

AUSTRALIAN AVIATION WILDLIFE HAZARD GROUP

EDUCATION FORUM

ADELAIDE & MELBOURNE
AIRPORTS / QANTAS

27 AUGUST 2007



Adelaide Airport Bird Strike

WHEN AND WHAT

- **Spring 2006 – post-dawn**
- **Multiple galah strike – B737 on rotation**
- **Dual engine ingestion**
- **Cockpit and leading edge strikes**
- **Maximum engine vibration**
- **Flight return to Adelaide**
- **No active harassment at time**





Response

ADELAIDE AIRPORT LTD

- Received initial advice from ATC – strike RWY 23 on departure (rotation)
- Immediate inspection
- Carcasses found, collected, bagged and placed in freezer
- Bird strike report faxed to ATSB, Uni and Airport Env Manager
- SSO on alert – harassment

Response

ASSESSMENT ...

- **Assessment done of aspects of AAL management system (not a formal incident investigation)**
- **Airside Safety Manager, Maintenance Manager, Environment Manager**
- **Uni of Adelaide consulted**

Response

1. **Revise operational planning process**
2. **More data analysis**
3. **Revise bird strike report form**
4. **Risk assessment**
5. **Insect and plant monitoring**
6. **Revise procedures**
7. **Trial new harassment techniques**
8. **Map grounds activity**



