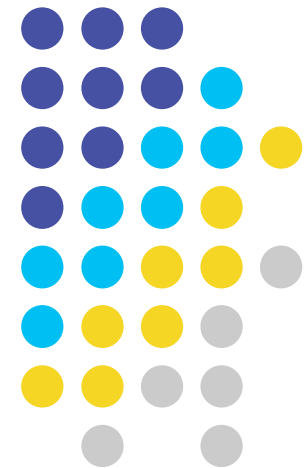




AAA National Bird and Animal Hazard Management Plan Template

Presented by
Peter Pallot
Sunshine Coast Airport



Bird and Animal Hazard Management Plan



- Provide a safer flying environment
- Provide guidance to Aviation Bird and Animal Hazard Managers
- Assist regulatory compliance



Management Plan Structure



- Part 1 – Administration
- Part 2 – Plan
 - Management System
 - Planning
 - Risk Assessment
 - Identification of Aspects
 - Setting Objectives and Targets
 - Organisational Structure
 - Operational Control
 - Implementation
 - Management System Audit Process
 - Management Review
- Part 3 - Procedures

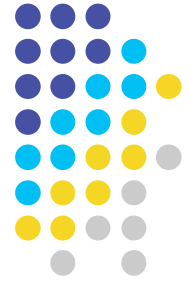




Part 2 Management Plan

- Management System
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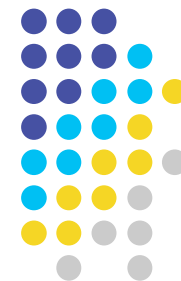




Planning

- Risk Assessment Preliminary Planning
 - Data
 - Bird Counts
 - Bird Strikes
 - Data Analysis
 - Risk Assessment





