The Birds of Mangemangeroa Reserve

Report of a Survey Nov. 2004 - Dec. 2005 Friends of Mangemangeroa Society Inc

> Bruce R Keeley April 2006

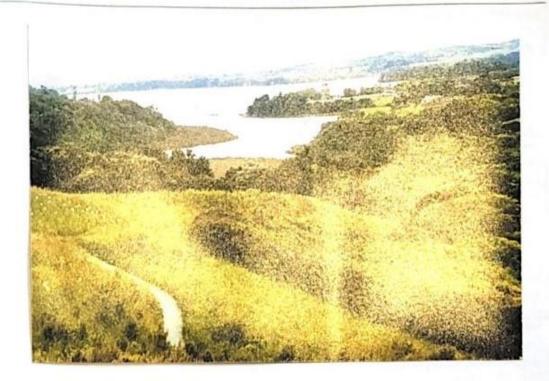
INTRODUCTION

It was an honour to be asked by the Friends of Mangemangeroa, to carry out a survey of birdlife, to ascertain the species present within the Mangemangeroa Reserve, with some indication of their relative abundance. This was not too much of a challenge since I had already been doing occasional surveys along the tracks for my own interest, and already was familiar with the local avifauna.

With very limited free time available, a minimalist approach was taken to the surveying method, and no claim is made as to any scientific rigour. The results are purely descriptive, with no analysis of data attempted.

On nine days, between November 2004 and December 2005, the Reserve track was walked at a leisurely pace, from the barn in Somerville Road to Shelly Park Boat Club and back. The Rotary Loop extension was not included. The track was walked early in the morning, when bird activity was at its peak, and human disturbance and cicada noise (in summer/autumn) were minimal.

Birds seen and heard were counted along the full length of the track. On the return walk, only new species or larger numbers were noted. Birds on the move present the possibility of being counted more than once, and allowance was made for this. If anything, count results would err on the conservative side.



Evidence of breeding was recorded, such as singing males, carrying of nest material, courtship behaviour and the sight or sound of young birds. Some notes were also made on plant species being used for food.

BIRD DIVERSITY IN MANGEMANGEROA RESERVE

With its area comprising a variety of vegetation zones and habitat types, the reserve would be expected to hold a greater variety of bird species than a more homogeneous area of similar size. The immediate surroundings of the reserve are even more diverse and include urban housing (of varying density), tidal flats, open sea, and farmland. To the east of the Mangemangeroa is the Turanga Creek/Clifton Beach/Airlies Lake complex which together provide an important roosting and nesting area for a wide range of waders and waterfowl, many of which may be seen flying over the Mangemangeroa Creek, (eg. a mixed flock of 2000+ Godwit & Knot on 21/02/05).

The bird list for this wider area runs to a total of just on 70 species, and rising. This is a remarkable total for a city edge in New Zealand, and only confirms the strategic importance of the protection of Mangemangeroa within this ecologically rich, but vulnerable, area of Auckland.

Within the Reserve itself, and its immediate environs, I have recorded 47 species (28 native and 19 introduced). Of these, 13 are confirmed as breeding, with a further 16 likely to do so.

LIST OF SPECIES

* indicates an introduced species; all others are native to NZ R (resident) M (migrant)

BC (breeding confirmed)

M (migrant) BP (breeding probable)

O (occasional)

SPECIES		STATUS	MAXIMUM COUNT
Black Shag	Phalacrocorax carbo	0	1
Pied Shag	Phalacrocorax varius	R	12
Little Shag	Phalacrocorax melanoleucos	R	
White-faced Heron	Ardea novae-hollandiae	R, BP	7
Black Swan*	Cygnus atratus	0	2 7 2
Canada Goose*	Branta canadensis	0	3
Paradise Shelduck	Tadorna variegate	R	6
Mallard*	Anas platyrhyncos	R, BC	10
Grey Duck	Anas superciliosa	O	1
Australasian Harrier	Circus approximans	R, BP	
Pheasant*	Phasianus colchicus	R, BP	
Californian Quail*	Callipepla californica	R, BC	6
Pukeko	Porphyrio porphyrio	R, BP	10
Pied Oystercatcher	Haematopus ostralegus	R/M	
Variable Oystercatcher	Haematopus unicolor	R	
Spur-winged plover	Vanellus miles	R	
Pied Stilt	Himantopus himantopus	M	6
Bar-tailed Godwit	Limosa lapponica	M	
Red Knot	Calidris canutus	M	
Black-backed Gull	Larus dominicanus	R	
Red-billed Gull	Larus novaehollandiae	R	
Caspian Tern	Sterna caspia	O	
White-fronted Tern	Sterna striata	R	
NZ Pigeon	Hemiphaga novaeseelandiae	R, BC	6
Spotted Dove*	Streptopelia chinensis	R, BP	7
Kaka	Nestor meridionalis	O	
Eastern Rosella*	Platycercus eximius	R, BC	6
Shining Cuckoo	Chrysococcyx lucidus	M, BP	1
Morepork	Ninox novaeseelandiae	R, BP	1
NZ Kingfisher	Todiramphus sanctus	R, BC	12+
Welcome Swallow	Hirundo tahitica	R, BP	
Silvereye	Zosterops lateralis	R, BC	43+
Grey Warbler	Gerygone igata	R, BC	10
Blackbird*	Turdus merula	R, BC	
Song Thrush*	Turdus philomelos	R. BC	
Dunnock*	Prunella modularis	R, BP	6
Skylark*	Alauda arvensis	R, BP	
Fantail	Rhipidura fuliginosa	R, BP	12
Tui	Prosthemadera novaeseelandiae	R, BC	8
House Sparrow*	Passer domesticus	R, BP	
Chaffinch*	Fringilla coelebs	R, BP	

