

**Report 99.178**

13 April 1999

File: Y/4/0/1

Report to the Rural Services and Wairarapa Committee  
from Ray Clarey, Senior Biosecurity Officer (Animals)

## **Magpie Research Programme**

### **1. Purpose**

To inform the Committee of a research programme which seeks to assess whether magpies seriously impact on native fauna, particularly birds.

### **2. Background**

- 2.1 Magpies are included in the Regional Animal Pest Management Strategy as an animal determined to be harmful and having pest characteristics of regional significance. It is known that magpies pose a considerable nuisance during the breeding season. Parent birds fiercely protect their territory, swooping on, and occasionally attacking people, especially children.
- 2.2 Magpies are also thought to affect native birds by excluding them from breeding territories and by predateding native bird chicks and eggs to feed to their own chicks.
- 2.3 Additional evidence is now becoming available which suggests the nuisance value of magpies is far greater than initially thought. A report in the magazine "Tree Grower" of November 1998 accuses magpies of causing ramicorns and double leaders to pine trees. It seems that magpies have a habit of flying at the leaders, with legs stretched horizontally and their inertia carries the leader past the horizontal position, often resulting in breakage to the tips. Broken leader tips encourage multiple leaders to develop which downgrades the value of the tree.
- 2.4 The objectives of the Regional Animal Pest Management Strategy in relation to magpies are:
  - Dispose of magpies where they are known to be harassing members of the public.

- Investigate the impact of magpies on native birds and assess available control technology.
- 2.5 It is anticipated that the proposed programme will meet a number of the expectations of the second stated objective. Attention to this objective to date has centred on a literature search report, collation of reported impacts of magpies, and the seeking of support from other Councils to undertake this research programme.

### **3. The Research**

- 3.1 An experimental design has been prepared by Landcare Research NZ Ltd on the basis of research-by-management. Research-by-management is a cost-effective way of obtaining robust information for future management decisions. It also provides an opportunity to broaden the skills of selected staff.
- 3.2 The hypothesis to be tested is “that maximum practicable control of magpies will increase the numbers of other birds.” The study design is based on matched pairs of study areas, each pair consisting of a treatment area where magpies are removed and a non-treatment area where magpies remain. Each area is to be at least 900 hectares, spaced at least 20 kilometres apart and be similar in terms of land use, topography and vegetation cover.
- 3.3 Trained people will conduct bird counts at fortnightly intervals for the first three months of the programme and thereafter at lesser intervals. An area at Woodside, Greytown has been identified as the most suitable treatment site and the non-treatment site will be at Matahiwi, west of Masterton. The experiment will depend on excellent communication between Council, Landcare Research and affected landowners. Landowners will need to know the objectives of the work, its national importance and how they can help. Regular opportunities for discussion as well as newsletters will be required to maintain enthusiasm for the project.
- 3.4 Six other Regional Councils have signified their intention of taking part in a similar programme. This experimental replication will provide more comprehensive detail as well as increase opportunities for national advocacy. The programme will commence this coming Spring and extend over a period of three years. Annual costs are expected to exceed \$25,000 (including staff training), which includes approximately \$6,000 for services provided by Landcare NZ Ltd. Accurate costs for the programme are difficult to forecast at this stage, as we do not know what it will take to maintain an area free of magpies.
- 3.5 Trials are currently being conducted with a variety of magpie traps, lures and baits to assess their effectiveness in different situations.

- 3.6 This trial will enable councils to determine whether the status of magpies should change in future pest management strategies. This collaborative research trial will be the first comprehensive investigation of the impacts of magpies in New Zealand.

#### **4. Recommendation**

*That the report be received.*

Report prepared by:

Approved for submission by:

Ray Clarey  
Senior Biosecurity Officer (Animals)

Wayne O'Donnell  
Manager, Biosecurity