

2003 Whitley awards

The Whitley Awards were held on Friday 12th September 2003 at the Australian Museum, all publishers who had submitted book and cd's for consideration for an award were invited to the function as were winning authors and editors. It is appropriate that the Whitleys are held in the Museum as they are named in honour of Mr Gilbert Whitley who was the Fish Curator at the Australian Museum for 40 years as well as being editor of the RZS publications for many years. The Whitleys are given to honour the best zoological publications for the year on

matters relating to the fauna of Australasia and they represent a unique set of honours as no other literary award are dedicated to zoology.

A sub committee of the RZS Council consisting of Drs Arthur White, Dieter Hochuli and Pat Hutchings reviewed all the books and cd's received and in some cases solicited additional reviews and made the recommendations to Council which were then accepted. The following awards were made and the accompanying book review was written by an appropriate scientist who made the presentation on the night.

2003 Whitley award for best zoological handbook.

Volume 6 of the Handbook of Australian, New Zealand and Antarctic Birds. Publishers Birds Australia and Oxford University Press \$395.00

Volume 6 of the Handbook of Australian, New Zealand and Antarctic Birds brings us another 107 species, another 1200 pages, and another 37 colour plates. To Birds Australia and Oxford University Press it brings another award. Volume 1, published in 1990, won a Whitley Award for Best Zoological Handbook, and so has every volume since then, including, in 1996, a Whitley Medal for Volume 3.

This success is a measure of the importance the judges have attached to this series, and to the excellence of the work.

The importance is obvious. HANZAB is documenting an avifauna which appears to be much more fragile than previously thought. By drawing together, analysing and synthesizing our knowledge of the abundance, habitat and behaviour of all the birds of our region,

HANZAB is a resource for research, for birdwatchers, and importantly, for conservation.

But important does not always mean excellent. And it is in the excellence of HANZAB that I think Australasian ornithology has been particularly lucky. We have a fortuitous assembly of dedicated and talented editors, artists, sub editors, contributors and proof readers. We have a publisher in Oxford that has maintained a high production standard. And underpinning it all we have Birds Australia.

By all measures HANZAB is a remarkable achievement and it is a pleasure to present the 2003 Whitley Award for the Best Zoological Handbook to Sid Cowling, here on behalf of the Birds Australia team that we honour today.

Paul Andrew- Curator, Taronga Park Zoo, Mosman

Best Children's series

"Invertebrates" Series 6 Books: Molluscs, Myriapods, Cephalopods, Crustacea, Annelids, Echinoderms. Beth Blaxland, Australian Museum / Macmillan Education, 2003. \$27.95 each

On 9 April 2003 the Iraq Museum in Baghdad was looted and left bare. Two days later this tragedy was communicated to staff at the British Museum, who then alerted the world. A strong argument has been made that the stripping of this museum will be one of the major enduring losses of the 2003 Iraq war. Not as well publicised is the looting and trashing of the natural history museum at Basra, and less well known is the loss of 12 million volumes from the national library in Iraq. With the dust still in the air in April, it emerged that high-level museum specialists in the US had advised the US government in January 2003 of the possibility of massive looting of the Iraq museum. That it went unprotected for a couple of crucial days was a predictable and preventable event. It is a cultural disaster for the world.

The plundering of the Iraq museum sends a strong message to Australia. Not only do we need to care about museums

in other countries, especially if we are among any willing coalition that plans to go to war, but we need to value and improve our own museums. The Australian Museum is a national icon, but perhaps its real vulnerability is in being undervalued, and thus underfunded, forgotten and left in the 'not important' basket of national and local priorities. The loss of the Australian Museum would rank along with the disaster at the Iraq museum. Let's take a look at just one of the values of the AM.

The winner of this year's Whitley award for the best children's natural history book series is an Australian Museum project. The six books on *Invertebrates* are a brilliant testimony to the expertise of museum staff, the resources accumulated in the museum since its inception in 1827, and the skill in communicating the details of invertebrates to an Australian public that is currently captivated by whales, koalas and crocodiles.

The series does not even include insects or spiders, so there was great courage (and confidence) shown in the selection: crustaceans, echinoderms, cephalopods, molluscs, myriapods and annelids. Beth Blaxland is to be congratulated for producing such a lucid text; the museum publishing unit of Jenny Saunders and Kate Lowe and museum series editor Deborah White also must share in the praise for this award-winning series. Further, each book has a museum scientific adviser; Penny Berents, Greg Edgecombe, Pat Hutchings and Ian Loch are the specialists behind the scenes. An extraordinary group of organisms has resurfaced because of that rare combination of skills that is found in the Australian Museum. The accurate text, the use of plain language, and the clarity of the photographs are complemented by the excellent production from Macmillan library publications. It has been a productive relationship and we hope it continues.