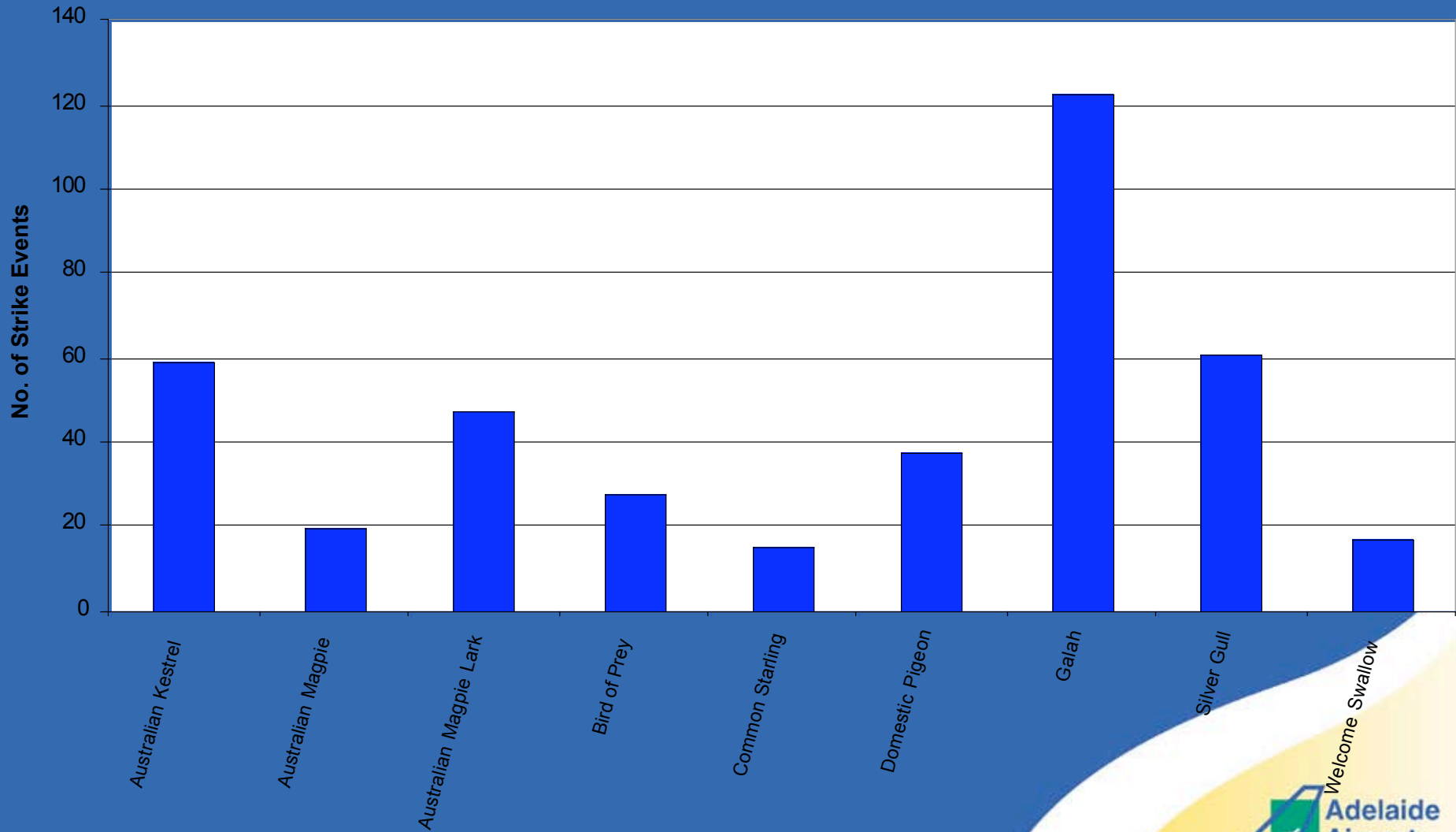
Operational Planning

- **Quarterly assessment and action plan, based on:**
 - Observations
 - Weather
 - Bird census data
 - Bird strike data
 - Revise bird strike report form

