

# FACT SHEET

## Forest Wind and impact to birds



Bird surveys have been undertaken over **three years**

### Bird Surveys

Four years of field surveys

- Four years of surveys between 2016 and 2019 and are ongoing
- Surveys in the Wind Farm Project Area and at reference sites
- Completed by experienced and qualified ecologist and bird expert

250 bird utilisation surveys

- Monthly surveys between October 2018 and April 2020 during the migratory bird period
- Weekly surveys from February 2019 to the end of April 2019
- Includes surveys for birds arriving or leaving the RAMSAR Great Sandy Strait
- Ongoing opportunistic surveys

36 survey sites

- Includes seven reference sites away from the proposed turbines
- Located in clear vantage points

### Wind turbines

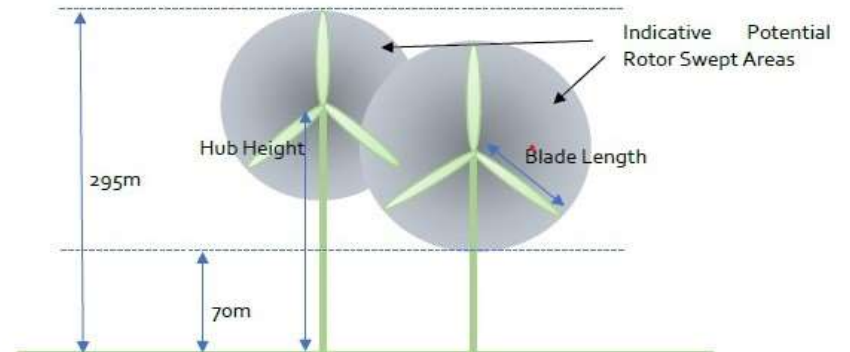
The potential impact to birds from wind turbines is dependent on the height that the birds fly and their interaction with the turbine blades.

A range of blade tip heights for the wind turbines have been considered in the assessment for Forest Wind:

- a maximum tip height of 295m
- a lower tip height of 70m

The physical area swept by the blades during operation is referred to as the Rotor Swept Area (RSA).

In reality the RSA will not extend across this entire height range but will be somewhere within it depending on final hub height and blade length of the installed turbines.



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### Flight height

During the surveys, most birds were recorded at less than 30m above ground level. Of the 64 bird species recorded in the Project Area the following five were observed flying in the rotor swept area:

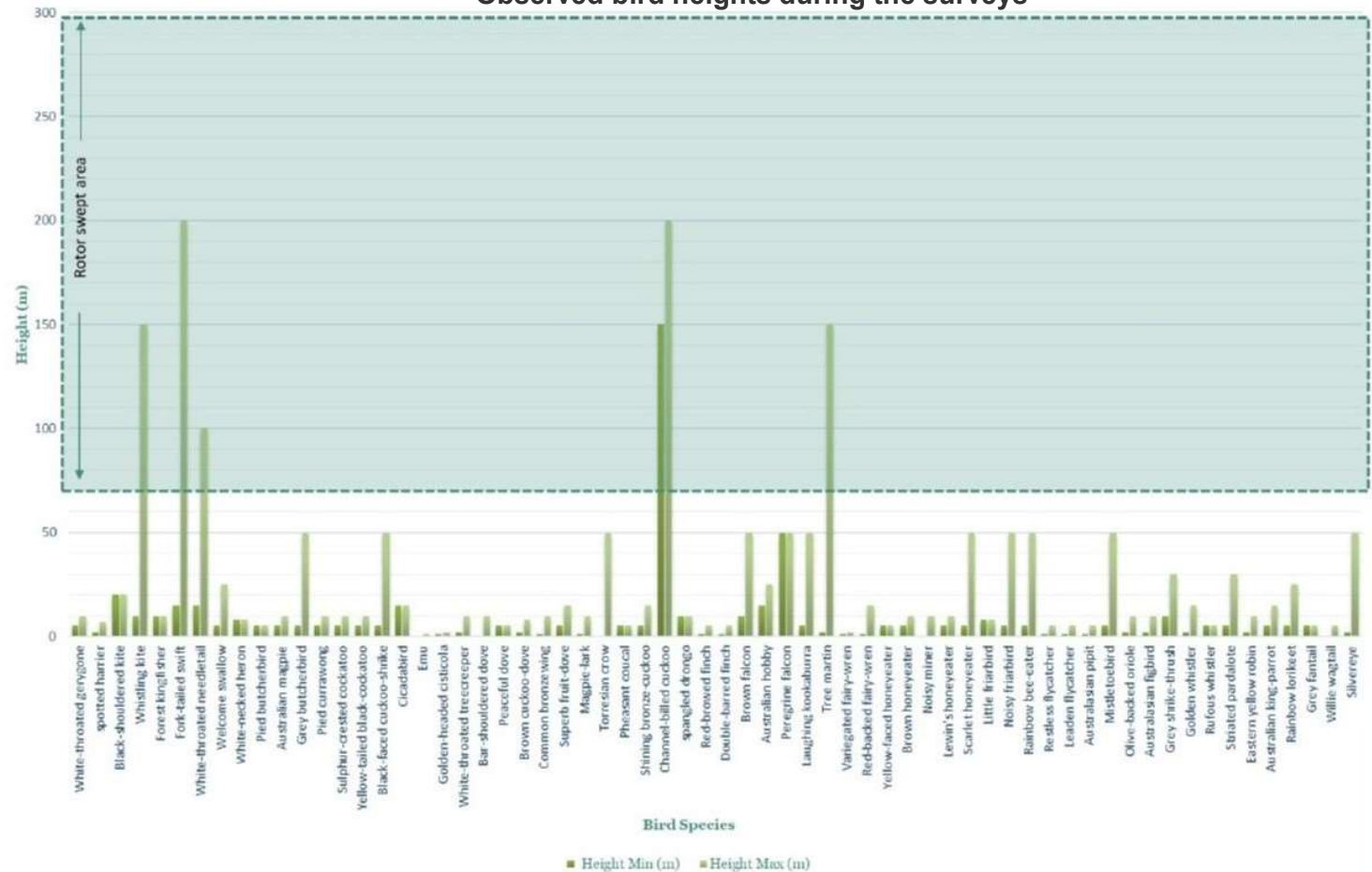
- Whistling kite
- Fork-tailed swift
- White-throated needle tail
- Channel-billed cuckoo
- Tree martin

