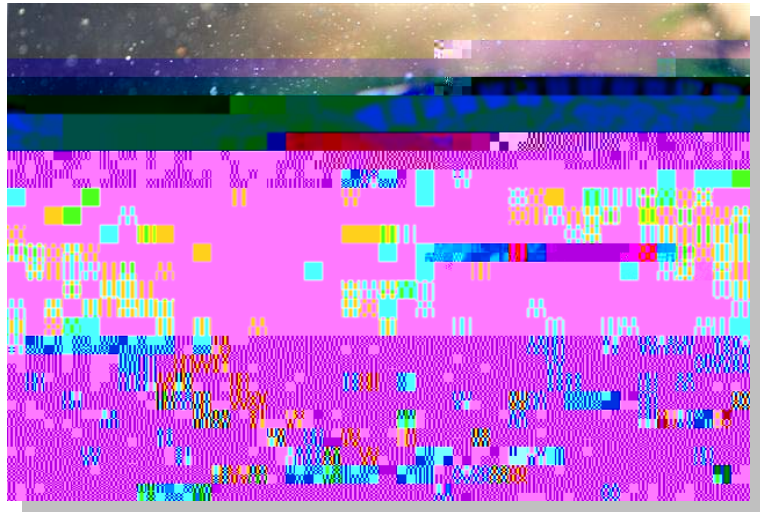


Best Practice Guidelines for Enhancing Urban Bird Habitat: Scientific Report



Produced by
Birds in Backyards Program



Best Practice Guidelines for Enhancing Urban Bird Habitat

Written by:

Acknowledgements:

The Birds in Backyards Steering Committee

The Scientific Editing Committee

The Reference Committee

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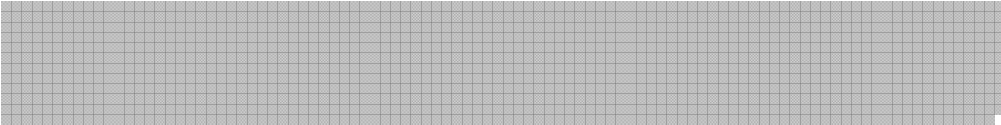
How to Use the Guidelines

Background

What do all birds need?

Urbanisation and its effects on birds

Strepera graculina





*Photograph: The Gunn's garden in Victoria has a Eucalypt canopy and open grass and is ideal Noisy Miner habitat.
Photographer: Diane Snape from The Australian Garden by Diane Snape (Blooming's Books 2003).*

Goals for restoring bird habitat in urban areas

References

Emu

The New

Atlas of Australian Birds

Australian Bird Atlas (1998-2001). Supplementary Report No. 1 - Comparisons of Atlas 1 (1977-1981) and Atlas 2 (1998-2001)

Corella **19**

The Atlas of Australian Birds.

Urban wildlife: more than meets the eye

Research 11

Partnership: Birds and Plants in Southern Australia
:

Research 25

Australian Wildlife

The Dynamic

Wildlife

Emu 89

Part 2: How to Undertake Habitat Restoration for Birds

2.1 Planning and Site Assessment

2.1.1 Plan of Management



2.1.3 Identifying Fauna and Faunal Habitat



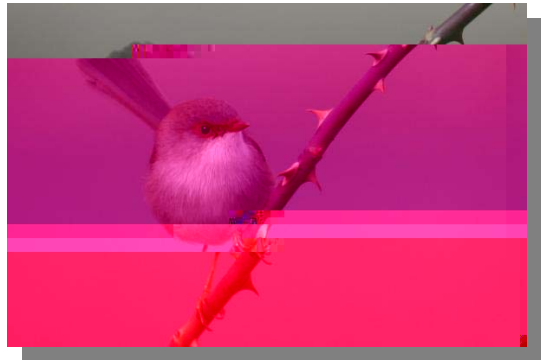
*Photo: Invertebrates such as this cicada provide an important food source for many bird species.
Photographer: R. Major, Australian Museum.*

