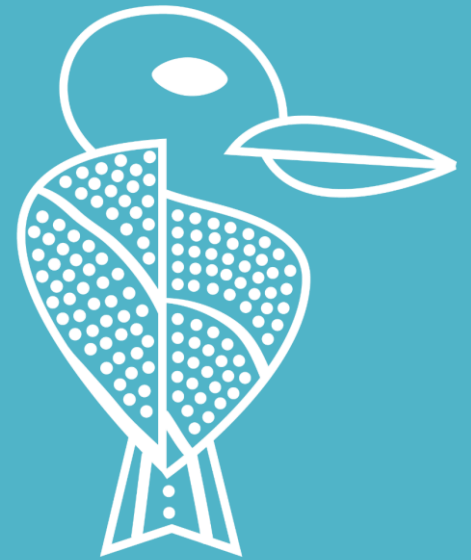




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***Terrestrial Wildlife
Hazards***



By Katie Selhorst

Birds vs Terrestrial Animals

3 Major factors to consider

1. Species commonly involved with collisions are recorded to have a population increase due to adaptation of urban living.
2. Increase in aviation traffic and the number of existing airports.
3. Aircraft design has shifted from 3 and 4 engine aircrafts to 2 engine aircrafts.



Birds vs Terrestrial Animals

Birds

- 62 deaths, USA 1960
- 34 military deaths,
Netherlands 1996
- Size, weight and number
- Approx. 38:1 bird strikes vs
terrestrial animals



Birds vs Terrestrial Animals

Terrestrial Animals

- Estimated 2% of strikes are terrestrial animals
- 61% recorded damage to aircraft vs 14% from birds
- Size, weight and number



Birds vs Terrestrial Animals

Australian Trends

- Decrease in birds strikes
- Increase in terrestrial animal strikes
- Average 37 strikes per year
- 25% cause damage
- QLD highest with 31% of recorded strikes



Australian Terrestrial Animal Strikes

Rabbits and Hares

- Highest strike rate
- Lowest of the damage rates
- Increase 2 years QLD

Kangaroo and Wallaby

- 2nd highest strike rate
- Highest damage rate of 61%
- Increase in QLD

Wild Dogs and Foxes

- 3rd highest strike rate
- Australia wide

Other

- Livestock- Most significant damage potential
- Echidna
- Emu
- Snakes
- Deer
- Wild boar

(ATSB 2011)

(ATSB 2014)



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Damage from Terrestrial Animals

1. Landing gear
2. Propeller
3. Wings and Rotor
4. Infrastructure

Direct Impacts

- Large Animals
- Urban vs Rural
- Movement of animals
- Predation

(Dolbeer and Wright 2008)

(Eldridge, Shakeshaft, and Nano, 2002)

(Kociolek et al., 2010)



Infrastructure

- Burrowing animals
- Runway visual impairment
- Urban vs Rural



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Airstrike Management

National level

airstrike records

program awareness

education

data entry

data analysis

Local level

Fertility management

Dispersal

Prevention

Mitigate

Relocation

Culling



Conclusion

- Terrestrial animal strikes recorded in lower frequencies
- Damage per strike are more significant
- Number of terrestrial animal strikes increasing within Australia
- National data management
- Local management



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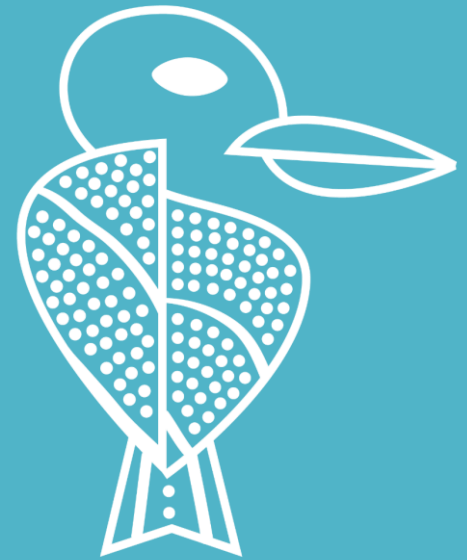
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