Other species that have the potential to fly in the RSA include:

- Black-shouldered kite
- Welcome swallow
- White-necked heron
- Brown falcon
- Australian hobby
- Peregrine falcon
- Rainbow bee-eater
- Cicadabird
- Torresian crow
- Australian magpie

Due to their low numbers and observed flight heights below the RSA the risk to these birds is low.

Observed bird heights during the surveys



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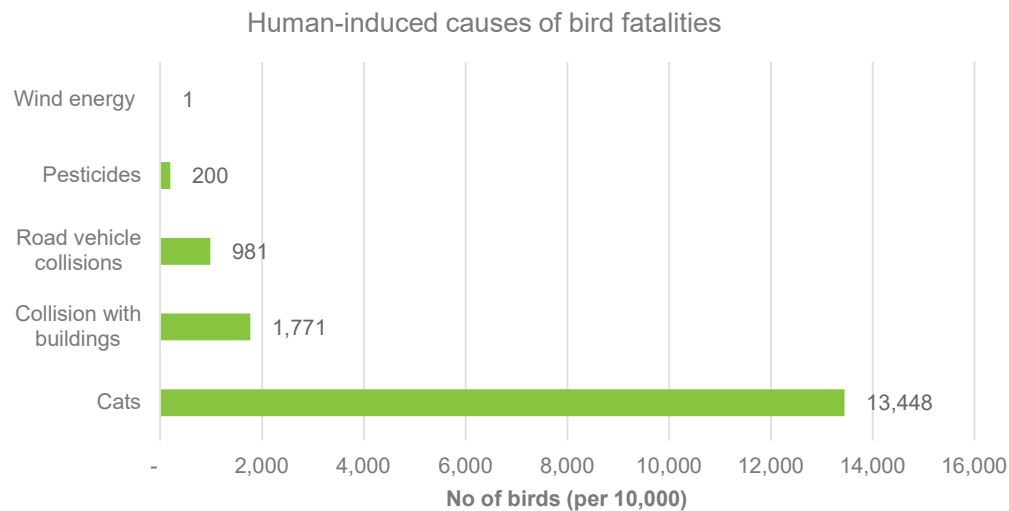
## Forest Wind and impact to birds



A Preliminary Bird and Bat Management Plan has been developed for the Project

### Wind farms and impacts to birds

Studies have found that wind farms are a small contribution to bird mortality in comparison to other causes.



\* Adapted from Table 3, A Synthesis of Human-related Avian Mortality in Canada, Calvert et al, 2013, Avian Conservation and Ecology 8(2): 11

### Forest Wind and impacts to birds

Forest Wind Holdings takes impacts to birds seriously and have developed a preliminary Bird and Bat Management Plan that outlines a monitoring program and management measures to be adopted during the operation of the wind farm.

Potential management measures include the following:

- temporary shutdown of individual turbines
- potential to use acoustic devices to deter birds
- slow rotor speeds



A copy of the Bird and Bat Management Plan can be found on our website:

Visit: [www.forestwind.com.au/planning-documentation](http://www.forestwind.com.au/planning-documentation)

