03	Tree Martin	T17	4/09/2024	Carcass/pulse	Bird	-33.579672	149.047769	
202410-01	Wedge-tailed Eagle	T18	1/10/2024	Incidental	Bird	-33.577222	149.051667	
202410-06	Gould's Wattled Bat	T38	2/10/2024	Carcass/pulse	Bat	-33.581347	149.072615	
202410-14	Australian Magpie	T35	2/10/2024	Carcass/pulse	Bird	-33.589645	149.073147	
202410-23	White-striped Freetail Bat	T20	2/10/2024	Carcass/pulse	Bat	-33.568271	149.049837	
202410-33	Galah	T02	3/10/2024	Carcass/pulse	Bird	-33.509049	149.072464	
202410-36	Nankeen Kestrel	T03	3/10/2024	Carcass/pulse	Bird	-33.513166	149.071082	
202410-37	Silvereye	T05	3/10/2024	Carcass/pulse	Bird	-33.518581	149.066085	
202410-40	White-striped Freetail Bat	T20	4/10/2024	Carcass/pulse	Bat	-33.568299	149.050366	
202410-41	Noisy Miner	T17	4/10/2024	Carcass/pulse	Bird	-33.578819	149.047589	
202410-42	Australian Magpie	T13	4/10/2024	Carcass/pulse	Bird	-33.581144	149.040178	
202410-43	White-striped Freetail Bat	T13	5/10/2024	Incidental	Bat	-33.581337	149.040469	Found during scavenger trials
202410-44	Inland Freetail Bat	T13	7/10/2024	Incidental	Bat	-33.581328	149.04057	Found during scavenger trials
202410-45	White-striped Freetail Bat	T20	9/10/2024	Incidental	Bat	-33.568589	149.049959	Found during scavenger trials

202410-46	White-striped Freetail Bat	T27	9/10/2024	Incidental	Bat	-33.564888	149.116754	Found during scavenger trials
202410-47	White-striped Freetail Bat	T26	30/10/2024	Incidental	Bat	-33.567029	149.11885	Found during Superb Parrot Surveys
202411-01	Nankeen Kestrel	T38	5/11/2024	Carcass/pulse	Bird	-33.580262	149.072871	
202411-02	Nankeen Kestrel	T23	6/11/2024	Carcass/pulse	Bird	-33.573756	149.062562	
202411-03	Inland Freetail Bat	T24	7/11/2024	Carcass/pulse	Bat	-33.571613	149.124445	
202411-04	Microbat sp.	T12	7/11/2024	Incidental	Bat	-33.566848	149.086255	Reported by contractors the day after it was found. No sign of carcass the next day - appears to have been scavenged
202411-05	Inland Freetail Bat	T04	7/11/2024	Carcass/pulse	Bat	-33.515853	149.071355	
202412-01	Sulphur Crested Cockatoo	T11	15/11/2024	Incidental	Bird	-33.563889	149.080556	Found by contractors
202412-02	White-striped Freetail Bat	T13	3/12/2024	Carcass/pulse	Bat	-33.581382	149.040441	
202412-03	White-striped Freetail Bat	T05	4/12/2024	Carcass/pulse	Bat	-33.518852	149.066065	
202412-04	Gould's Wattled Bat	T05	4/12/2024	Carcass/pulse	Bat	-33.518735	149.066081	
202412-05	White-striped Freetail Bat	T20	9/12/2024	Incidental	Bat	-33.56847	149.0504	Found by FCWF staff
202412-06	Gould's Wattled Bat	T20	9/12/2024	Incidental	Bat	-33.568449	149.049844	Found by FCWF staff
202412-07	White-striped Freetail Bat	T21	9/12/2024	Incidental	Bat	-33.568095	149.059547	Found by FCWF staff
202412-08	White-striped Freetail Bat	T28	13/12/2024	Incidental	Bat	-33.581485	149.103609	Found by FCWF staff
202412-09	Southern Forest Bat	T28	13/12/2024	Incidental	Bat	-33.581444	149.103573	Found by FCWF staff
202412-10	Southern Forest Bat	T28	13/12/2024	Incidental	Bat	-33.581381	149.103677	Found by FCWF staff
202412-11	Southern Forest Bat	T28	13/12/2024	Incidental	Bat	-33.581338	149.10372	Found by FCWF staff
202412-12	Nankeen Kestrel	T21	13/12/2024	Incidental	Bird	-33.56833	149.059023	Pulse search conducted by Mick Callan outside of normal monitoring period in response to

