

SAFETY & BIRD MANAGEMENT

A D E L A I D E A I R P O R T L I M I T E D



Nankeen Kestrel - *Falco cenchroides*



Australian Magpie - *Gymnorhina tibicen*

Adelaide Airport provides an ideal grassland habitat for many bird species. A number of bird species are attracted to the airport to feed; this includes both birds of prey and birds that feed on insects and plant material. The airport is also surrounded by four golf courses and several waterways (including Patawalonga Creek, Patawalonga Lake, and a network of stormwater drains), which also provides an attractive bird environment.

WHAT IS BIRD STRIKE?

Bird strike is the term used to describe the collision of an aircraft with a bird. Collisions involving other animals (eg foxes) are also recorded as wildlife strikes. All suspected or confirmed strikes are reported to Air Traffic Control, Adelaide Airport Limited (AAL; the airport operator) and the Australian Transport Safety Bureau.

PREDOMINANT BIRD SPECIES

Species most commonly involved in bird strike incidents at Adelaide Airport include Magpie-Larks, Silver Gulls, Domestic Pigeons, Australian Magpies, Galahs and Kestrels. Species such as Ibis, Welcome Swallows, Little Corellas, Skylarks and Common Starlings are also regularly observed at the airport but are rarely struck by aircraft.

Different species of birds possess a range of behavioural patterns which therefore pose different risks to aircraft. For example, birds that hover above the ground searching for prey (e.g. Kestrels) pose a risk to aircraft during landing or take off. Bird species, such as Galahs and Silver Gulls, flock together which creates the risk of 'multiple' birds being struck. Other species, such as Magpies, feed on the ground around the taxiways and may be struck by taxiing aircraft. As a result each species needs to be managed differently.

IMPACT OF BIRD STRIKES

The primary risk associated with bird strike is the hazard posed to aviation safety. Bird strike can cause significant damage to aircraft, aircraft crashes and potentially the loss of human life. Colliding with a bird can cause millions of dollars damage to aircraft engines and turbines, as well as contributing to airline costs due to aircraft unavailability during repair. It is also important to note the loss of the bird's life as a result of a strike.

RESPONSIBILITIES OF ADELAIDE AIRPORT LIMITED

AAL, as the airport operator, is responsible for and committed to ensuring passenger safety. Under the Civil Aviation Safety Regulations 1998 the airport is required to reduce the risks associated with bird strike.

WHAT IS DONE TO REDUCE THE RISK OF BIRD STRIKE?

AAL has put in place management strategies to ensure airport operations are conducted safely. A Wildlife Hazard Management Plan has been developed and implemented at Adelaide Airport, which puts in place measures to reduce hazards associated with all wildlife. The most important objective is to maintain the grassland habitat around the runway in such a way so that birds are not encouraged to feed in areas close by the runways and taxiways. For example, the grass is mowed regularly to a height that discourages birds that feed on bulbs and worms; weeds that are a known food source for birds (e.g. Onion Grass) are closely controlled; feral animal numbers are minimised; and drains are kept clear of refuse which could attract birds.

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Carpobrotus rossii (Angular pigface)

Certain tree and shrub species used in landscaping may also potentially attract more birds to the vicinity of the airport. Therefore, the Environment Department of AAL advises and approves the landscaping plans for all new developments at Adelaide Airport. AAL has even produced Landscaping Guidelines that provide a preferred plant list to tenants and developers alike.

The Safety and Security Officers employed by AAL also have an important role in bird management. If birds are posing a risk to aircraft and passenger safety, Safety and Security Officers will first use their vehicles in an attempt to disperse the flock and move the birds away from the runway or taxiway. If this approach is not successful, bird scaring cartridges (i.e. BirdFrite) are used. These empty shells produce a loud bang when fired which can help scare birds away from the immediate area. Finally, if all other methods have failed and the birds still pose an unacceptable safety hazard, population control is undertaken.

PARTNERSHIPS

AAL works closely with ornithologists at The University of Adelaide who conduct monthly bird surveys on and around Adelaide Airport, produce regular reports identifying potential hazards, and advise on bird management issues. A bird database has been developed with the university to help analyse trends in bird numbers and distribution and thereby improve management of different species.

Bird management meetings are also held quarterly and are attended by AAL, airlines, and the University of Adelaide.



For further information please contact AAL's Airside Safety Manager or Environment Manager, telephone 8308 9211.