2.1.3.1 Bird Surveys

Atlas of Australian Birds

The Atlas of Australian Birds

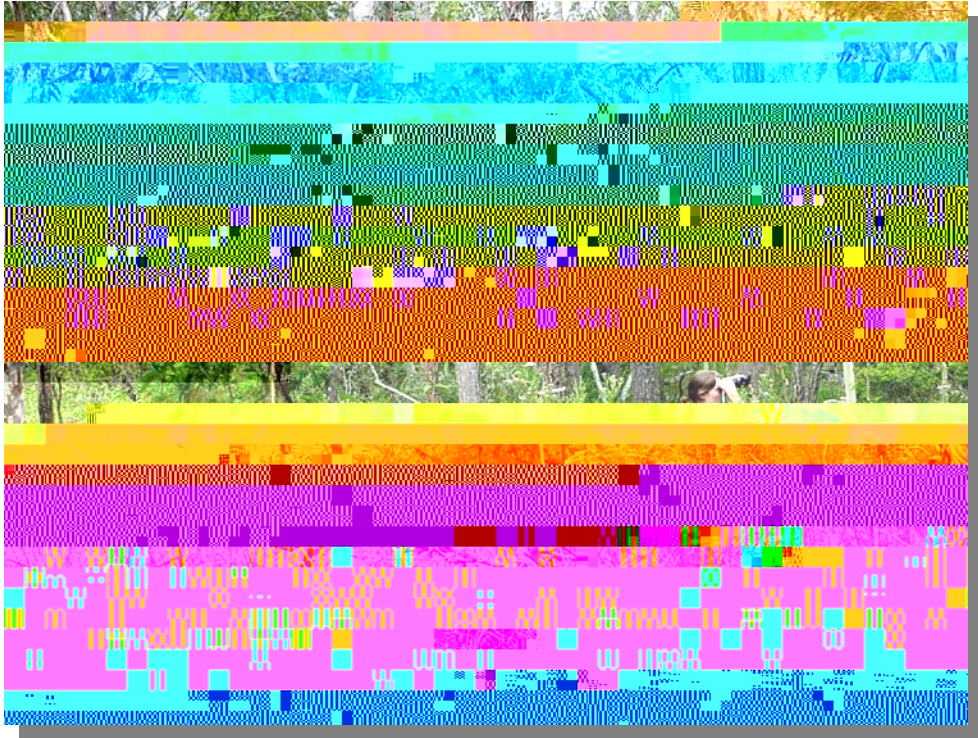
2.1.4 Long-term Commitments



*Photo: A female Superb Fairy-wren (Malurus cyaneus)
Photographers: Wojciech Dabrowka and Kevin Vang*

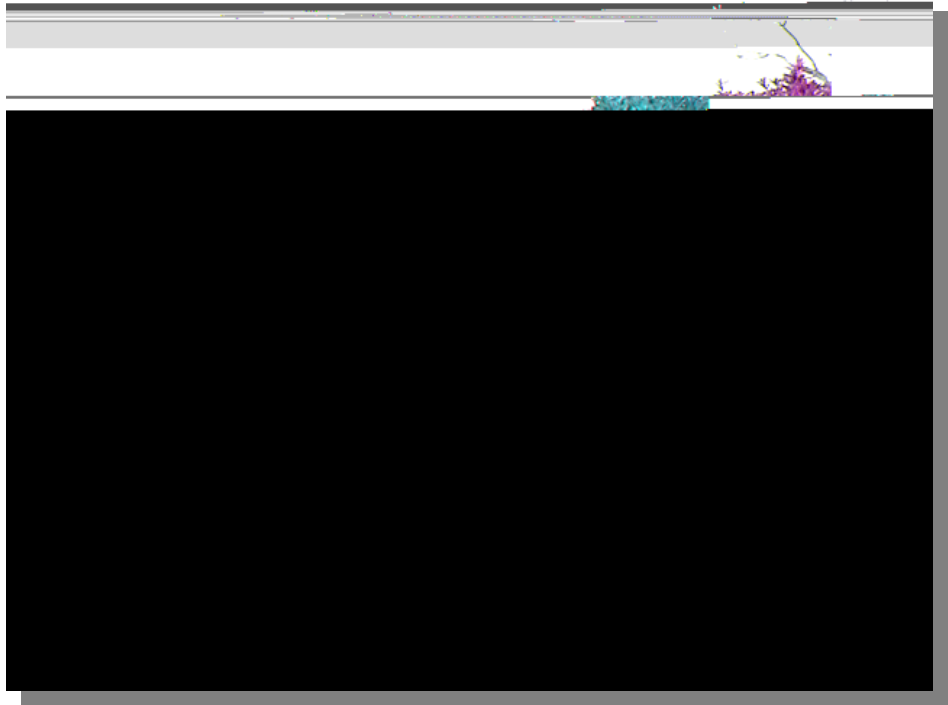
2.2 Impacts and Management Considerations