								high number of incidental carcasses
202412-13	Southern Forest Bat	T21	13/12/2024	Incidental	Bat	-33.568169	149.059725	Pulse search conducted by Mick Callan outside of normal monitoring period in response to high number of incidental carcasses
202412-14	Inland Freetail Bat	T28	14/12/2024	Incidental	Bat	-33.580943	149.103458	Pulse search conducted by Mick Callan outside of normal monitoring period in response to high number of incidental carcasses
202412-15	Southern Forest Bat	T24	17/12/2024	Incidental	Bat	-33.571420	149.124623	Found by FCWF staff
202412-16	Gould's Wattled Bat	T24	17/12/2024	Incidental	Bat	-33.571591	149.124499	Found by FCWF staff
202412-17	Galah	T01	17/12/2024	Incidental	Bird	-33.503552	149.07226	Found by FCWF staff
202501-01	White-striped Freetail Bat	T13	8/01/2025	Carcass/pulse	Bat	-33.581462	149.040506	
202501-02	White-striped Freetail Bat	T38	8/01/2025	Carcass/pulse	Bat	-33.581083	149.072882	
202501-03	White-striped Freetail Bat	T38	8/01/2025	Carcass/pulse	Bat	-33.58116	149.072876	
202501-04	Nankeen Kestrel	T35	8/01/2025	Carcass/pulse	Bird	-33.589134	149.07375	
202501-05	Little Forest Bat	T03	9/01/2025	Carcass/pulse	Bat	-33.512585	149.071385	
202501-06	Galah	T01	9/01/2025	Pulse	Bird	-33.503657	149.071914	
202501-07	Australian Raven	T38	9/01/2025	Carcass/pulse	Bird	-33.581513	149.07268	
202501-08	Gould's Wattled Bat	T04	24/01/2025	Incidental	Bat	-33.5157	149.071241	Found by FCWF staff
202501-09	White-striped Freetail Bat	T38	24/01/2025	Incidental	Bat	-33.581268	149.07275	Found by FCWF staff
202501-10	White-striped Freetail Bat	T38	24/01/2025	Incidental	Bat	-33.581007	149.072616	Found by FCWF staff
202501-11	White-striped Freetail Bat	T38	27/01/2025	Incidental	Bat	-33.581168	149.072084	Pulse search conducted by Mick Callan outside of normal

								monitoring period in response to impact trigger being reached
202502-01	Australian Magpie	T03	12/02/2025	Carcass	Bird	-33.51316	149.071604	
202502-02	Gould's Wattled Bat	T03	12/02/2025	Carcass	Bat	-33.512517	149.071598	
202502-03	Australian Magpie	T23	12/02/2025	Carcas	Bird	-33.573274	149.062647	
202502-04	Nankeen Kestrel	T22	12/02/2025	Carcass	Bird	-33.57073	149.062843	
202502-05	White-striped Freetail Bat	T20	12/02/2025	Carcass	Bat	-33.568296	149.049307	
202502-06	White-striped Freetail Bat	T20	12/02/2025	Carcass	Bat	-33.568542	149.049311	
202502-07	Nankeen Kestrel	T35	12/02/2025	Carcass	Bird	-33.589786	149.072972	Found by contractor but included as part of monthly monitoring as staff were conducting turbine search on same day
202502-08	White-striped Freetail Bat	T35	12/02/2025	Carcass	Bat	-33.590312	149.0738	
202502-09	White-striped Freetail Bat	T27	13/02/2025	Carcass	Bat	-33.564957	149.117117	
202502-10	Australian Raven	T01	13/02/2025	Pulse	Bird	-33.50361	149.071981	
202502-11	White-striped Freetail Bat	T20	13/02/2025	Pulse	Bat	-33.568629	149.05006	
202502-12	White-striped Freetail Bat	T20	13/02/2025	Pulse	Bat	-33.568332	149.049798	
202503-01	Gould's Wattled Bat	T24	5/03/2025	Carcass	Bat	-33.571532	149.124569	
202503-02	White-striped Freetail Bat	T38	5/03/2025	Carcass	Bat	-33.581137	149.073332	
202503-03	Gould's Wattled Bat	T22	5/03/2025	Carcass	Bat	-33.570621	149.062125	
202503-04	White-striped Freetail Bat	T22	5/03/2025	Carcass	Bat	-33.570631	149.062122	
202503-05	Gould's Wattled Bat	T20	5/03/2025	Carcass	Bat	-33.568246	149.049444	
202503-06	White-striped Freetail Bat	T20	5/03/2025	Carcass	Bat	-33.568598	149.049737	

202503-07	White-striped Freetail Bat	T19	5/03/2025	Carcass	Bat	-33.574152	149.050505	
202503-08	Sacred Kingfisher	T19	5/03/2025	Carcass	Bird	-33.574152	149.050448	
202503-09	Magpie Feather Spot	T08	6/03/2025	Carcass	Bird	-33.521482	149.050645	
202503-10	Gould's Wattled Bat	T05	6/03/2025	Carcass	Bat	-33.518768	149.065199	
202503-11	Crested Pigeon Feather Spot	T03	6/03/2025	Carcass	Bird	-33.513144	149.07158	
202503-12	Crested Pigeon Feather Spot	T03	6/03/2025	Carcass	Bird	-33.512902	149.070654	
202503-13	Gould's Wattled Bat	T38	6/03/2025	Pulse	Bat	-33.580865	149.072842	
202503-14	Gould's Wattled Bat	T35	6/03/2025	Pulse	Bat	-33.589311	149.073206	
202503-15	Yellow-bellied Sheathtail Bat	T35	6/03/2025	Pulse	Bat	-33.590107	149.073244	
202504-01	Nankeen Kestrel	T37	2/04/2025	Incidental	Bird	-33.585091	149.070492	
202504-02	Possibly White-striped Freetail Bat	T14	2/04/2025	Incidental	Bat	-33.583217	149.045577	
202504-03	Australian Magpie	T23	3/04/2025	Carcass	Bird	-33.573299	149.062715	
202505-01	Nankeen Kestrel	T36	8/05/2025	Carcass	Bird	-33.587746	149.071498	

