

Dog Dispersal Trial Brisbane Airport



NatureCall was engaged by BAC to run a dog dispersal trial on airside land.

The purpose of undertaking the trial was to gauge the response of wildlife to a dispersal dog, with the intention of using the dispersal dog as a wildlife management tool.

The trial was required to demonstrate to BAC the control and safety of using a dog on site.



Airport location

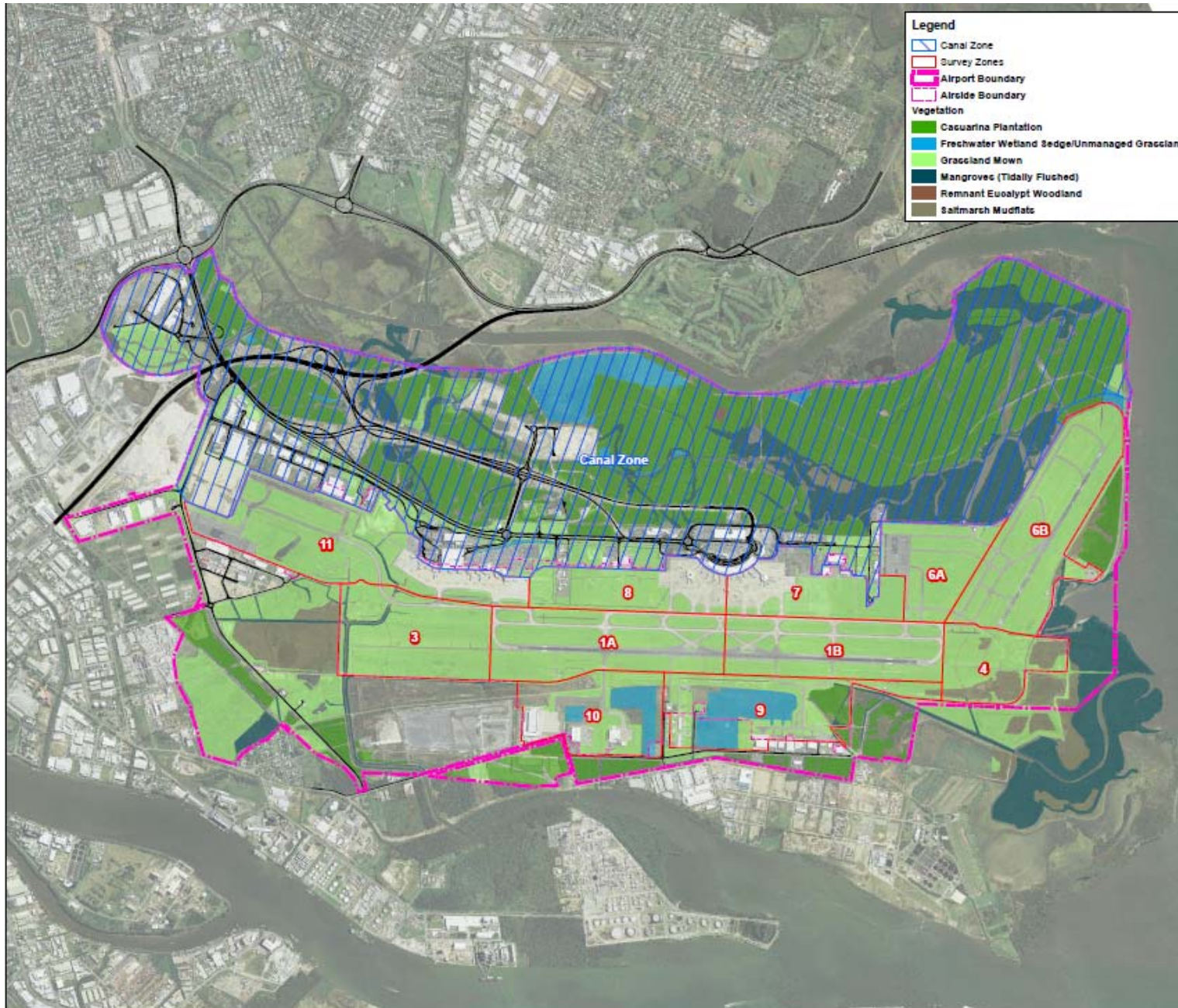
Brisbane Airport, located at Eagle Farm, is situated 13km north-east of the Brisbane central business district (CBD) and encompasses a total land area of 2,700 hectares.

Brisbane Airport contains large areas of vegetation and provides a diverse range of wildlife habitat. The vegetation within the Brisbane Airport property includes the following broad vegetation communities:

- Mangroves
- Saltmarsh/claypan
- Freshwater Wetlands and Sedge Communities
- Casuarina Plantation
- Open Grasslands
- Eucalypt open forest.

The location of each vegetation type and habitat area is shown in Figure 1.

