


REPORT ON PELICAN DETERRENTS HOUGHTON HIGHWAY BRIDGE REDCLIFFE

The following officer has **endorsed** this document.

Name Eddie Peters
Position District Director (metropolitan)
Signature  Date 30/6/06

Contents

1	Introduction	3
2	Background	3
3	Response	3
3.1	Response Approach.....	3
3.2	Selected Device.....	3
3.3	Trial	4
3.4	Consultation.....	4
4	Outcomes	4
4.1	Public Response.....	4
4.2	Findings	5
5	Recommendations.....	5
5.1	Roosting Platforms	5
5.2	Recommendation for Roosting Platforms	6

1 Introduction

This Report describes a trial to evaluate bird deterrents on the Houghton Highway Bridge.

2 Background

The Houghton Highway is a 2.9km viaduct across Bramble Bay connecting the City of Redcliffe to the City of Brisbane.

The bridge accommodates three lanes of traffic with a tidal flow system for peak direction flows.

It stands approximately five metres above the bay. It is lit by 49 street lights mounted at nine metres above the road on three metres outreaches from the columns to the street light.

These street lighting outreaches are a favourite roosting site for pelicans.

Pelicans are relatively abundant on Bramble Bay and around the Moreton Bay foreshores.

They are an icon of Redcliffe City and are closely identified to the community.

As the pelicans fly off from these roosts they frequently defecate. As the outreach is over the most eastern traffic it is not unusual for the stool to fall on traffic in this lane.

In 2004 Redcliffe City Council referred a request to the Department of Main Roads to consider placing platforms on the adjacent Hornibrook Highway which is a cycle and pedestrian bridge, rather than the Houghton Highway where they have caused problems to motorists.

3 Response

3.1 Response Approach

Main Roads researched the available deterrents. It selected the Daddi Long Legs (DLL) bird deterrents, an American device supplied through Peter the Original Possum and Birdman Company. This company operates with a permit from Queensland Parks and Wildlife Services for native fauna.

3.2 Selected Device

A photograph and description of the device is attached in Attachment 1.

The DLL consists of 12 stainless steel wires, tipped with plastic knobs at one end and mounted on a Delvin plastic spindle. (Attachment 2)

The wires arch out from this central spindle and rotate and vibrate freely so that they move when touched by a bird. This movement causes the wires to touch and "tickle" the bird which finds it uncomfortable so that it does not perch.

The advantages of the device are;

- it does not injure the bird
- it is a passive device and does not require power or other consumables

- it does not pollute the environment with noise or chemicals
- it has limited visual impact when viewing the bridge
- it can be fitted to the columns without modifying the columns
- it is relatively inexpensive
- it does not interfere with the operation or electrical safety of the lighting.

3.3 Trial

The purpose of a trial of the deterrents was carried out to;

- determine if the devices were effective in preventing pelicans roosting on the street light outreaches
- determine if the deterrent effect was temporary or persistent
- test mounting, installation and operational performance of the equipment
- discover any adverse effects.

It was decided a one month trial with surveillance of performance of the protected poles compared with adjacent poles would be sufficient.

A section of five street lights at the northern end of the bridge was chosen with control sites of unprotected lights on either side.

The trial commenced on 24 April 2006.

3.4 Consultation

Redcliffe City Council identified and requested action on 22 July 2004 (Attachment 3)

Redcliffe City Council was advised of the trial. Media reports appeared in the local newspapers. Following some misinformation that spikes were being used that would injure the birds, an advertisement was placed in the local paper (Attachment 1) and media statements prepared.

Media interest has been high and the community is actively concerned.

4 Outcomes

4.1 Public Response

- 36 responses were received including common responses from Scarborough State School Children Grade 4 (10) and (4) as on page 2 of Attachment 4.
- A petition is being circulated with approximately 1033 signatories so far against the Daddi Long Legs. There is considerable misinformation that pelicans would be injured.

Generally responses divided into 3 categories as follows.

CATEGORY A

Denying any issue of safety, pelicans not to be injured and the public benefits far outweighing any traffic risk . (Example is Attachment 4 page 1) (majority approximately 22)

CATEGORY B

Acknowledging a safety issue but requesting alternative roosts be provided. (Example is Attachment 5) (3 responses)

CATEGORY C

Acknowledging the safety issue, including personal experiences, supporting the initiative. (5 responses) (Example is Attachment 6).

4.2 Findings

- The Daddi Long Legs are an effective deterrent. No landings of pelicans on the outreaches protected by the devices were observed. Pelicans attempting to land were deterred and flew to adjacent poles.
- Claims of injury to the pelicans are not substantiated, although this was not tested rigorously.
- From the limited sample taken, roosts by pelicans are more than 100 a day. The duration of the roost is typically less than one hour.

5 Recommendations

It is recommended that;

- the Daddi Long Legs be accepted as a suitable deterrent
- further installation of the devices be deferred until a suitable alternative to provide roosting sites is developed, tested and approved
- the alternative be determined before finalisation of the duplication project and incorporated into the project.
- the environmental hazard be recognised and included in future bridge and foreshore designs.

5.1 Roosting Platforms

- The preferred requirements of pelicans for roosting sites have not been determined.
- The public has suggested a variety of platforms, brackets and poles.
- Modification of the existing lighting columns is considered to be impractical. The columns have been in place for 25 years and could not be disassembled without damage, particularly in the field.
- Attachments/brackets off the existing lighting columns would require detailed design and testing to confirm the poles could support the additional loads.
- Replacement of existing poles with purpose designed poles incorporating roosts would require approximately \$20,000 per pole, due to working on the bridge under traffic plus specialised fabrication costs.

5.2 Recommendation for Roosting Platforms

- That the Department of Parks and Wildlife and suitably approved experts be engaged to determine roosting preferences and determine an appropriate roost design.
- An environmental expert be engaged to confirm the devices are safe.