Table 12: Raptor records from turbine monitoring May 2024 to April 2025

Common Name	Scientific Name	Date recorded	Start time	End time	Number of birds	Latitude	Longitude	Min Height	Max Height	Perched?	Notes
Wedge-tailed Eagle	*Aquila audax*	1/05/2024	8:11	8:11	1	-33.582364	149.043386	N/A	N/A	Yes	Perched on top of tree near WTG `13
Brown Falcon	*Falco berigora*	1/05/2024	9:59	10:02	1	-33.570666	149.065755	N/A	N/A	No	On side of track near WTG 22
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	10:28	10:29	1	-33.569554	149.058715	N/A	N/A	Yes	South of WTG 21

Wedge-tailed Eagle	*Aquila audax*	1/05/2024	11:54	11:56	1	-33.566722	149.046819	N/A	N/A	Yes	In proximity to WTG 20
Wedge-tailed Eagle	*Aquila audax*	1/05/2024	12:16	12:24	2	-33.575824	149.052737	N/A	N/A	No	Circling WTG 18 and WTG 19
Brown Falcon	*Falco berigora*	1/05/2024	12:17	12:19	1	-33.571602	149.065998	N/A	N/A	Yes	On side of track near WTG 22
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	12:23	12:23	1	-33.576599	149.076902	N/A	N/A	No	On powerline adjacent to Errowanbang Road
Wedge-tailed Eagle	*Aquila audax*	1/05/2024	13:18	13:21	2	-33.601321	149.083062	N/A	N/A	No	Near WTG 33 heading north
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	14:18	14:23	1	-33.58163	149.07317	N/A	N/A	No	WTG 38
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	14:29	14:30	1	-33.582186	149.071228	N/A	N/A	No	Perched on dead stag SW of WTG 38
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	15:17	15:17	1	-33.517941	149.051165	N/A	N/A	No	Perched on powerline near substation
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	16:09	16:17	1	-33.523876	149.055274	N/A	N/A	No	Near T07 heading North
Nankeen Kestrel	*Falco cenchroides*	1/05/2024	16:12	16:13	1	-33.5053	149.074138	N/A	N/A	No	Perched on dead stag SW of WTG 01
Nankeen Kestrel	*Falco cenchroides*	2/05/2024	8:19	8:25	1	-33.524153	149.063235	N/A	N/A	No	Hovering near T06
Australian Hobby	*Falco longipennis*	1/05/2024	9:56	9:56	1	-33.568079	149.059296	N/A	N/A	No	*Carcass Find
Wedge-tailed Eagle	*Aquila audax*	2/05/2024	9:19	9:26	1	-33.57383	149.126932	N/A	N/A	No	Soaring over valley souh of WTG 24
Wedge-tailed Eagle	*Aquila audax*	2/05/2024	11:23	11:33	2	-33.571828	149.06333	N/A	N/A	No	Soaring east between WTG 22 and WTG 23

Wedge-tailed Eagle	*Aquila audax*	2/05/2024	12:15	12:23	2	-33.584004	149.050591	N/A	N/A	No	Soaring 100 m east of WTG 15
Nankeen Kestrel	*Falco cenchroides*	2/05/2024	15:29	15:31	1	-33.523408	149.065226	N/A	N/A	No	Hovering over edge of platform at T06
Black-shouldered Kite	*Falco cenchroides*	5/06/2024	9:29	9:31	1	-33.581657	149.073319	N/A	N/A	No	Flew in northerly direction
Nankeen Kestrel	*Falco cenchroides*	5/06/2024	10:03	10:06	1	-33.586562	149.072742	N/A	N/A	No	East of the pad near WTG 36
Wedge-tailed Eagle	*Aquila audax*	5/06/2024	10:29	10:45	1	-33.585576	149.072135	N/A	N/A	No	South-west of WTG 36
Nankeen Kestrel	*Falco cenchroides*	5/06/2024	10:39	10:43	1	-33.580065	149.071407	N/A	N/A	Yes	Perched on a dead stag south-west of WTG 38
Nankeen Kestrel	*Falco cenchroides*	5/06/2024	11:36	11:39	2	-33.589924	149.074441	N/A	N/A	Yes	Perched on a dead stag east of WTG 35
Nankeen Kestrel	*Falco cenchroides*	5/06/2024	13:45	13:46	1	-33.572808	149.063517	N/A	N/A	No	Located north of WTG 23 flying west
Black-shouldered Kite	*Falco cenchroides*	3/07/2024	10:06	10:06	1	-33.573718	149.07479	N/A	N/A	Yes	Perched on wires next to the road
Wedge-tailed Eagle	*Aquila audax*	3/07/2024	11:16	11:20	3	-33.574422	149.054358	N/A	N/A	No	Soaring in vicinity of T19
Nankeen Kestrel	*Falco cenchroides*	3/07/2024	11:20	11:21	1	-33.577645	149.053914	N/A	N/A	No	Sighted flying updraft
Nankeen Kestrel	*Falco cenchroides*	3/07/2024	11:44	11:48	1	-33.57962	149.048072	N/A	N/A	No	Soaring above platform at T17, then flew south towards T15
Nankeen Kestrel	*Falco cenchroides*	3/07/2024	12:24	12:29	1	-33.518888	149.05195	N/A	N/A	No	On track between Errowanbang Road and T8

