

## FOREWORD

One of the most basic elements of ecology and conservation biology is knowing what species occur in what places. As conceptually simple as this may sound, it is an incredibly difficult and complex undertaking, although probably the single most important fact underpinning all of ecology.

It is impossible to make informed decisions about conservation management without some knowledge on the general geographic distributions of species. The aim of this report is to provide readers with my best estimate of the distribution of as many species of rainforest vertebrates as possible at this time within the Wet Tropics bioregion. Understanding biodiversity necessitates understanding the factors that determine the distribution of each constituent species.

Approximately 350 species of vertebrates occur in the rainforests of the Wet Tropics bioregion, however, only about 153 species have their core distributions in the rainforest. In this report, I present distribution maps for the 177 species of Wet Tropics vertebrates where there was sufficient data to produce a useful map (the vast majority of true rainforest species), and twelve species richness maps based on overlaid distribution maps (Appendix B). The distribution maps represent a combination of bioclimatic modeling, habitat preferences, biogeographic distributions and expert knowledge. Also included is a comprehensive species list of all vertebrates in the Wet Tropics bioregion (Appendix A), with information on the conservation status, range size (of the mapped species), habitat specialisation and summaries of species richness by taxa both in spatially continuous maps and in tabulated form.

The CD-ROM enclosed in the back cover (Appendix C) provides a PDF version of this report, which is embedded with hyperlinks to enable easy viewing of any species maps from the Index to Maps and those mapped species listed in Appendix A.

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