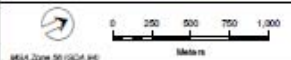
Figure 1
Brisbane Airport Corporation
Site Location



Source: All data supplied by client

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biodiversity australia
T/a NatureCall



BLM Zone 50 (GDA 84)

File

The diversity of habitat provides resources for a diversity of wildlife.

Study in 2004, recorded 211 vertebrate species (156 bird species, of which , 17 are classified as 'strike-risk' species).

The top 5 'high' risk species include:

- Flying-fox
- Australian white ibis
- Brown hare
- Pacific black duck
- Straw-necked ibis

This level of diversity requires a versatile and comprehensive approach to wildlife management.



Aim

The objective of the dog dispersal trial was to demonstrate the benefit of using a dog as a wildlife management tool. It was also necessary to compare the success of the dog, to other 'active' wildlife management methods used at Brisbane Airport.

Current active wildlife management techniques include:

Brisbane Airport active management

- Vehicle patrols using vehicle lights, sirens and horns
- Pyrotechnics (Bird Frite)
- Live shot
- Live trapping
- Nest removal



Dog Selection

NatureCall have been training and using bird dispersal dogs since 2004. First project was Stotts Creek land fill (Tweed Shire Council). Sites include open tip faces, golf courses, and airports.

Dog selection/training is crucial to achieve the desired outcome with a view to safety.

The working kelpie is the preferred breed of choice for the follow reasons:

- Endurance
- Trainability
- Agility

Puppy v adult dog:

- Both have pros and cons
- Dogs will need to be assessed on a behavioural/reaction traits

Several behaviours need to be achieved for a fully trained bird deterral dog:

- Stop, sit, stay
- Faultless recall
- Directional send
- Caste
- Environment desensitisation



Method

Data was collected during each dispersal effort (location, time, efforts, direction)

The trial focused on the northern section (RWY14/32).

Two days per week/ 6 weeks.

Quad bike used for 4 weeks

Identified approved zones and the high priority dispersal areas.



Results

The species of bird managed during the trial:

- Australian white ibis (high strike risk)
- Straw-necked ibis (high strike risk)
- Masked lapwing (plovers) (moderate risk)
- White-faced herons (moderate risk)
- Egrets (cattle, intermediate, and great) (moderate risk/low risk)



Results

Results showed a success, bird species were reacting to the dog.

To measure success:

- Number of **efforts** to get an acceptable result
- The **direction** the birds flew
- **Time** to re-land
- **Location**
- **Acceptability** (rated from 1 - 5)

Effort : the number of times the dog runs and chases birds, per flock

Efforts v time

Number of efforts, and amount of time, was considered important. It indicated how the birds were reacting to the dog.

Effort numbers varied from 1 – 7

Based on dispersing the birds on foot.

Quad bike was introduced (wk 4), decrease time to disperse birds and improve results.



Directional control

Direction control indicates:

- the handler had control of the dog
- that the dog could control the direction of the birds

The dog controlled bird direction 90% of the time.