Wedge-tailed Eagle	*Aquila audax*	3/07/2024	14:37	14:48	2	-33.532719	149.083426	60	100	No	Pair of Wedge-tailed Eagles soaring at a height of 60-100 m west of WTG 6. Both flew north towards WTG 4 and flew back towards WTG 6 heading south out of sight.
Wedge-tailed Eagle	*Aquila audax*	3/07/2024	15:04	15:06	2	-33.513427	149.07361	N/A	N/A	No	Circling over valley
Wedge-tailed Eagle	*Aquila audax*	3/07/2024	15:59	16:09	2	-33.513427	149.07361	N/A	N/A	No	Soaring in spirals easterly
Wedge-tailed Eagle	*Aquila audax*	4/07/2024	10:59	11:08	2	-33.566295	149.049117	75	75	No	Soaring at 75 m near T19 being harassed by ravens. Then flying north past T20 and continuing north
Wedge-tailed Eagle	*Aquila audax*	4/07/2024	11:14	11:18	1	-33.57193	149.068194	50	70	No	One Wedge-tailed Eagle soaring at 50-70 m, headed south before looping back northwards
Wedge-tailed Eagle	*Aquila audax*	4/07/2024	12:10	12:15	1	-33.525635	149.066917	60	70	No	One Wedge-tailed Eagle soaring east of T6 at 60-70 m elevation. Headed south before circling back to the north, then south again
Nankeen Kestrel	*Falco cenchroides*	4/07/2024	12:21	12:26	1	-33.518293	149.049842	30	30	No	Hovering at 31m then flying north-west and landing on a transmission line
Nankeen Kestrel	*Falco cenchroides*	7/08/2024	7:25	7:45	1	-33.57441	149.125467	30	50	No	Chased by approximately 40 Sulphur-crested Cockatoos. Flew in arcing patterns around south of turbine 24 platform at 30-50 m high. Cockatoos left and Nankeen Kestrel flew south into the valley and out of sight
Nankeen Kestrel	*Falco cenchroides*	7/08/2024	8:53	9:04	1	-33.582422	149.075061	35	35	No	Nankeen Kestrel hovering at approximately 35 m within a 45 m radius of the pinned location

Nankeen Kestrel	*Falco cenchroides*	7/08/2024	10:11	10:14	1	-33.57199	149.062804	40	40	No	Flying SSE towards T23 from T21 at 40 m, periodocally stopping at points to hover.
Wedge-tailed Eagle	*Aquila audax*	7/08/2024	10:30	10:33	1	-33.577722	149.043301	50	100	No	Wedge-tailed Eagle soaring in circles at approximately 50-60 m above valley south of T16. Travelled north past T16 and ascending to 100 m before heading north and out of sight.
Nankeen Kestrel	*Falco cenchroides*	7/08/2024	10:55	11:07	1	-33.573573	149.065659	10	35	No	Hovering at approximately 35 m then diving. Stopping and hovering at several points before flying at around 35 m from T23 east towards the wind farm headquarters
Nankeen Kestrel	*Falco cenchroides*	7/08/2024	11:46	11:58	1	-33.578522	149.063891	55	55	No	Hovering at approximately 55 m around a 30 m radius from the pinned location for 5 minutes before flying southeast towards T37 our of sight.
Wedge-tailed Eagle	*Aquila audax*	7/08/2024	13:31	13:36	1	-33.565311	149.048953	75	75	No	Soaring at approximately 75 m high in a W / SW direction for five minutes until sight was lost.
Nankeen Kestrel	*Falco cenchroides*	8/08/2024	12:26	12:30	1	-33.579766	149.071269	20	20	No	Flying NW of T38 at approximately 20 m. Stopped to hover twice above paddock before flying north into valley out of sight.
Nankeen Kestrel	*Falco cenchroides*	8/08/2024	13:27	13:32	1	-33.574201	149.063971	35	35	No	Flying from a distance SE of T23. Hovering at approximately 35 m then descending out of sight into the valley
Wedge-tailed Eagle	*Falco cenchroides*	8/08/2024	13:41	13:56	2	-33.569556	149.049155	45	125	No	Soaring in circles (approx 45 m and 65 m) SW of T20 then continuing to circle and move approximately 125 m to the South, then flying to the west of T20 out of sight

Nankeen Kestrel	*Falco cenchroides*	8/08/2024	14:01	14:12	1	-33.568138	149.050785	25	25	No	NE of T20, hovering at approximately 25 m and swooping again at 25 m, then flying back towards the east out of sight.
Wedge-tailed Eagle	*Falco cenchroides*	4/09/2024	1:12	1:31	1	-33.518429	149.051282	N/A	N/A	No	West of WTG 08 prior to moving in a southerly direction
Brown Falcon	*Falco berigora*	4/09/2024	1:24	1:25	1	-33.571141	149.062212	N/A	N/A	No	East of WTG 21 moving south towards WTG 23
Brown Falcon	*Falco berigora*	4/09/2024	1:57	2:02	1	-33.558293	149.062521	N/A	N/A	Yes	Recorded perched on a powerline next to Errowanbang Road prior to flying north
Wedge-tailed Eagle	*Falco cenchroides*	4/09/2024	2:17	2:18	2	-33.567448	149.061811	N/A	N/A	No	Soaring between WTG 21 and WTG 22 prior to flying north
Wedge-tailed Eagle	*Falco cenchroides*	4/09/2024	2:49	2:52	1	-33.581942	149.042637	N/A	N/A	No	Soaring to north east of WTG 14 prior to heading east towards WTG 14, then flew north
Brown Falcon	*Falco berigora*	2/10/2024	8:07	8:17	1	-33.568117	149.121784	30	50	No	Brown Falcon soaring at 30-50 m, stopping periodically to hover near T25. Then chased by an Australian Raven to the east of T26, where it went back to hovering. Then flew north over a rise and out of sight.
Nankeen Kestrel	*Falco cenchroides*	2/10/2024	12:19	12:39	1	-33.586128	149.072830	25	45	No	Nankeen Kestrel flying back and forth (north to south and vice versa) at approximately 25 – 45 m then landing in a tree. Then it repeated flying back and forth while intermittently hovering and swooping the ground. Observed for 20 minutes before observation was stopped, bird was still present.
Nankeen Kestrel	*Falco cenchroides*	2/10/2024	13:30	13:35	1	-33.573327	149.063427	25	25	No	Nankeen Kestrel hovering at approximately 25 m then flying