What, you may ask, does a person who spends his working days studying koalas know about children's books on invertebrates? One hundred years ago we shot and traded koala skins, up to half a million per year. Only esoteric zoologists were interested in the animals themselves and there were few, if any, voices calling for their protection. Now they are icons for conservation. They live in remnant forests, especially along the NSW coast, and one of the ways to conserve a piece of remnant coastal forest, or even an entire forest, is to point to its koala population. My hope, as a zoologist, is that the invertebrates in these books will, in 100 years from now, fill the PR role that the koala does today. By reading these books we can point to the spectacular cephalopods that can be show-cased to conserve long stretches of precious coastline. Among the finest ecological research in Australia is being carried out on molluscs in coastal NSW. This valuable research will become more visible because these books bring this group of animals into every home and, even more importantly, every school library. The mudflats, beaches and soils are teeming with crustaceans and annelids that provide essential ecosystem services. Their conservation will amply repay any effort we invest in protecting their habitat and preventing their local sites from being contaminated. The Macmillan books show us what the animals look like. Will people care about invertebrates? Yes, the history of conservation in NSW points in that direction. It is only 100 years since the first mammals and birds were protected. Reptiles were not protected until 1974, and frogs not until 1992. Only a few invertebrates have been included as threatened species since the passage of the NSW *Threatened Species Conservation Act 1995*.

Where is the repository for such esoteric zoology? In part, it is the universities, but it is also in large measure in museums, and the Australian Museum is of outstanding national significance in that respect. As the conservation focus shifts and invertebrates begin to loom larger, it will be to the Australian Museum that the planners, policy writers and field ecologists turn. However, it is clear to

this seasoned campaigner that it is nearly impossible to save something that you neither recognise nor respect. These six books are aiming at the right readership — children. Of course, I would enjoy seeing an extra book called the politicians' guide to invertebrates or, more subtly, the koala conservationists' guide to invertebrates. It would be an amalgam of what is in these books plus some up-to-the-minute koala-type politics, such as what happens to the snails on the land that is about to be cleared, what happens to the myriapods if we put a prescribed fuel reduction burn through this bush, what happens to the crustaceans if we develop this peninsula and will the worms stay put even if we build a sewage outfall just upstream of this stand of mangroves? Until such a companion volume is written, can I suggest that the idea be trialed in a 2-page addition to the end of each subsequent volume, or each new edition.

Do children read these books? Yes, but they have to be selected by adults to give to the kids. The trick is to put a zoological book together so that the adults will enjoy them too. Numerical facts seem to have little appeal to kids, but adults love them. So, the fascinating fact boxes in each book are adult bait. Did you know that there are about 14 000 different types of myriapods, and most are centipedes and millipedes? Did you know that some kinds of echinoderms live for about 35 years? Did you know that the seas near Australia have a greater variety of cephalopods than anywhere else in the world? Are you hooked? I was. So, as a parent who has read scores of zoological type books to my offspring when they were small, I can see the immense value in these beautifully laid-out volumes.

Do I have any quibbles? Well yes, I am also an editor, and they can be dreadful people. Modesty is a great Australian virtue, but in the industry of publishing, it can be a limitation. I did look for an introduction, or preface, in the books to help me see the book's scope, to know a bit about the author Beth Blaxland, the series editor Deborah White, and to see what age groups/school syllabus items it was relevant to and even, perhaps, what kind of research was currently being conducted on the subject animal group. There was not introduction or preface. So, no more shyness please, the case exists for the inclusion of an introduction. However, I do recognise that an introduction/preface is considered to be off-putting for kids who just dive straight into a book. This is not a reason for ditching it, but it does mean it would have to be carefully written and beautifully presented. Otherwise I have no other quibbles.

The award of the Whitley prize for the best children's series is richly deserved for the author, Beth Blaxland, and Macmillan publishing, with recognition also going to the Australian Museum publishing unit and the museum's scientific advisors.

I am looking forward to the next title in the series.

Daniel Lunney
NSW Dept of Environment and Conservation Hurstville NSW

Winner of the Best Zoological Series

Four volumes of the “Zoological Catalogue of Australia”:

Volume 27.3B Hemiptera: Heteroptera (Pentatomomorpha)

Volume editors W.W.K. Houston & A. Wells, Australian Biological Resources Study. Authors: Gerry Cassis and Gordon F. Gross. CSIRO Publishing, Australia \$160

Volume 29.5 Coleoptera: Buprestoidea.

Volume Editor W.W.K. Houston, Australian Biological Resources Study. Author Chuck.L. Bellamy CSIRO Publishing, Australia \$140

Volume 19.2A Crustacea: Malacostraca (Syncarida, Peracarida: Isopoda, Tanaidacea, Mictacea, Thermosbaenacea, Spelaeogriphacea).

Volume Editor W.W.K. Houston & P.L. Beesley Australian Biological Resources Study. Author Gary .C.B. Poore CSIRO Publishing, Australia \$140

Volume 19.3B Crustacea: Malacostraca Eucarida (part 2) Decapoda—Anomura, Brachyura.

Volume Editor A.Wells & W.W.K. Houston Australian Biological Resources Study. Author Peter J.F. Davie CSIRO Publishing, Australia \$150.

