references are collected in a single section at the end, rather than placed at the end of individual chapters.

The presentation standard of the book is high in both paperback and hardback editions and copies should wear well in libraries. Numerous black and white diagrams and photographs enhance the text and the avoidance of colour presumably helped to contain the price. The index is comprehensive, but there is no separate index of authors that would be helpful for tracing the contributions of those cited to different aspects of forest management.

Overall, Lindenmayer and Franklin is undeniably a valuable reference for researchers, managers and students interested in the conservation of forest biodiversity. It deserves to attract a wide readership.

References

- Burgmann, M. and Lindenmayer, D., 1998. Conservation Biology for the Australian Environment. Surrey Beatty & Sons, Chipping Norton.
- Calver, M. C., Bradley, J. S. and Wright, I. W., 1999. Towards scientific contributions in applying the precautionary principle: an example from Western Australia. *Pac. Cons. Biol.* 5: 63-72.
- Di Stefano, J., 2001. Power analysis and sustainable forest management. For. Ecol. Man. 154: 141-53.

- Florence, R. G., 1996. Ecology and Silviculture of Eucalypt Forests. CSIRO Publishing, Collingwood, Victoria.
- Gibbons, P. and Lindenmayer, D., 1997. Developing tree retention strategies for hollow-dependent arboreal marsupials in the wood production eucalypt forests of eastern Australia. *Aust. For.* **60**: 29–45.
- Lindenmayer, D. and Franklin, J., 1997. The importance of stand structure in off-reserve wildlife conservation: a case study from the Victorian mountain ash forests. Pp. 506–15 *in* Conservation Outside Nature Reserves ed by P. Hale and D. Lamb. Centre for Conservation Biology, the University of Queensland, Brisbane.
- Lindenmayer, D. B. and Franklin, J. F., 2000. Managing unreserved land for biodiversity conservation: the importance of the matrix. Pp. 13-25 *in* Conservation in Production Environments: Managing the Matrix ed by J. Craig, N. Mitchell and D. A. Saunders. Surrey Beatty & Sons, Chipping Norton.
- Lindenmayer, D. B. and Pope, M. L., 2000. The design of exotic softwood plantations to enhance wildlife conservation: preliminary lessons from the Tumut fragmentation experiment, southeastern Australia.
 Pp. 44-49 in Conservation in Production Environments: Managing the Matrix ed by J. Craig, N. Mitchell and D. A. Saunders. Surrey Beatty & Sons, Chipping Norton.

Magpie Alert: learning to live with a wild neighbour

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BOOKS are written for many different reasons. To my mind, *Magpie Alert* is unique in this regard as it attempts to bridge the gap between enjoyment of suburban wildlife and fear of dangerous attack from a wild bird.

The Australian Magpie Gymnorhina tibicen poses an unusual problem. They are one of the few species that has thrived under the changed environment created not only by our agriculture, but by our suburban lawns and playing fields over which magpies forage for insects and their larvae.

For most of the year magpies are welcome as part of the family by suburban households, but over a short period of a few weeks the occasional "rogue" individual takes it upon himself to defend his nestful of young, and in doing so attacks passers-by, particularly young children and people on bicycles.

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Each year, the responsible authorities receive reports of these attacks and attempt to remedy the situation and soothe the public, but the easy solution of shooting the culprit, as was done in the past, is no longer acceptable to a public taught to appreciate the wildlife around them. What is an enemy to a kid on the way home from school may well be another family's much loved garden visitor.

This continuing problem was raised by the Queensland Parks and Wildlife Service who were fortunate enough to involve the cooperation of Griffith University with a specialist group – the Suburban Wildlife Research Group (SWRG), led by the author of *Magpie Alert*, Dr Darryl Jones. This book is the result of eight years investigation by SWRG through the work of Jones and several students undertaking post-graduate research under his direction.