											south into the gully until out of sight.
Nankeen Kestrel	*Falco cenchroides*	3/10/2024	7:04	7:11	1	-33.517467	149.052030	35	35	No	Nankeen Kestrel hovering at approximately 35 m then landing on transmission line. Observed for 7 minutes.
Brown Falcon	*Falco berigora*	3/10/2024	14:25	14:30	1	-33.522186	149.049436	55	55	No	Brown Flacon observed flying at approximately 55 m towards the east then south past T8 and out of sight.
Brown Falcon	*Falco berigora*	4/10/2024	11:11	11:18	1	-33.567410	149.062796	55	55	No	One brown falcon flying at approximately 55 m to the south then changing direction and flying north until flying out of sight over a crest.
Wedge-tailed Eagle	*Aquila audax*	10/10/2024	6:58	7:01	1	-33.581527	149.043074	N/A	N/A	Yes	Roosting in a stag behind the dam wall. Flew west down the valley out of sight
Nankeen Kestrel	*Falco cenchroides*	14/10/2024	10:09	10:11	1	-33.582811	149.075308	N/A	N/A	Yes	Roosting on short stag. Observed for two minutes before flying out of sight. Flew out of sight while making recording.
Nankeen Kestrel	*Falco cenchroides*	17/10/2024	11:40	11:42	1	-33.570329	149.065212	40	40	No	Flew south at approximately 40 m elevation prior to hovering for around 30 secs, then diving out of sight.
Brown Falcon	*Falco berigora*	17/10/2024	11:59	12:00	1	-33.567985	149.065757	N/A	N/A	No	Flying alongside tree lone being pursued by a magpie. Flew behind the ridge and out of site.
Wedge-tailed Eagle	*Aquila audax*	17/10/2024	12:07	12:10	1	-33.572275	149.056033	180	250	No	Soaring at approximately 180m being harassed by a Raven. Circled up to 250m elevation prior to losing sight.

Nankeen Kestrel	*Falco cenchroides*	17/10/2024	12:15	12:16	1	-33.572072	149.058696	N/A	N/A	No	Hovering high above trees prior to banking on updraft and flying over the valley.
Nankeen Kestrel	*Falco cenchroides*	18/10/2024	14:02	14:03	1	-33.523225	149.066541	N/A	N/A	No	Nankeen Kestrel soaring over paddock before dipping down and flying north west and into the valley.
Nankeen Kestrel	*Falco cenchroides*	20/10/2024	6:50	6:56	1	-33.573373	149.052148	N/A	N/A	Yes	Nankeen Kestrel roosting in a small stag. Observed for several minutes without moving.
Black-shouldered Kite	*Elanus axillaris*	20/10/2024	10:07	10:08	1	-33.509076	149.074325	N/A	N/A	No	Observed flying from track to woodland near WTG 02.
Wedge-tailed Eagle	*Aquila audax*	20/10/2024	10:41	10:42	1	-33.530500	149.066408	100	100	No	Soaring over the valley at approximately 100m elevation, continued along the valley losing elevation as it dived in left to right gliding motions.
Nankeen Kestrel	*Falco cenchroides*	24/10/2024	9:53	9:55	1	-33.570726	149.071520	N/A	N/A	No	Hovering near power lines for around 30 seconds prior to banking to the north and flying towards trees in the paddock and out of sight.
Nankeen Kestrel	*Falco cenchroides*	28/10/2024	11:54	12:00	1	-33.562387	149.081404	30	50	No	Soaring at approximately 30-50m west of WTG 11 stopping intermittently to hover four times before gliding north west into the gully and out of sight.
Wedge-tailed Eagle	*Aquila audax*	28/10/2024	13:36	13:31	3	-33.550263	149.078773	100	150	No	Three Wedge-tailed Eagles soaring at 100-150m for 20 minutes. Two adults and one juvenile. Two adults continued to soar whilst juvenile dropped into the gully and roosted in a tree. Adults flew north and out of sight, juvenile stayed roosting

