

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

Magpie Research Programme

1. Purpose

To update the Committee on the magpie research programme to test the hypothesis that magpies limit the conspicuousness or abundance of other birds.

2. Background

Magpies are included in the RPMS as an animal determined to be harmful and having pest characteristics of regional significance. The objectives of the RPMS 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.

It is considered that the research programme will meet most of the expectations of the second stated objective.

The magpie research programme was the subject of Report 99.178 to the Committee in April last year. The main points of that report were:

- Parent birds occasionally attack people
- Magpies are thought to predate other birds, chicks and eggs
- The study design is based on matched pairs of study areas at Western Lake (Sth Wairarapa) and Woodside (Greytown).
- The study is being replicated by other Regional Councils and is the first comprehensive investigation of the impacts of magpies in New Zealand. Landcare Research Ltd prepared the research project.

3. Progress To Date

All occupiers within the study areas have been supplied with details of the project and consent gained to enter onto their land. The occupiers will be an integral part of the programme and will be asked to provide an independent view of the presence or absence of birds around their properties. A special bird log sheet has been prepared for this purpose. It is intended to maintain intermittent contact with occupiers and try to inject enthusiasm for the project. Newsletters will be sent to all interested occupiers or helpers.

Staff responsible for the bird counting have been given hearing tests and trained in the field on two occasions by experienced staff from Landcare and Wildlife Management International Ltd. Monitoring bird populations consists of five minute counts. There are 36 counting stations randomly selected within each study area with each site marked for ease of location. The treatment and non-treatment areas are counted at the same time by the two observers, simultaneously in each area.

Pre control bird count monitoring has been carried out twice. This occurred 8th to 15th December 1999 and 10th to 13th January this year. Some of the main bird species counted were magpies, greenfinch, starling, kingfisher, chaffinch, goldfinch, house sparrow, eastern rosella, black backed gull, spur-winged plover, blackbird, song thrush, fantail, harrier hawk, skylark, pukeko, tui, white faced heron, hedge sparrow, black shag, mallard duck and kereru. Bellbird and shining cuckoo were heard at various times, but not sighted.

The following comments are from an internal report by Biosecurity Officer Rachel Helson, who is one of the staff involved with the programme. They provide a 'first impression' of the field survey observations.

"The bellbirds heard were mostly calling from the main forest range or in the bush margins where the farms back onto the Rimutakas (i.e. outside the study area). I heard several shining cuckoos calling from remnants within the study area, although they were always on the northwestern side of the study sites closest to the main forest range. I saw a shining cuckoo chick being fed by a warbler in one such remnant. The northwestern side of the study sites were also where the majority of the tui and kereru sightings were. On two occasions I heard a long-tailed cuckoo – probably the same individual. Again, it was coming from the bush margin (Waiorongomai count point 10).

Despite a large number of magpies there were also a lot of other birds present, including natives. The general impression I got was that the native birds mostly inhabited the native remnants while the magpies dominated the pasture and shelterbelts. It may be that the native birds are always there but are more subdued when magpies are present. Another possibility is that when there is sufficient habitat, magpies will tolerate a certain level of other species and it is only when habitat is limited (i.e. an urban environment) that they become very aggressive to all other birds. Other introduced birds such as the finches, starlings, skylarks and yellowhammers also occupied pasture/shelterbelt areas

and did not appear too inhibited by the magpie presence. I witnessed magpies chasing spur-winged plovers on two occasions. ”

Staff have been interviewed on Morning Report on Radio New Zealand. Two people rang to commend the Council for undertaking this project. One caller, a Wellington resident, reported an increase in native birds since magpies were trapped last year. The second person called from Gisborne and was interested in the details of the research. He has been unsuccessfully trying to convince Gisborne District Council to list magpies as a pest. The caller was impressed by Councils commitment to magpie control and investigation.

4. Magpie Control

Control of magpies using 24 multi-catch Larsen traps commenced at Woodside on 14th January. To date over 160 magpies have been captured. It is expected that the first cull will net over 600. Maintenance control will be required over the autumn to curb re-invasion. A further intensive cull will be carried out during late winter just prior to the start of the magpie-breeding season. A further bird census will be carried out in the spring.

5. Other Research

Landcare Research Ltd may involve a PhD student in the study. Some topics that are being considered include:

- Magpie re-invasion rates and origins in trapped areas. Where do re-invading magpies come from and at what rate?
- Effectiveness of different magpie control techniques.
- Modelling control options. Given various control techniques, what combinations of these over land area and timing will most effectively suppress magpie populations?
- Details of behavioural interactions between magpies and other species. Perhaps film at passerine nests in magpie territories and examine the social status of individual magpies which are seen to chase or kill other species.

These studies would assist the overall project and provide additional detail consideration and inclusion in the RPMS.

6. Communications

The magpie research programme has already attracted considerable media publicity. Most calls received from the public have been complimentary.

All of the occupiers involved have been visited by one of the staff conducting the programme and supplied with operational detail.

Landcare Research will produce a newsletter for all participants, describing results as they are collated.

7. Recommendation

That the report be received.

Report prepared by:

Approved for submission by:

Ray Clarey
Senior Biosecurity Officer, Animals

Wayne O'Donnell
Manager, Biosecurity