

MACKAY PORT AUTHORITY



MACKAY AIRPORT
BIRD HAZARD
MANAGEMENT
PROGRAM

PRESENTED BY
MANAGER AIRPORT
OPERATIONS
RAY WATERS



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The Mackay Port Authority is taking a proactive approach to the elimination of wildlife hazards at the airfield by continually enhancing current practices and management through the introduction of the Mackay Airport Bird Management Plan.



HABITAT MODIFICATIONS

Since 2001, Mackay Airport has undertaken a variety of habitat modifications in an effort to reduce bird attractiveness. However, continual modifications of habitats at Mackay Airport is necessary to ensure bird populations are continually reduced.

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- A major reshape of Runway 14/32 with laser levelling to prevent water ponding. Significant capital works have been undertaken including laser-leveling of some grassed sections of the airport installation of concrete-lined drains, all to improve drainage.



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- An introduction of hybrid grass unattractive to birds on Runway 14/32
- A security fence 7800 meters in length has been installed around the airport which limits to potential for mammals such as wallabies and kangaroos to enter Airside areas.
- In 2002 deactivation of runway lights at night when ever possible to reduce the number of curlews feeding on insects near runway lights
- Mowing heights have been increased in the flight strips.
- Roost spikes have been placed in the roof of the terminal building to reduce perching opportunities for pigeons.
- Mesh has been placed over some culverts to restrict swallows from nesting: these were ineffective after heavy rains.

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- **Detection and Dispersal of Hazards**
- It is important that Mackay Airport remains proactive in the detection of bird and wildlife hazards by continuing ongoing bird counts, bird patrols and fence inspections.
- Runway inspections prior to all RPT arrivals and departures positioning adjacent to the touch down and rotation zones for bird dispersal





Mackay Airport had an existing bird management program which primarily involved:

1. Monitoring, through bird strike reporting and conducting bird counts.
2. Dispersal and removal of birds with pyrotechnics and live shot.



WILDLIFE MANANEMENT PLAN

- An environmental consultant (Ecosure) has been contracted by the authority to conduct an assessment of wildlife hazards at the aerodrome, develop a Wildlife Management Plan to manage these hazards and generally improve wildlife management activities at the aerodrome. The contracted organisation is a well-established consultant with mature wildlife management plans introduced into a number of airports within Australia.
- Introduction of Bird Hazard Management Plan in conjunction with Ecoshaw under the Australian Airport Association template which is CASA approved.



The objectives of the Mackay Airport Bird Management Plan are to:

- Identify and assess the risks posed by birds and wildlife to aircraft operating at
- Mackay Airport via analysis of data collected over several years.
- Determine the most appropriate means of treating and monitoring the risks posed by birds and wildlife by developing long term plans for the minimisation of bird and wildlife populations on and around Mackay Airport.



The objectives of the Mackay Airport Bird Management Plan are being achieved using the following methods:

- Active Management
- Passive Management
- Formation of a Bird Hazard Management Committee

ACTIVE MANAGEMENT

- Active management techniques concentrate on the dispersal or removal of wildlife from hazardous situations on airport.
- Bird Dispersal - Bird and other wildlife dispersal methods currently employed by Airport Safety Officers are live shot, pyrotechnics (bird frite) and vehicle dispersal.
- Culling – The use of live shot to lethally control individual birds on airport.
- Requires firearm licensing and permits for culling. There were restrictions on species and the quantity permitted to be culled.
- Nest Removal – No birds should be permitted to breed on airport. All nests should be removed as soon as practical.



PASSIVE MANAGEMENT

- Passive management of airports and airfields generally focuses on the reduction of available food, cover and water. The advantages of passive management are that it permanently reduces the carrying capacity of the airport, offering a long-term solution.
- Grass Management – Long grass maintained at 300mm effectively reduces populations of grassland species such as Masked Lapwings and Australian Magpies due to their inability to safely forage. Seed heads must be removed regularly so as not to attract granivorous bird species or rodents.
- Buildings and Other Structures – The removal of all non-essential posts will reduce perching opportunities. Built structures (such as towers, eaves etc) need to be monitored in the breeding season and if nesting occurs such structures should be modified to eliminate access to birds.
- Shellgrit Creek retention basin by undertaking long-term monitoring as outlined in the bird management plan.

The airport environment contains a series of habitats which are significant bird attractions:

- Grasslands
- Drainage
- Built environment
- Landscaped gardens

Significant off-airport habitats identified:

- Sporting Field
- Shellgrit Creek retention basin
- Shellgrit Creek mouth
- Racecourse
- Northern drainage system (draining into the retention basin)
- Mackay landfill
- Borthwicks & Sons Abattoirs
- Pigeon exercising



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MACKAY AIRPORT BIRD & WILDLIFE MANAGEMENT COMMITTEE

In July 2006, the Mackay Airport Bird and Wildlife Management Committee was formed. This committee is an excellent base from which to develop management options for populations of high risk species at Mackay Airport.





This committee consists of a variety of key stakeholders who can influence the management of bird populations on and around Mackay Airport.

- The previous Damage Mitigation Permit was found to be too restrictive.
- Approval was sought for an unlimited permit which was subsequently approved as a result of the formation of the committee.

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THANK YOU