2.2.1 Revegetation versus Regeneration



*Photo: Monitoring of the bird life within an urban remnant in Wyong, NSW.
Photographer: R. Major, Australian Museum.*

2.2.2 Key Principles for Plant Selection and Planting Design



*Photo: A garden containing a mix of both native and exotic vegetation in Milton, NSW.
Over 70 species of birds have been recorded visiting this garden.
Photographer: Geoffrey Andrews.*

Bird Type	Food Source	Habitat Preference
Large Nectarivores		

2.2.2.1 References

Society of NSW

Proceedings of the Linnaean

Urban wildlife: more than meets the eye

cyaneus Emu

Malurus

Rubus spp.

Alectura lathamii



2.2.3.2 Effective Weed Management

UPSLOPE

1	2	1	2	1	2
3	4	3	4	3	4

DOWNSLOPE



2.2.5.1 The Noisy Miner Effect

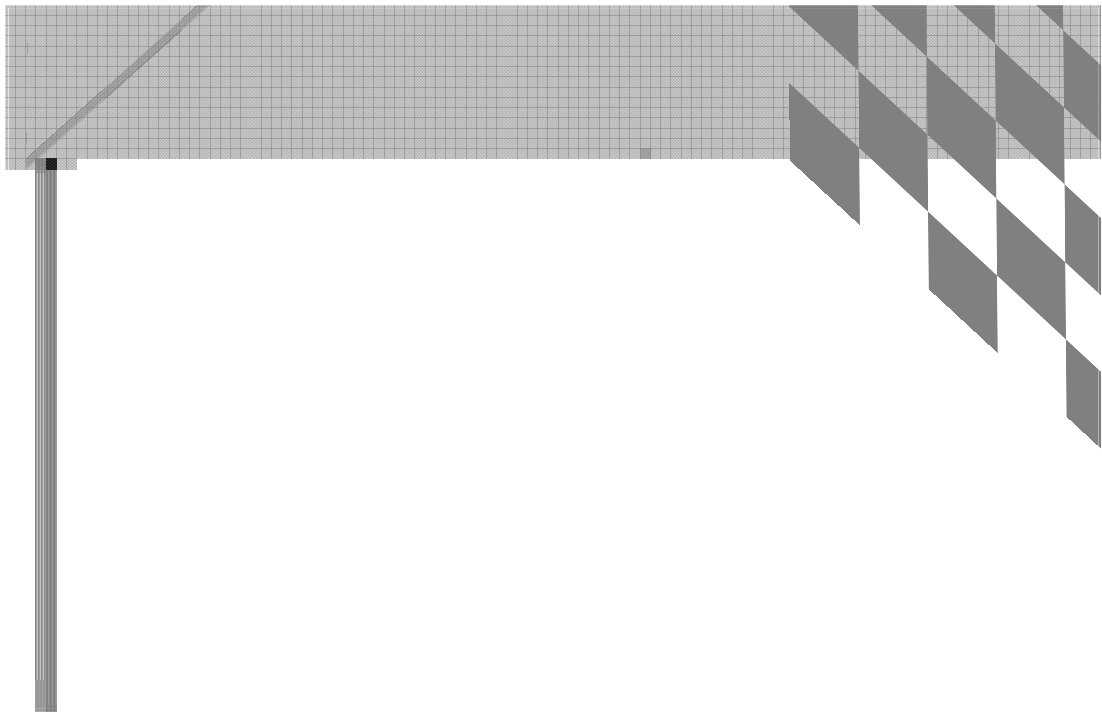
*Manorina
melanocephala*



*Photo: Juvenile Noisy Miner (Manorina melanocephala).
Photographers: Wojciech Dabrowka and Kevin Vang.*

et al.

*Photo: A native vulnerable grevillea species (Grevillea oleoides)