The book consists of seven chapters covering a broad range of topics in logical sequence, starting with an appreciation of the suburban landscape "the dynamics of suburban life" as shown by the rapidly developing city of Brisbane. The change from native bush with its seasonal fluctuations to a suburbia with perennially green well-watered lawns proved to be ideal for the Australian Magpie – an indigenous member of the early Gondwanan radiation and only a very distant relative of the European black-andwhite corvid from which it takes its name.

The second chapter describes the magpie's lifestyle with a subheading "How to succeed in the suburbs". Suburbia provides all that a magpie could wish for - trees to roost and nest in with plenty of open space to forage over all the year round. Magpies live in family groups that defend an area ("their territory") from other magpies. Part of this defence is the beautiful carolling song that may become a group chorus advertising their presence to other magpies. The size of these groups varies around the continent, but all members join in driving off other magpies and in harassing predators by mobbing. Many Australian households feed "their" magpies and for most of us the local group is part of our home neighbourhood and soon becomes very tame, losing any fear of humans.

All this is very well until the breeding season comes round and then some of the males become very aggressive towards anyone approaching their nest. Chapter Three "Magpies vs people: what happens during a magpie attack?" deals with magpie-human interactions. Although the background for this book lies in suburban Brisbane, the problem occurs throughout Australia's towns and cities and the need for sensible understanding is universally necessary. Before any solution can be offered the magnitude of the problem needs to be assessed and described. The author lists six features common to all magpiehuman conflicts: Only a small proportion of birds are aggressive (9% in suburban Brisbane); 99% of attackers were male; attacks were usually near a nest tree when there were nestlings; increased as the nestlings grew and stopped when they fledged.

Attacks by magpies on humans are basically attempts to defend a nestful of young. Eight main forms of attack behaviour are described, ranging from alarm calls through distant and close swoops, bill snaps, pecks, bites, dive bombs and the ultimate, ground attack. These terms were drawn from the behaviour literature which emphasizes that magpies spend most of their time "keeping other magpies away from a distance (using their black and white markings and especially their alarm calls) and if that does not work, it is straight into no nonsense fighting!" It is easy to see how any apparently intruding human fits into this pattern of behaviour. Injuries resulting from these attacks are usually slight, but can be surprising and frightening. A survey by SWRG found that 70% of a random sample of 357 Brisbane residents had experienced attacks from magpies, but that most usually resulted in only slight damage. However, analysis of 399 injuries reported in this survey showed that attempts at evasion, particularly by cyclists, may result in "indirect injuries" (17%) and that 10% of injuries were to or near the eye.

Chapter four looks at the several theories about what stimulates magpie attacks: territoriality, brood defence, hormone imbalance, learned from parents, human harassment, or a particular stimulus. The evidence for each is discussed, but no single explanation that is plausible, logical or understandable is found.

Chapter Five looks at the "Human dimension of the conflict" and emphasizes the wide range of human responses to magpies, from hatred to love. The discussion involves many examples encountered by SWRG over eight years and from their survey. That different groups of people have different values highlights a hitherto largely unrecognized need for "human dimension research" in any consideration of wildlife management.

Chapter Six considers what can be done to alleviate a magpie problem and suggests four categories of approach: preventative, protective, proactive and removal. Warning signs, avoidance of strike areas, protective headgear, waving a stick, education, translocation and euthanasia are some of the approaches considered.

The last chapter (7) "Coexistence or conflict?" suggests asking three questions that can be answered by a little careful observation. 1. What type of intruder is the magpie targeting? 2. How intense are the attacks? 3. Can attacks be avoided? Armed with the answers to these questions, the relevant approach (Ch.6) can be selected; three real-life examples are given.

Magpie Alert is well illustrated both by colour photographs and excellent black and white drawings. It presents our current knowledge on the complex relation between magpies and people and offers the best ways of managing this unique suburban wildlife conflict in a thoroughly readable, jargon-free style. University of New South Wales Press is to be congratulated on publishing such an unusual book so well. It will be a great help to those authorities responsible for fielding complaints about wildlife, providing them with real data rather than emotional legends. Magpies were here before we arrived and so it is up to us to learn how to live with them and to enjoy the experience — Magpie Alert should help most people to do this.