Critical in dog dispersal, for safety

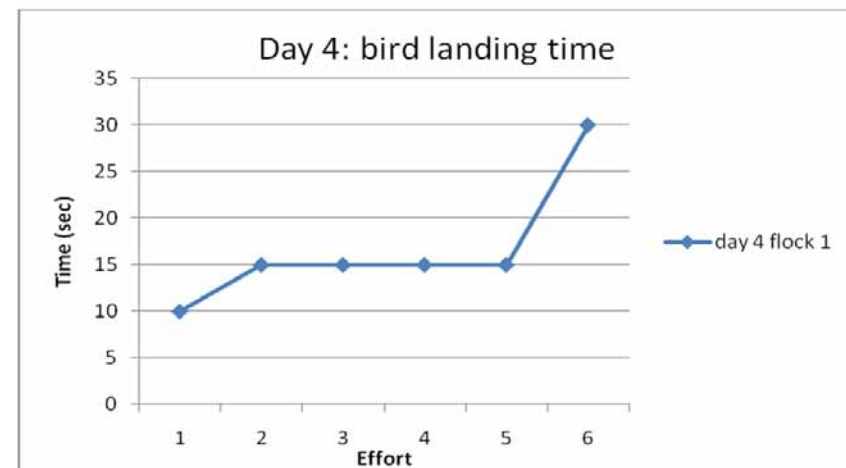
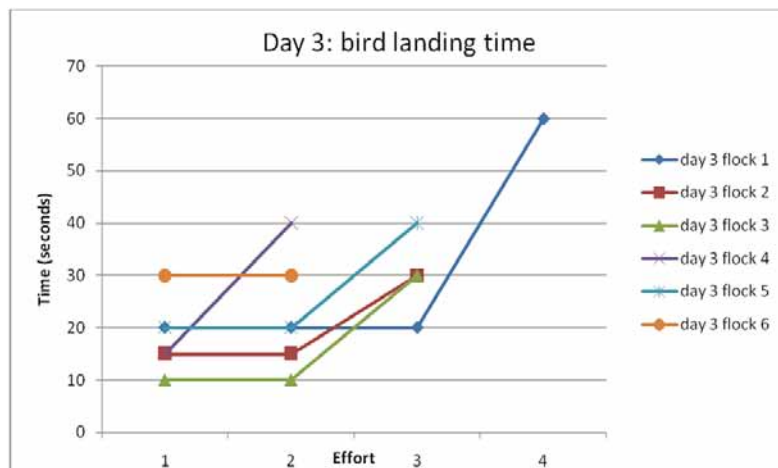
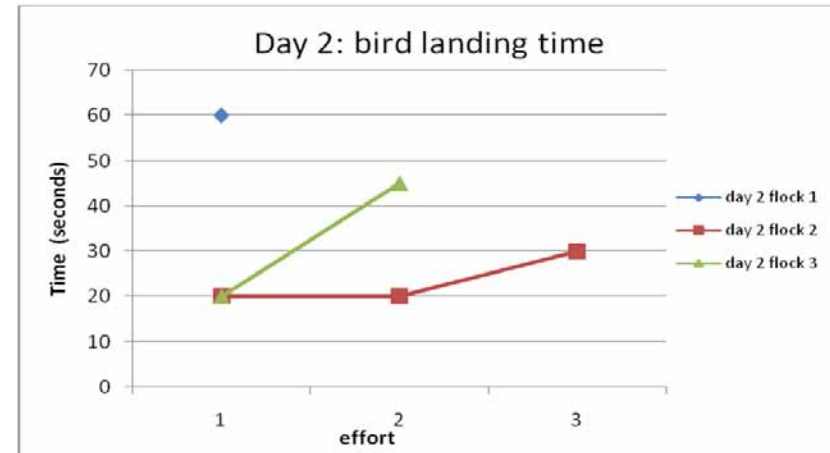
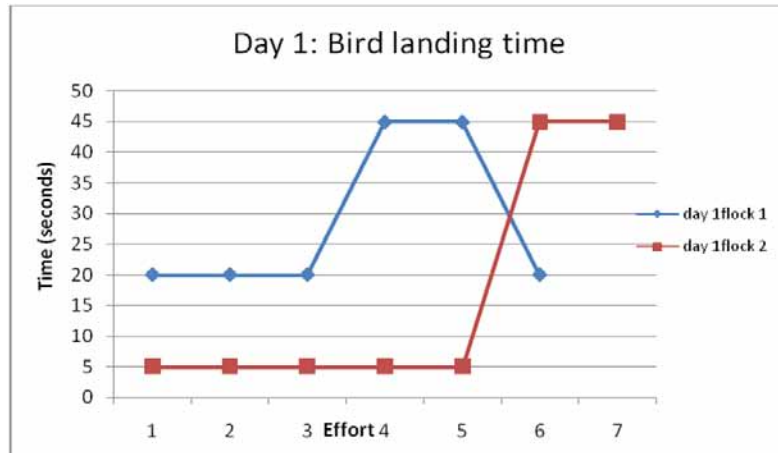
Important when comparing with other active methods (live shot, noise, pyrotechnics).