Goldfinch*	Carduelis carduelis	R, BC
Greenfinch* Yellowhammer* Starling* Myna* Australian Magpie*	Carduelis chloris	R, BC
	Emberiza citronella	R, BC
	Sturmus vulgaris	R, BP
	Acridotheres tristis	R, BP
	Gymnorhina tibicen	R, BP

Other observers will no doubt be able to ascertain the breeding status of some of the species designated above as 'BP'. Several 'new' species may qualify for the list through the present knowledge of other people, or will be added through sightings in the future.

For example, the Banded Rail Rallus philippensis is almost certainly present, but its secretive habits make it hard to find. I have heard one possible bird calling. The Long-tailed Cuckoo Eudynamis taitensis, which is occasionally heard or seen in Howick on migration, may well stop-over in the forest cover of the Reserve from time to time.

RELATIVE ABUNDANCE

A general indication of relative abundance may be obtained by the following counts of the 20 most numerous species on 14 March 2005.

Silvereye	29
Blackbird	18
Kingfisher	15
Pied Oystercatcher	11
Grey Warbler	8
Fantail	8
House Sparrow	8
Myna	7
Spotted Dove	7
White-faced heron	7
Pied Stilt	6
Tui	5
Eastern Rosella	4
Magpie	4
Goldfinch	4
NZ Pigeon	3
Mallard	3
Spurwinged Plover	3
Greenfinch	3
Blackbacked Gull	3

The number of birds observed will vary day-to-day and even hour-to-hour, in relation to weather conditions, tidal movements, and sheer luck! The seeming absence of Californian Quail, for example, may quickly change with the appearance of a covey of 5 or 6 birds on the track.

Time of year will influence what food is available, and where birds are in relation to migration or their breeding cycle, vocal activity or moulting. The above tally of four Goldfinches, for example, was rather small, whereas a month or so earlier the place may have been alive with family groups begging for food from their parents.

Despite this complex of variable factors, my observations showed the Silvereye to be easily the most abundant resident throughout the year.

BREEDING

The best indication of successful breeding is obviously the presence of young live birds, and this was recorded for the following species:

Mallard – family of ten tiny ducklings

Eastern Rosella – an immature bird with adult

Kingfisher – several broods of noisy young in nesting holes

Silvereye – family groups with begging young

Grey Warbler - one family group

Fantail - one family group

Goldfinch - family groups

Breeding – at least attempted – can be assumed from such behaviour as territorial song, carrying of nesting material, courtship behaviour etc. In this category, the following were included:

NZ Pigeon – the characteristic steep-banking display dive was often seen

Shining Cuckoo - full song heard late spring/early summer

Blackbird - singing on territories
Song Thrush
Dunnock
Tui " "
Chaffinch " " "
Yellowhammer " "

For some other species, even without visible evidence, breeding at Mangemangeroa was assumed, simply because a species was resident within suitable habitat.

Here I would include:

Whitefaced Heron - the large pine trees on the Rotary Loop Track are a likely site.

Harrier

Pheasant

Pukeko

Spotted Dove

Morepork

Welcome Swallow

House Sparrow

Chaffinch

Greenfinch

Starling

Myna

Magpie

FEEDING BEHAVIOUR

The following few records were made as to which plants were being utilised for food.

NZ Pigeon Kowhai (August)

Puriri (August, September, January)

Tui Kohekohe flowers & Privet fruit (June)

Kowhai (August, September)

Mahoe (November)

Flax flowers (December, January)

Blackbird Kohekohe fruit (May)

Goldfinch Thistle heads (February)

Silvereye Kowhai (September)

CONCLUSION

The Mangemangeroa Reserve, with its splendid remnant of mature, intact coastal forest, is a precious *taonga* to be protected and nurtured at all costs. Its varied ecological composition holds a remarkable level of biodiversity, not least in its avifauna.

More study could profitably be done on which plants are most used for food, and for nesting, by the native birds in particular.

For hole-nesters, such as the Kingfisher, the protection of large mature trees (Puriri etc) is vital. The regular appearance of Kaka in the area has in recent years raised (with the Department of Conservation) the possibility of this species being encouraged to breed on the mainland. Control of tree-climbing predators and wasp nests will be an important part of protecting these nest cavity sites. Sustained possum control will benefit birds and plants alike.

Control of mustelids, rodents and cats would also be desirable to protect ground-nesting birds, especially the Banded Rail, which favours the mangrove/salt-marsh community. It is just possible that the Fernbird, *Bowdleria punctata*, still remains in the Mangemangeroa/Turanga area, but would be extremely vulnerable to predation.

The forest edge, where it adjoins pasture, is vulnerable to browsing and wind damage, and in some places looks to be in poor health. This marginal zone (eg around the gate below the barn) often has profuse bird-life, and re-planting it with appropriate 'edge' species will do much to enhance the overall integrity of the Reserve.

Bruce R Keeley, BSc Life Member, Ornithological Society of N Z 13 The Glebe, HOWICK, 1705

A9 View Shafts