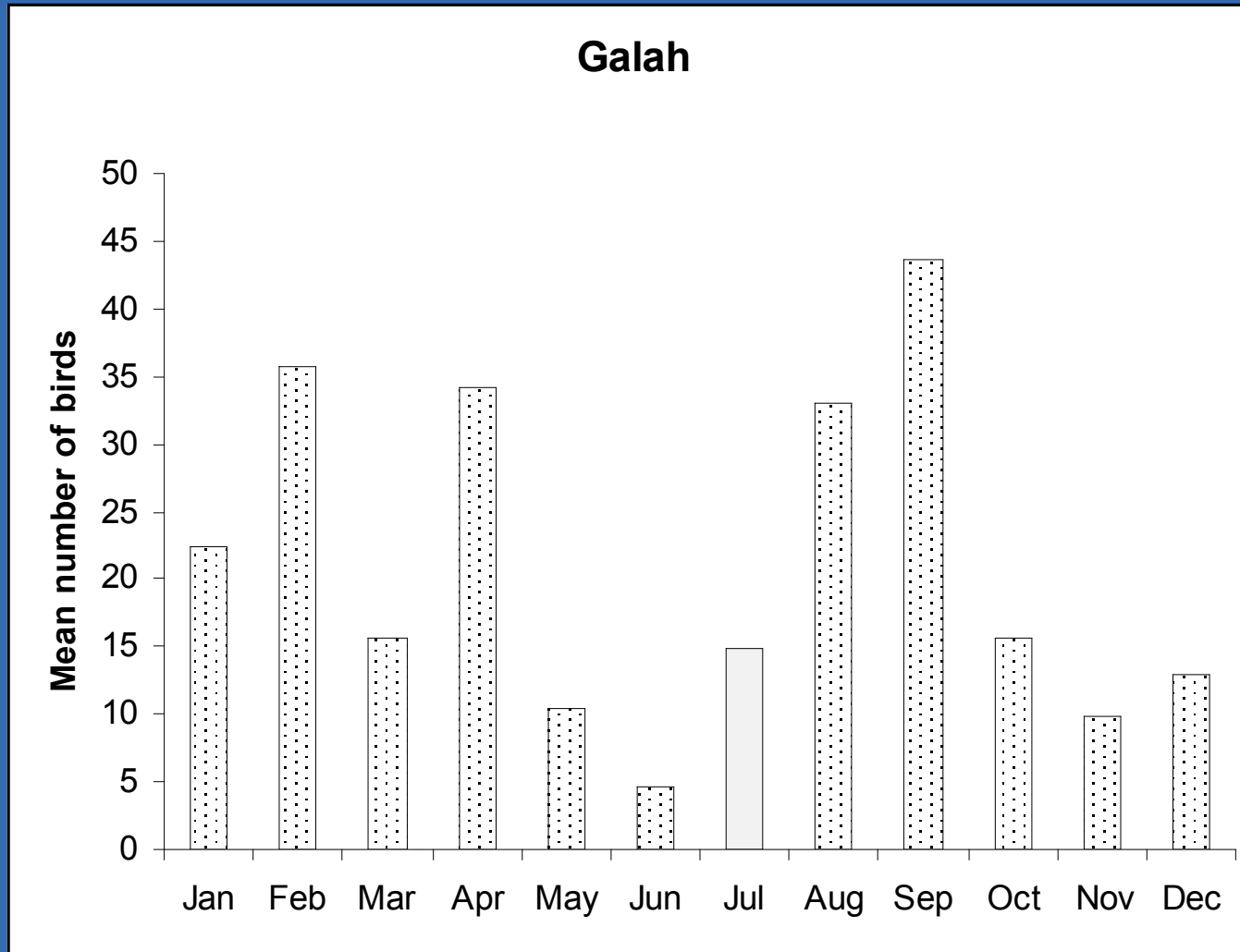


Data Analysis

Adelaide Airport Most Common Bird Species Strike Events 1987 - Oct 2006



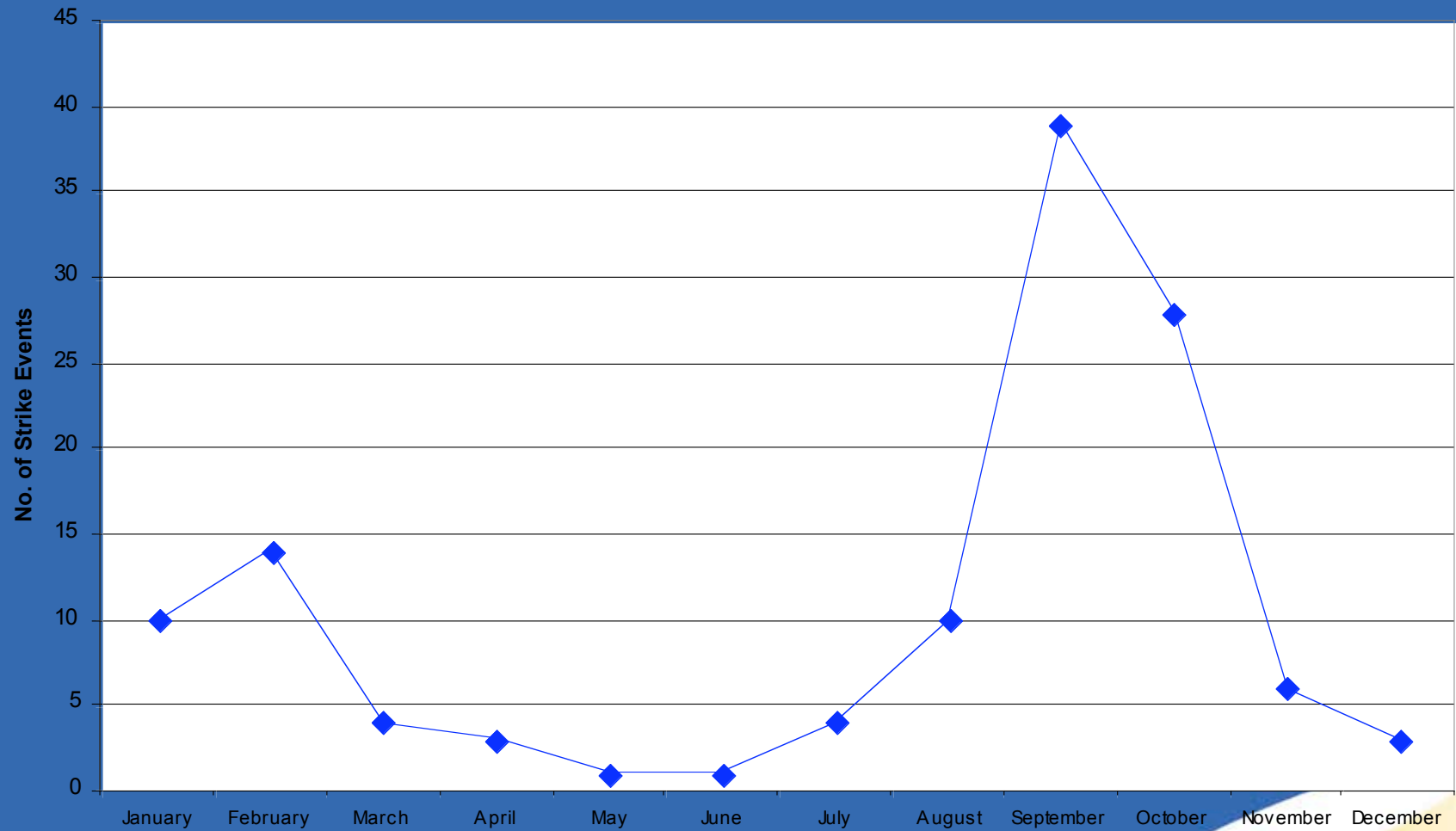
Data Analysis



Mean Numbers of Galahs 2001- 2005 (UofA)