grown from seed in a suburban garden in Coal Cliff, NSW.
Photographer: R. Major, Australian Museum.*



2.2.5.2 References

Emu

Acabthiza s *Birds of Eucalypt Forests and Woodlands: Ecology, Conservation, Management*

:

Conservation Biology **11**

Proceedings of the Ecological Society of Australia **16**

Ninox strenua

Nature Conservation 2: the role of corridors

Biological Conservation 127

Oikos 101

Nature Conservation 2: the role of corridors

2.2.6 Introduced Birds

Part 3: Bushland Remnants

3.1 Introduction

3.2 Remnant Size and Shape



*Photo: This Epacris spp. provides nectar for smaller nectarivores. Larger birds such as the Noisy Miner (Manorina melanocephala) are unlikely to be able to access the small flowers.
Photographer: R. Major, Australian Museum.*

3.3 Location and Management Implications

3.4 Case Study 1: Flat Rock Gully

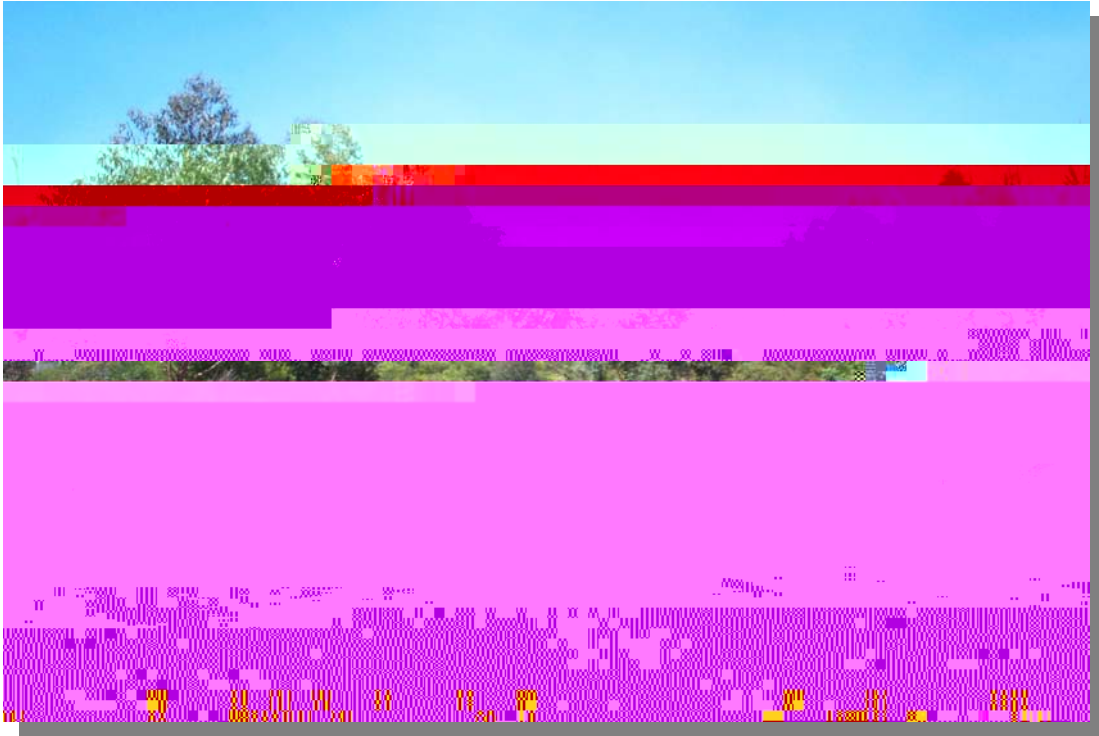
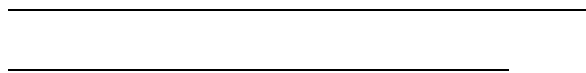