											for 5 minutes before flying out and to the north.
Black-shouldered Kite	*Elanus axillaris*	30/10/2024	7:11	7:18	1	-33.569877	149.070392	N/A	N/A	Yes	Perched in a tree for approximately 7 minutes before flying south and out of sight.
Wedge-tailed Eagle	*Aquila audax*	30/10/2024	10:29	10:35	2	-33.575937	149.043974	100	100	No	Two Wedge-tailed Eagles soaring west of WTG 16. Rising currents upwards in a circular motion up to 100m height before heading down into the valley and out of sight.
Nankeen Kestrel	*Falco cenchroides*	1/11/2024	10:00	10:03	1	-33.589841	149.075512	15	35	No	Flying at approximately 35m before several swoops down to a pair of trees, one dead, where nesting Eastern Rosella's in a tree hollow were making alarm calls. Flew away at 25-30m elevation to the south west.
Nankeen Kestrel	*Falco cenchroides*	1/11/2024	10:14	10:17	1	-33.586690	149.070214	3	45	No	Hovering at 45m for approximately 30 seconds before banking east and flying at 30m between turbines 36 and 37. Hovered at 30m before diving to the ground then flew low at 3-6m to the west and down the gully out of sight.
Nankeen Kestrel	*Falco cenchroides*	5/11/2024	9:20	9:21	1	-33.587274	149.072741	25		No	Nankeen Kestrel sighted gliding at 25m elevation while driving between turbines. Lost sight of the bird from inside the vehicle. Observed for less than 1 minute.
Nankeen Kestrel	*Falco cenchroides*	5/11/2024	10:02	10:05	1	-33.580187	149.042202	10	50	No	Nankeen Kestrel flying low at approximately 10-15m above paddock north of T13. Then rose to 50m and flew north over the gully, then past T16 and out of sight.

Wedge-tailed Eagle	*Aquila audax*	5/11/2024	10:20	10:25	1	-33.578786	149.040975	50	70	No	Wedge-tailed Eagle soaring at approximately 50-70m in circles west of T13. Circled for approximately 4 minutes before flying east below the hill and out of sight.
Nankeen Kestrel	*Falco cenchroides*	5/11/2024	10:30	10:32	1	-33.589105	149.075049	50	50	No	Nankeen Kestrel soaring over the gully in a northerly direction at 50m elevation. Flew north in a soaring motion on the breeze before dropping elevation slightly and disappearing from sight.
Nankeen Kestrel	*Falco cenchroides*	5/11/2024	11:38	11:40	1	-33.579264	149.076354	30	40	No	Nankeen Kestrel flying north at 30m elevating to 40m above Errowanbang Road prior to banking west and flying out of sight.
Wedge-tailed Eagle	*Aquila audax*	5/11/2024	13:26	13:28	2	-33.519636	149.063510	20	100	No	Two Wedge-tailed Eagles soaring at approximately 70-100m near T5. One performed multiple dives towards the ground, stopping at 20m before pulling up. Then they both headed west and out of sight.
Wedge-tailed Eagle	*Aquila audax*	6/11/2024	10:17	10:18	1	-33.519296	149.067234	30	30	No	Wedge-tailed Eagle briefly observed rising on updraft behind ridge south of T05. Circled briefly at approximately 30m elevation before dipping out of sight.
Nankeen Kestrel	*Falco cenchroides*	6/11/2024	10:22	10:24	2	-33.518262	149.066154	10	25	No	Nankeen Kestrel flying along top of cutting adjacent to T05 at approximately 8m elevation. Rose to 15m before joined by a second Nankeen Kestrel with both birds flying west at heights between 10 and 25m.

Wedge-tailed Eagle	*Aquila audax*	6/11/2024	10:28	10:29	2	-33.519088	149.065390	30	60	No	Pair of Wedge-tailed Eagles flying east in the valley towards T05 at elevations between 30 and 60 meters. Being harassed by magpies they turned and flew down the valley in a westerly direction.
Nankeen Kestrel	*Falco cenchroides*	6/11/2024	14:55	14:56	1	-33.582856	149.074754	8	25	No	Nankeen Kestrel gliding west at 15-20m elevation before banking to the north and rising to 30m where it hovered briefly before diving to the ground.
Nankeen Kestrel	*Falco cenchroides*	7/11/2024	7:38	7:41	1	-33.570443	149.123210	30	60	No	Nankeen Kestrel gliding at 10-15m elevation crossing the track between T24 and T25. Rose on the updraft to 25m before gliding west and hovering above a tree at 30m elevation. Flew north-west over the gully at 45m elevation and hovering briefly before continuing to fly in a north-westerly direction.
Nankeen Kestrel	*Falco cenchroides*	3/12/2024	15:19	15:24	1	-33.574330	149.049453	35	35	No	Nankeen Kestrel hovering at approximately 35 m and diving four times, then flying over a crest to the NW and out of view. Observed for 5 minutes.
Wedge-tailed Eagle	*Aquila audax*	3/12/2024	16:21	16:41	2	-33.519049	149.053354	0	35	No	Two Wedge-tailed Eagles soaring above the substation at approximately 35 m being harassed by crows. They then started diving down, catching a rabbit. Observed them eating the rabbit for approximately 10 minutes then they started flying south to approximately 55 m elevation, then flew north-east until out of sight. Observed for 20 minutes.