Time for birds to re-land

Time to re-land was measured

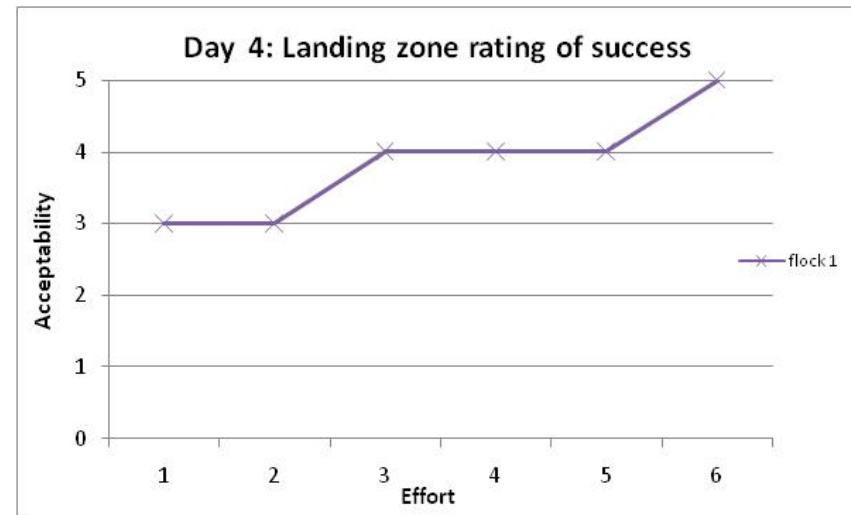
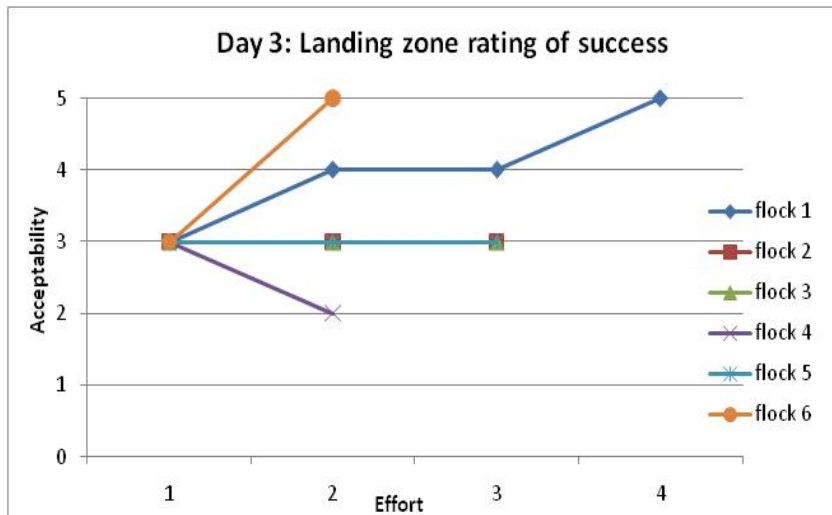
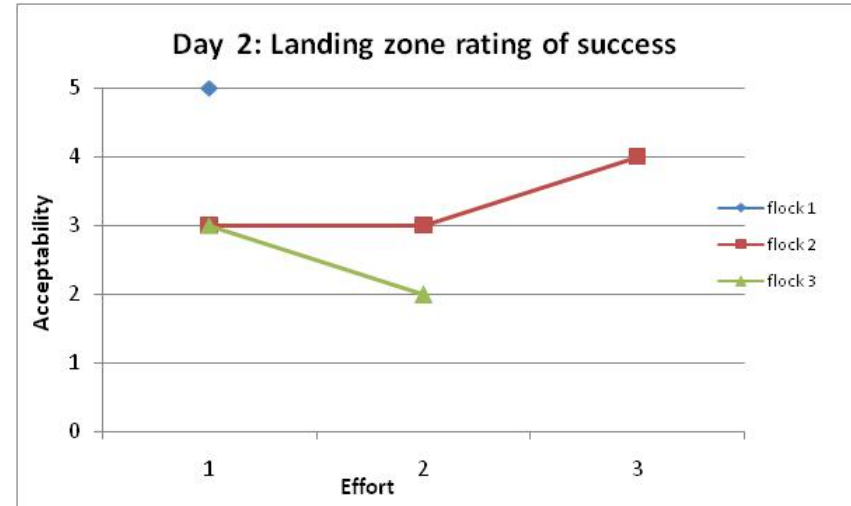
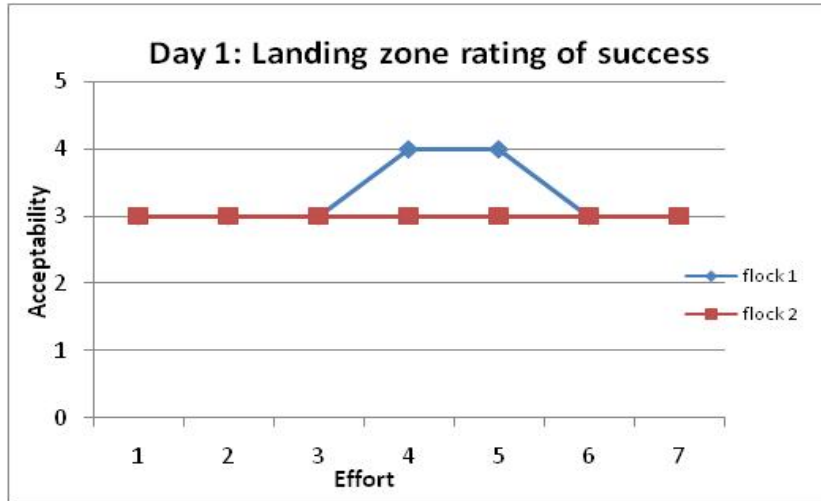
Shows distance birds moved, and level of unease.



Location of re-landing

Landing location data recorded during efforts

This shows how the dog can direct where the birds disperse to



Discussion

This trial showed that dog dispersal on airports is a valuable tool.

The data collected supports:

- the birds see the dog as a significant threat
- the more often the birds see the dog, the less tolerant they are
- the dog dispersal has a more controlled reaction compared to other active methods
- Using a live predator ensures a stronger reaction from birds