Photo: Flat Rock Gully in 2003 after revegetation. Over 100 species of birds have been recorded using the site. Photograph obtained from James Smallhorn, Willoughby City Council.

Part 4: Riparian Habitats

4.1 Introduction



novaeseelandiae
novaeguineae

Ninox strenua
Cracticus torquatus

Ninox

Dacelo

Egretta novaehollandiae
Anas superciliosa
Chenonetta jubata
Anas castanea
Phalacrocorax
melanoleucos
Threskiornis spinicollis
Threskiornis molucca
Fulica atra
Podiceps cristatus
Gallirallus philippensis

Manorina melanocephala
Anthochaera carnunculata
Anthochaera chrysoptera
Manorina melanophrys

Phylidonyris
novaehollandiae
Lichenostomus penicillatus

Gallinula tenebrosa

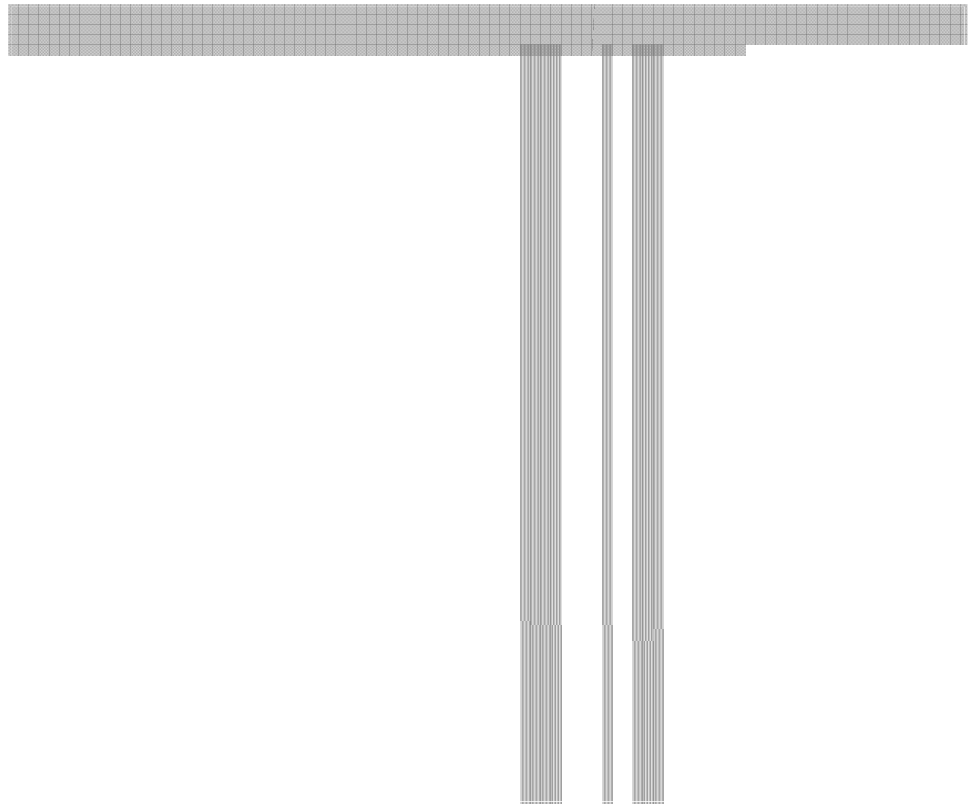


Photo: White-faced Heron (*Egretta novaehollandiae*).
Photographers: Wojciech Dabrowka and Kevin Vang

Melithreptus lunatus



Photo: Various projects currently underway to restore Tom Thumb Lagoon. Photographs obtained from Lynne Kavanagh, Wollongong City Council.