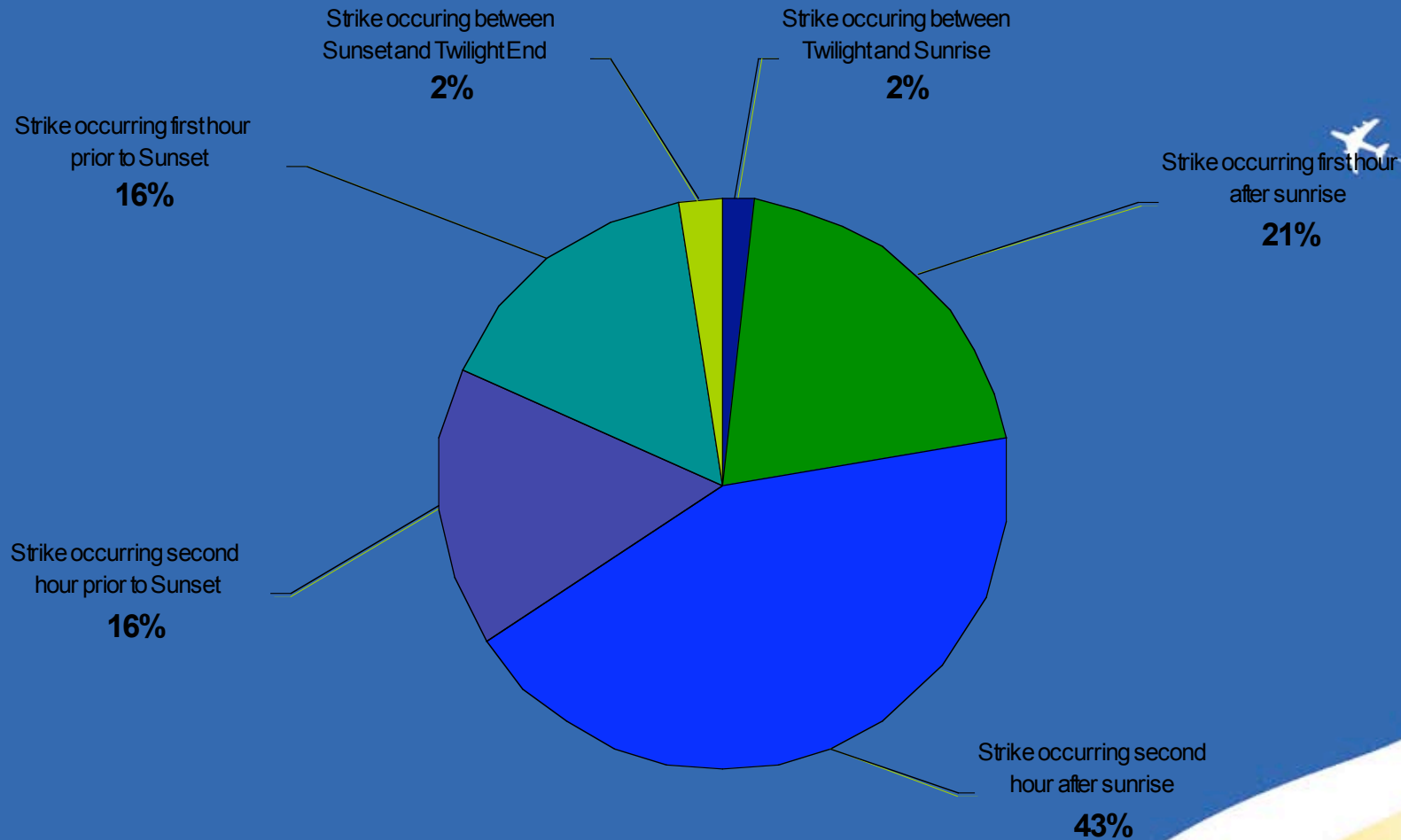
Data Analysis

Number of Adelaide Airport Galah Strike Events by Month 1987- Oct 2006



Data Analysis

Summary of Adelaide Airport Bird Strike Events Relative to Twilight, Sunrise and Sunset 1987 - Oct 2006



Risk Assessment

GALAH

- 'very high' risk species
- Body mass
- Flocking
- Erratic and low flight patterns
- Juveniles
- Numbers decreasing



Key Learnings

- **Establish immediate reporting communication lines with airlines**
- **If you collect data ... analyse and use it!**
- **Think about what data helps manage risk**
- **Develop incident response / investigation procedures**
- **Look at Key Performance Indicators**
- **Audit your own systems**
- **Procedures and training**

Some specific twin engine wildlife strike event costings

Date: 27SEP2006
Port: ADL
Wildlife: Galahs
Aircraft: 737-800
Engine type: CFM56-7
Flight phase: Take-off
Event: Air Turn Back
P.O.B.: 146
Damage: Engine/airframe
Outcome: Major disruptions
Cost: > AUD\$180k

Date: 03OCT2006
Port: MEL
Wildlife: Corellas
Aircraft: 767-300
Engine type: CF6-80C2
Flight phase: Take-off
Event: Nil
P.O.B.: 142
Damage: Engine
Outcome: Minor disruptions
Cost: > AUD\$125k

ACTUAL COSTS FOR TWO SPECIFIC QANTAS AIRLINES BIRDSTRIKE EVENTS: 27SEP2006 & 03OCT2006