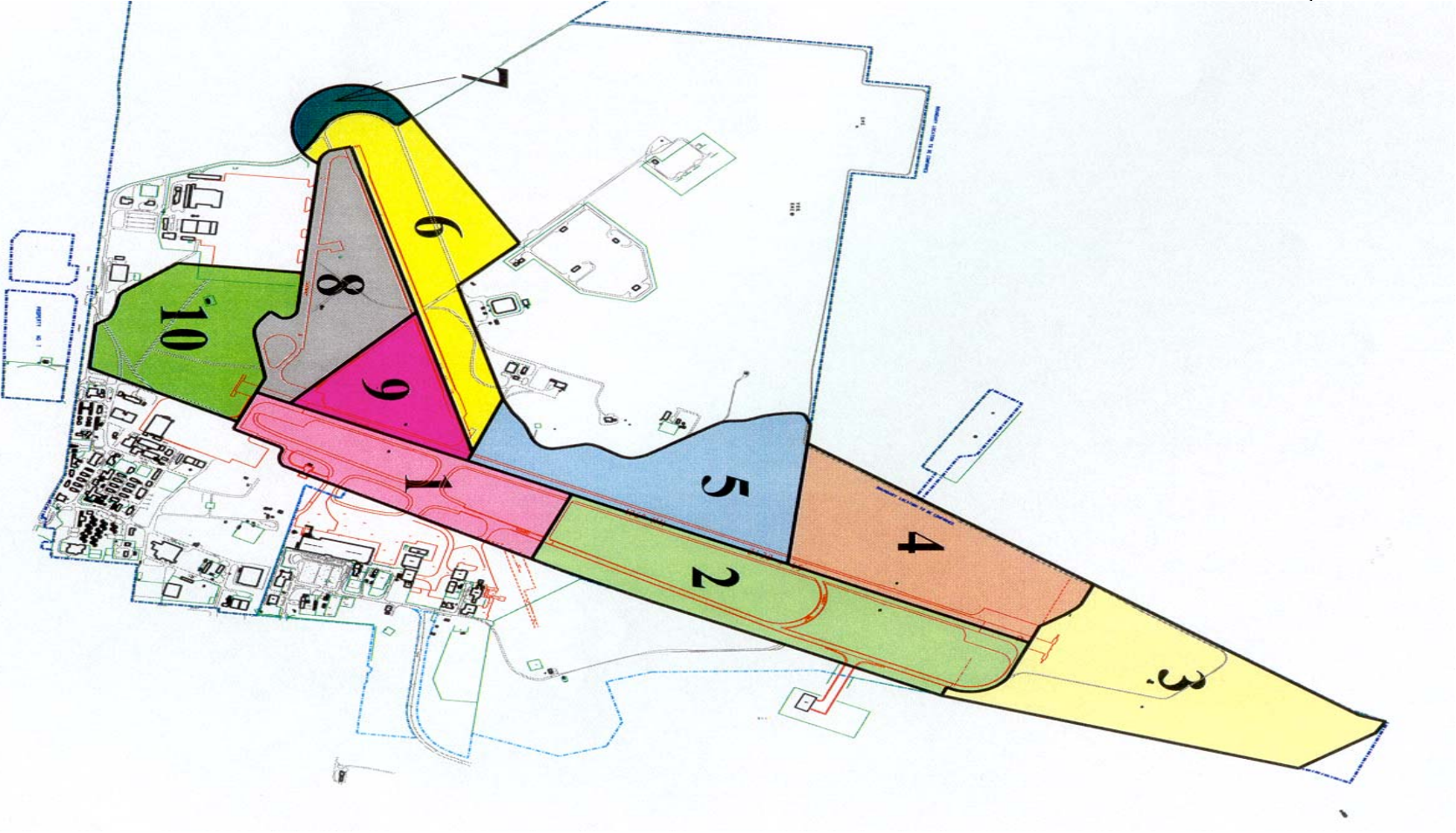
Bird Counts

Define the Bird Count Areas

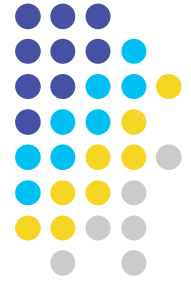
- ✈ Use easily identifiable boundaries such as drains, tracks, taxiways or runways help define areas easily when setting count areas



Bird Count Areas

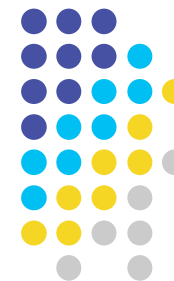


Bird Counts



- Count birds at the same time of day
 - ☞ It's better to count once a week three times a day than three times a week once a day
 - ☞ Capture the period of peak bird activity
- Count using the same areas and the same path each time
- Make sure your people are trained and equipped
 - ☞ Develop an airport specific bird identification handbook
- Record the data



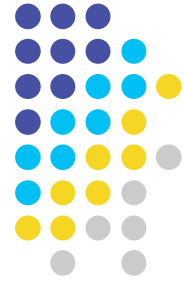


Data Capture

- Use new ATSB reporting form
- Review all relevant records
- Be consistent in what constitutes a bird strike (use the definitions)
- Using the data records we can identify key risks



Converting Data into a Risk Profile



- Risk is the product of likelihood and severity
 - Methodology used in the template was developed by Dr John Allan
- A comprehensive risk assessment will help
 - Prioritise targets
 - Allocate scarce resources
 - Aid continuous improvement



Likelihood



- Average number of strikes over the past 5 years per species

Likelihood Rating

No. strikes per annum	>10	3–10	1–2.9	0.2–0.9	0–0.1
Category	Very high	High	Moderate	Low	Very low

Severity



- **Severity** is calculated for each animal species as the percentage of strikes that resulted in damage to the aircraft
 - Based on data from US, Canada and Melbourne Airport

Severity Rating

No. strikes per annum	>20	10–20	6–9.9	2–5.9	0–1.9
Category	Very high	High	Moderate	Low	Very low





Overall Risk

- Finally, the Likelihood Rating and the Severity Rating for each species were combined in Allen's (2001) matrix to determine whether specific management action is required for that species.