Wedge-tailed Eagle	*Aquila audax*	4/12/2024	9:54	10:09	2	-33.518436	149.057036	10	115	No	Two Wedge-tailed Eagles roosting in a tree for 8 minutes from when first observed, then flying west to just north of turbine 7 at approximately 115 m high until out of sight. Observed for 15 minutes.
Nankeen Kestrel	*Falco cenchroides*	4/12/2024	16:02	16:02	1			50	50	No	Nankeen Kestrel flying at approximately 50 m high north of T22. Flew in a straight line over the gulley east to west before going behind a hill and out of sight. Observation lasted 20 seconds.
Nankeen Kestrel	*Falco cenchroides*	5/12/2024	7:09	7:11	2	-33.569942	149.064510	30	30	No	Two Nankeen Kestrel observed hovering above the edge of the platform near T22 at approximately 30 m. One flew south into the gully when a car drove past it. The other flew north of the platform and continued to hover one more time for 30 seconds before heading north-west and out of sight.
Nankeen Kestrel	*Falco cenchroides*	5/12/2024	7:55	8:03	1	-33.581194	149.077253	20	35	No	Nankeen Kestrel hovering at approximately 35 m and swooping, repeated three times before flying south past the tree line and out of sight. Observed for 8 minutes.
Wedge-tailed Eagle	*Aquila audax*	5/12/2024	10:02	10:14	1	-33.522257	149.054146	85	125	No	Wedge-tailed Eagle spiralling between T7 and T8 at approximately 85 m then flying to the north-west up to 125 m and then flying out of sight. Observed for 12 minutes.
Wedge-tailed Eagle	*Aquila audax*	5/12/2024	10:39	10:50	1	-33.524495	149.065739	135	135	No	Wedge-tailed Eagle spiralling at approximately 65 m to the east of T6 and then up to approximately 135 m flying south-west past T6

											and out sight. Observed for 11 minutes.
Wedge-tailed Eagle	*Aquila audax*	5/12/2024	11:17	11:20	2	-33.521539	149.067657	20	35	No	Two Wedge-tailed Eagles perched in a tree for three minutes, then flying east at approximately 45 m and out of sight behind trees.
Wedge-tailed Eagle	*Aquila audax*	8/01/2025	8:54	8:57	1	-33.571781	149.066926	15	65	No	Wedge-tailed Eagle soaring at 15 m over pad at WTG22. Flying north-east, gently flapping and rising on updraft to 30 m before moving in a northerly direction and continuing to gently rise on the breeze. Continued north to an elevation of 65 m before disappearing from sight.
Wedge-tailed Eagle	*Aquila audax*	8/01/2025	9:52	9:55	1	-33.573638	149.060908	40	150	No	Wedge-tailed Eagle soaring at 150 m near WTG21, soaring on the updraft before flying south and descending to 40 m, then gliding over the ridge south east and out of sight.
Nankeen Kestrel	*Falco cenchroides*	8/01/2025	9:56	10:01	1	-33.565970	149.047557	30	30	No	Nankeen Kestrel hovering at approximately 31 m to the north west of WTG20, then dived off site. Observed for 5 minutes.
Nankeen Kestrel	*Falco cenchroides*	8/01/2025	10:32	10:37	1	-33.516754	149.070245	35	35	No	Nankeen Kestrel flying at approximately 35 m south south-west towards WTG06 and out of sight over a hill.
Peregrine Falcon	*Falco peregrinus*	8/01/2025	11:39	11:42	1	-33.520351	149.050319	1	4	No	Peregrine Falcon flying low and fast to the north-west of WTG08. Fast flapping flight at elevations between 1-4 m. Flew low over the ridge and out of sight.

Wedge-tailed Eagle	*Aquila audax*	8/01/2025	14:24	14:30	2	-33.588988	149.081497	100	150	No	2 Wedge-tailed Eagles soaring at 100-150 m on updrafts. Circled west of WTG35 before flying east and out of view.
Nankeen Kestrel	*Falco cenchroides*	12/02/2025	7:31	7:35	2	-33.519907	149.052658	20	25	No	2 Nankeen Kestrels perching on tree then flying east at approx 25 m and out of sight.
Nankeen Kestrel	*Falco cenchroides*	12/02/2025	8:49	8:55	2	-33.5241	149.065757	15	25	No	2 Nankeen Kestrels hovering at approx 15-25 m then flying off to the east and out of sight into the valley.
Nankeen Kestrel	*Falco cenchroides*	12/02/2025	9:51	9:53	1	-33.51888	149.067408	40	100	No	Nankeen Kestrel gliding on thermal at 40 m height. Circling upwards to 70 m before flying west through stationary turbine blades of WTG05 at 100 m. Continued west out of sight.
Nankeen Kestrel	*Falco cenchroides*	12/02/2025	11:00	11:01	1	-33.508133	149.070961	25	25	No	Nankeen Kestrel flying at approx 25 m height travelling in a NW direction away from stationary T02. Flew out of site in a NW direction.
Nankeen Kestrel	*Falco cenchroides*	12/02/2025	15:18	15:20	1	-33.58366	149.075918	25	30	No	Nankeen Kestrel soaring at heights of 25 to 30 m criss crossing above the track just above the tree line before diving out of sight.
Nankeen Kestrel	*Falco cenchroides*	13/02/2025	7:23	7:31	1	-33.586585	149.071782	15	25	No	Nankeen Kestrel hovering at approx 15-25 m and swooping, then flying east out of sight.
Brown Falcon	*Falco berigora*	13/02/2025	9:15	9:17	1	-33.517573	149.051799	N/A	N/A	No	Flying following a group of galahs, swooped to the ground before circling and flying over the hill
Wedge-tailed Eagle	*Aquila audax*	13/02/2025	9:25	9:35	2	-33.524716	149.065608	25	45	No	2 Wedge-tailed Eagles circling T6 at approx 25-45 m, observed for 10 mins then capped observation.