4.6 References

The role of corridors
:

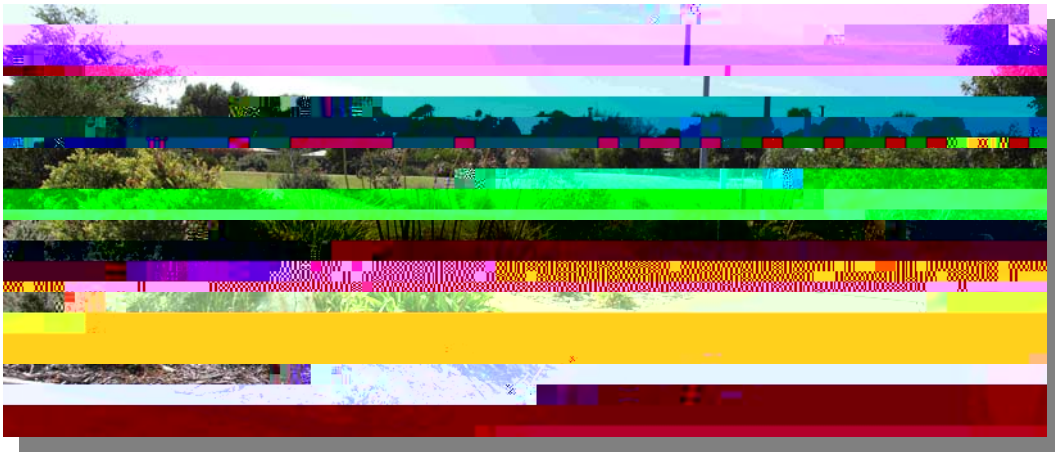
Conservation Biology 2

Nature Conservation 2:

Pacific

Part 5: Parks and Public Spaces

5.1 Introduction



*Photo: This retirement village in Port Elliot, South Australia has created garden beds next to walking paths and on the edges of open spaces using a range of shrubs and grasses.
Photographer: Pat Klynsmith.*

5.2 Vegetation Selection for Parks and Streetscapes

5.3 Park and Streetscape Design



*Photographs: New low lying shrubs and grasses have been added along these streetscapes in Sydney as part of a 'Bush Pockets' program.
Photographer: Michael Easton.*