Likelihood

	Very high	High	Moderate	Low	Very low
Very high	Reject	Reject	Reject	Reject	Review
High	Reject	Reject	Reject	Review	Review
Moderate	Reject	Reject	Review	Accept	Accept
Low	Review	Review	Accept	Accept	Accept
Very low	Accept	Accept	Accept	Accept	Accept

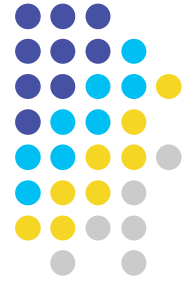


Identification of Aspects

- Aspects to be considered
 - Species
 - Numbers on and transiting the airport
 - Airport habitat
 - On and off airport activities
 - Weather and seasons
 - Other site specific aspects



Planning Summary



- Prioritise risk rating for the species
- Identify aspects to be addressed
- Develop a treatment plan
- Set objectives and targets
- Allocate resources
- Review effectiveness of plan



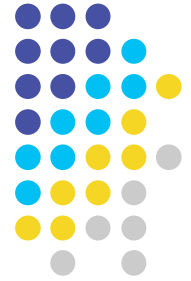
Bird Management Committee



Function

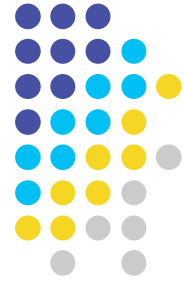
- Develop and implement strategies to reduce the incidence of bird strike
- Review Bird strike data
- Review Operating Procedures and policies
- Act as a forum to discuss recommendations from research and expert reports

Bird Management Committee



- Membership
 - Airport Operator
 - Airlines
 - Local Councils
 - Maintenance Organisations
 - Environmental Groups
 - DoTaRS, CASA

Section 4 Implementation

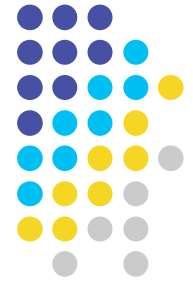


Based on

- Exclusion
- Deterrence
- Detection
- Harassment
- Communication



Exclusion



Deterrence



- Environmental Controls are a long term fix
 - Land management issues
 - Vegetation
 - Drainage
 - Landscaping
 - Waste management
 - Other initiatives

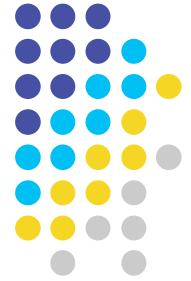


Detection



- Bird Patrols/Runway Guarding
- Bird Counts
- Bird Activity Reports
- Bird Strike Reporting



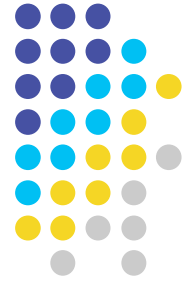


Harassment

- Plan harassment in a concentric approach
- Try concentrating your effort early in the morning
- Train your staff
- Use appropriate ammunition
- Have clear policies on depredation



Communication

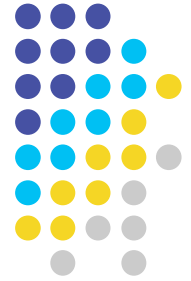


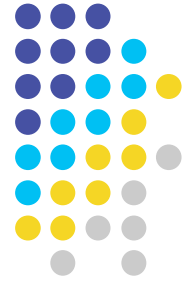
- Bird Management Committee Meetings
- Notice in ERSA
- Bird Watch Reports
- NOTAM



Management Plan Summary

- Gather your data
- Communicate with Stakeholders
- Develop your plan
- Implement
- Review its Effectiveness





More information

- www.aaal.com.au
- www.casa.gov.au/aerodromes/bird.htm
- www.birdstrike.org
- www.int-birdstrike.com
- www.wildlife-mitigation.tc.faa.gov/public_html/index.html