Nankeen Kestrel	*Falco cenchroides*	13/02/2025	10:08	10:11	2	-33.517465	149.068892	25	25	No	2 Nankeen Kestrels flying across the track to the east at approx 25 m high until they were out of sight.
Wedge-tailed Eagle	*Aquila audax*	13/02/2025	11:06	11:10	2	-33.524119	149.066242	75	100	No	2 Wedge-tailed Eagles soaring, one at approx 100 m, one at 75 m. Travelling slowly in a SE direction.
Wedge-tailed Eagle	*Aquila audax*	13/02/2025	11:10	11:15	2	-33.52222	149.061576	25	60	No	2 Wedge-tailed Eagles soaring between 25 and 60 m and circling before heading SE out of sight.
Nankeen Kestrel	*Falco cenchroides*	13/02/2025	15:47	15:55	1	-33.566209	149.058786	25	25	No	Nankeen Kestrel hovering at approx 25 m and swooping, then flying towards the north and out of sight.
Nankeen Kestrel	*Falco cenchroides*	13/02/2025	16:58	17:08	2	-33.569576	149.123625	23	35	No	2 Nankeen Kestrels hovering at approx 35 m and swooping then hovering just above tree (approx 23 m), then flying to the north east and out of sight.
Brown Falcon	*Falco berigora*	5/03/2025	7:01	7:03	2	-33.512739	149.046135	30	40	No	2 x Brown Falcon and 1 x Nankeen Kestrel soaring at 30-40 m in a circular motion. Nankeen Kestrel headed south over the hill and out of sight. Brown Falcons flew and perched in a tree.
Nankeen Kestrel	*Falco cenchroides*	5/03/2025	7:01	7:03	1	-33.512739	149.046135	30	40	No	2 x Brown Falcon and 1 x Nankeen Kestrel soaring at 30-40 m in a circular motion. Nankeen Kestrel headed south over the hill and out of sight. Brown Falcons flew and perched in a tree.
Nankeen Kestrel	*Falco cenchroides*	6/03/2025	6:54	6:55	1	-33.518934	149.052560	30	30	No	Nankeen Kestrel flying in a circular pattern at approximately 30 m elevation before landing in an old stag.

Wedge-tailed Eagle	*Aquila audax*	6/03/2025	10:00	10:08	1	-33.524135	149.066315	20	40	No	Wedge-tailed Eagle riding currents east of T06. Flew south at 40 m before headed back north at 20 m elevation. Then flew into the valley and out of sight.
Nankeen Kestrel	*Falco cenchroides*	7/03/2025	7:01	7:05	1	-33.524639	149.059929	40	40	No	Nankeen Kestrel flying east, stopping at times to hover. Flying at approximately 40 m. Flew out over the valley and out of sight.
Brown Falcon	*Falco berigora*	7/03/2025	11:25	11:26	1	-33.581076	149.048350	40	40	No	Brown Falcon seen flying west to east, soaring in a direct path of at 40 m elevation. Observed for approximately 20 seconds before diving into the gully and out of sight.
Wedge-tailed Eagle	*Aquila audax*	7/03/2025	12:00	12:03	1	-33.582356	149.048799	150	200	No	Wedge-tailed Eagle soaring at 150-200 m on updrafts. Headed north before soaring east over the hill and out of sight.
Nankeen Kestrel	*Falco cenchroides*	2/04/2025	12:24	12:24	1	-33.524226	149.053195	2	3	No	Nankeen Kestrel on the ground next to the gravel road. Flew low over the ground at approximately 2-3 m elevation to the south and over the hill and out of sight. Observation lasted 10 seconds.
Brown Falcon	*Falco berigora*	3/04/2025	8:59	9:07	2	-33.571208	149.068760	N/A	N/A	Yes	Two Brown Falcons perched in a tree for approximately 3 minutes. Then flew south before perching in another tree. One then flew back north and over the track and out of sight, other bird remained perched in the tree.
Nankeen Kestrel	*Falco cenchroides*	3/04/2025	10:33	10:35	2	-33.581915	149.040628	30	40	No	Two Nankeen Kestrels soaring at approximately 30-40 m elevation, soaring south and out of sight.

Nankeen Kestrel	*Falco cenchroides*	3/04/2025	14:06	14:07	2	-33.525030	149.054194	20	20	No	Two Nankeen Kestrels diving and rising to about 20 m elevation before flying to the south and out of sight.
Nankeen Kestrel	*Falco cenchroides*	3/04/2025	14:17	14:20	1	-33.524360	149.055122	1	20	No	Nankeen Kestrel hovering at approximately 20 m, then zig zagging and diving down and up again. Flew south west over the valley.
Nankeen Kestrel	*Falco cenchroides*	4/04/2025	7:30	7:56	2	-33.503529	149.072143	N/A	N/A	Yes	Two Nankeen Kestrels flying around WTG01. Both flew into hatches at the top of the turbine before perching on top of the blades and on top of the turbine. Both flew down around the hatches and entered approximately three times. Then one flew to the north and out of sight.