Part 6: New Developments

6.1 Introduction

6.3.3 Parks with Artificial Lakes/Ponds

6.4 References

Conservation Biology 11

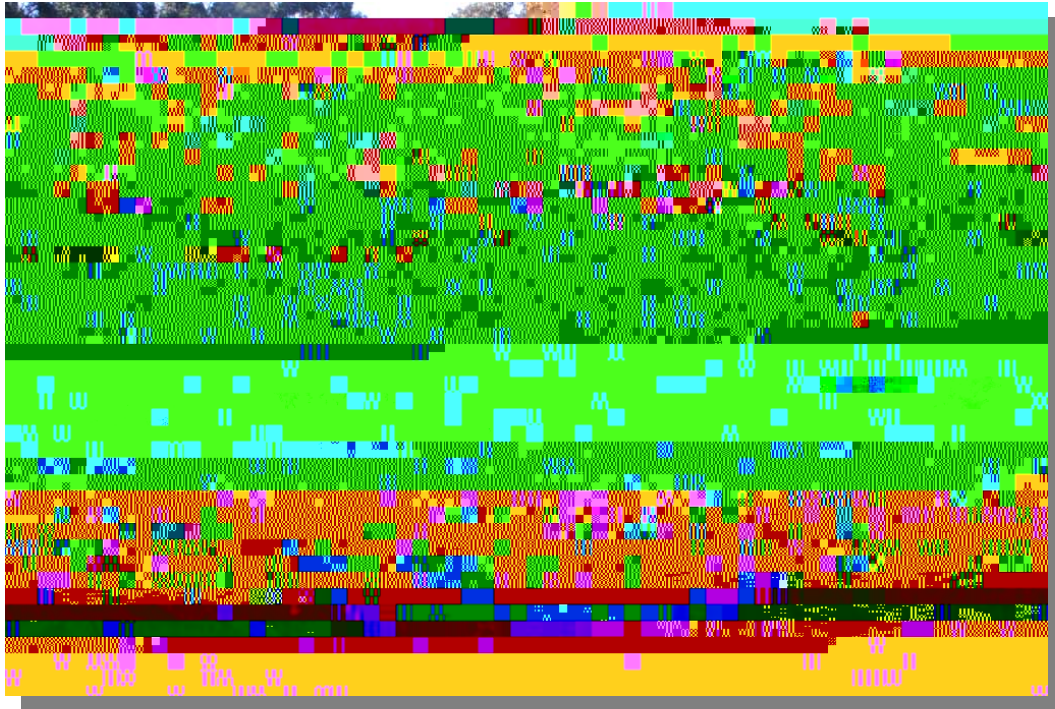
Urban wildlife: more than meets the eye

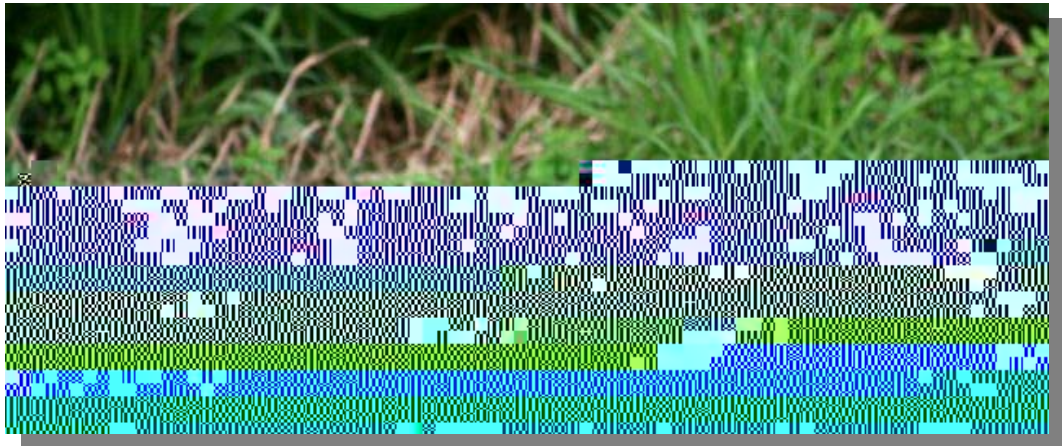
Part 7: Domestic Gardens

7.1 Domestic Garden Management

7.1.1 Success Stories: Native Havens – A North Sydney Council Program

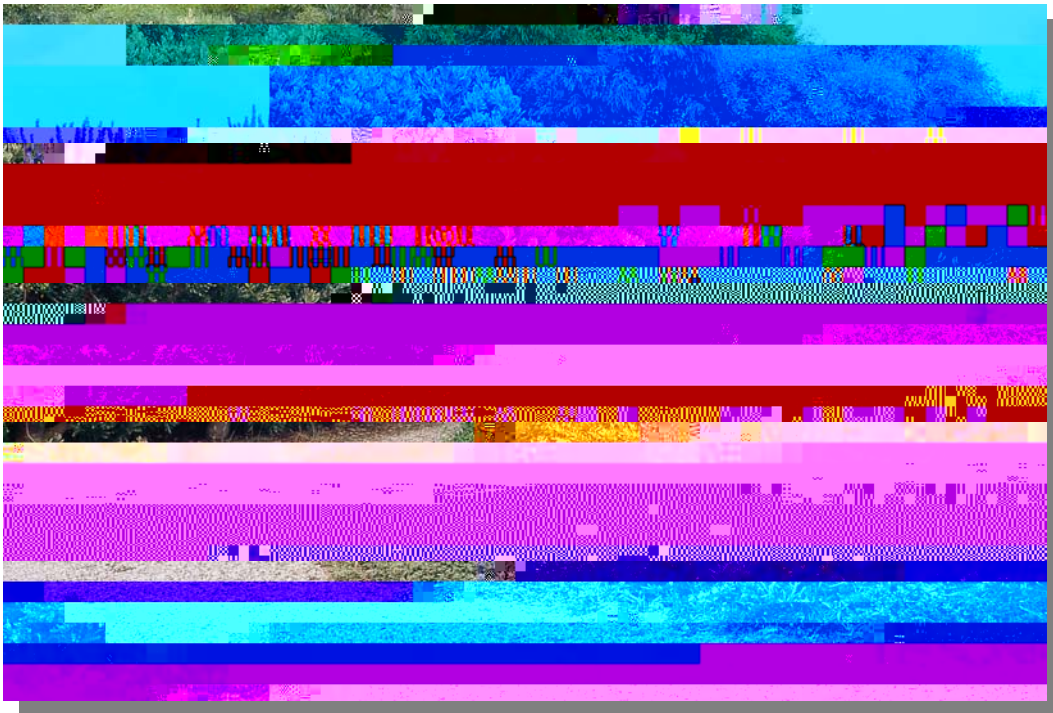
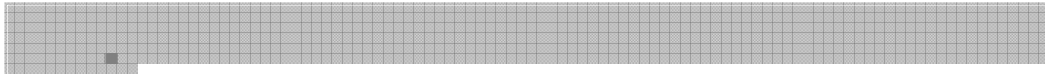
7.1.2 References





Anthochaera carunculata
Trichoglossus haematodus

Ligustrum spp.
Strepera graculina



Photograph: Dense shrubs are prevalent throughout the Davidson's garden in Victoria, providing great small bird habitat. Photographer: Diane Snape from [The Australian Garden](#) by Diane Snape (Blooming Books 2003).

7.2.1 References

Emu

Corella

Phylidonyris novaehollandiae

Emu **96**

cyaneus *Emu* **84**

Malurus

Austral Ecology **31**

cyaneus *PhD thesis*

Malurus

leucoptera leucoptera
Emu **95**

Pterodroma

Wildlife Research **25**

Landscape and Urban Planning **71**

7.3 Weeds and the Garden

Schinus molle *areira*

Cotoneaster glaucophyllus
Pittosporum undulatum

Weed Control

Weeds and

7.3.1 References

The Biology

7.5 Supplementary Feeding

Dacelo novaeguineae *Cracticus torquatus* *Cracticus nigrogularis* *Gymnorhina tibicen*
haematodus *Manorina melanocephala* *Trichoglossus*
Trichoglossus chlorolepidotus
Streptopelia chinensis *Columba livia*

Therefore supplementary feeding may be promoting the dominance of these already abundant species rather than sustaining populations of small insectivorous or granivorous birds and may in fact be contributing to the decline of small native birds.

7.5.1 References

7.7 Domestic Pets

7.7.2 References

- Felis catus*
Wildlife Research **24**
- Felis catus*
Wildlife Research **25**
- Journal of Zoology. (London)* **212**
- Conservation* **17** *Environmental*
- Journal of Botany* **23**: *Aust.*
- Wildlife conservation in the urban environment: are pets a threat?*
- wildlife* *The impact of cats on native*
:
- Impacts of domestic and feral cats on wildlife*
- Journal of the American Veterinary Medicine Association.* **212**
- Hons thesis.*
- Responsible cat ownership*
- The need for cat control legislation*
- Felis catus* *Mamm. Rev* **33**

7.8 Nest Boxes

Acridotheres tristis

Sturnus vulgaris