Back in the 1970s a Federal initiative to document the fauna and flora of Australia led to foundation of the Bureau of Flora and Fauna — now the Australian Biological Resources Study (ABRS), a section of the Department of the Environment and Heritage. Initially, for the fauna, the organisation concentrated on terrestrial vertebrates, but subsequently this was extended to include all groups in the fauna. Two major fauna projects were initiated. The *Fauna of Australia* project would describe Australia's fauna in detail to family level, and the *Zoological Catalogue of Australia* project would provide a richly detailed listing of all the species of any group that occurs in Australia or Australian waters. More recently, ABRS developed a software program called *Platypus* for handling taxonomic data. In this program, data are entered into a standard set of boxes, and include items such as valid names, previously used names, distribution and the citations to these records. The *Zoological Catalogues* are derived from the files thus produced. To date a large number of volumes in the series have been published, though not in any taxonomic order (which explains the odd volume numbering system). Last year, the last printed (hard-copy) invertebrate volumes in this series appeared, on crustaceans and groups of insects

These *Zoological Catalogues* have been skillfully edited by Keith Houston (formerly of ABRS), Alice Wells and Pam Beesley, but they rely extensively on the expertise of the relevant experts on the particular group. Compilation of the detailed data is very much a labour of love — I know because I have done one. It involves a lot of tracking down of obscure literature often only available in museums — which is why so many of the authors of these catalogues are employees of State museums — and much too- and fro-ing with the relevant editor at ABRS to explain all the decisions which you have made. One becomes quite a detective.

But once they are produced and published the Catalogues become an invaluable source of information to anybody working on these groups and become an essential book on the bookshelves if you are working on any aspect of the group. ABRS is planning to put all these catalogues onto the web (in fact, now has online all but those published in the last 18 months), which will allow periodic updating as the fauna becomes better known.

RZS in awarding a Whitley award to CSIRO Publishing and to the editors from ABRS has recognised the tremendous value of these publications in advancing our knowledge of Australia's biodiversity — they also highlight the tremendous gaps in our knowledge of this biodiversity, especially when it comes to invertebrates.

ABRS has made the decision that in future no further volumes will be published in the *Zoological Catalogue of Australia* series, that all similar checklists will be produced electronically and made available on the ABRS website. This has some 'pros'. For example, they will be much easier to update. For many of us, however, the hard copies are sometimes easier to use — perhaps this is a generation thing! ABRS is to be strongly congratulated on this program, which is almost certainly a unique program worldwide, and we encourage them to continue the production of catalogues of the fauna, even in the light of continuing funding cuts — they are essential. In fact, ABRS advises that it will seriously consider hard copy publication of catalogues for particular groups, in a simpler form, should a strong case be made for their production.

Any how it is with much pleasure that RZS awards CSIRO Publishing and ABRS the Best Zoological Series award— while the awards go to the publishers and the editors — we should also congratulate the authors of each of the volumes without whom these would never have seen the light of day.

Pat Hutchings
The Australian Museum

Whitley Awards-Best Specialist Periodical **Wingspan- Publishers Birds Australia \$68.00 p.a (4 issues)**

As an avid field ornithologist or birder as we are more popularly known I look forward with great anticipation to receiving my quarterly copy of *Wingspan* produced by Birds Australia. Having been a long term member of Birds Australia I have seen the newsletter transform and evolve into its current award winning format.

It keeps the members informed of bird conservation issues, local interest projects, recent rare sightings, bird observatory news, campouts and cutting edge research into a variety of ornithological issues. Only in this most recent issue did I learn that male fairywrens present females with flower petals often of a particular colour and often for less than monogamous desires. Fascinating stuff indeed.

With increasing evidence of the decline in bird populations Australia wide, *Wingspan* has become a very important tool for bringing the attention of the plight of Australia's birds to an increasingly aware public.

In my own lifetime I have seen many birds disappear from the Sydney county. These include the Regent Honeyeater, Turquoise Parrot, Diamond Firetail, Brown Treecreeper and Hooded Robin to mention a few. I feel we are watching precipitous declines similar to those that affected Australian frogs in the 70's and 80's.

Like frogs Australian birds need all the help they can get. *Wingspan* is one of the most effective conservation communicators as a result of the great job done by their editors. So congratulations to Penny Olsen and the *Wingspan* editors on winning the Whitley Award and championing the cause of Australia's superb bird fauna. It is with great pleasure that I present this award to Birds Australia for their excellent work.

Dion Hobcroft
Taronga Park Zoo, Mosman

Best Zoological Periodical **"Nature Australia Magazine" Editor: Jennifer Saunders Australian Museum,** **publishers Australian Museum \$36.30 p.a (4 issues per year)**

These are interesting times for natural history museums. Some question their role in the modern world. Some perceive museums as anachronistic throwbacks to Victorian times, static repositories for the booty of adventurous explorers who collected an extraordinary range of naturally and culturally significant items. Museums obviously do a lot more than that.

As a publication of the Australian Museum, *Nature Australia* is a shining beacon identifying one of the many ways in which museums and their initiatives are relevant to modern biology. It bridges the gap between zoologists and the wider community, making our science relevant in a broader context, fascinating us along the way.

Nature Australia is a magazine familiar to all Australian zoologists.

The case for recognising the periodical is simple, by any criterion. Were it a person, it could easily be categorised as beautiful, intelligent... even as having a great sense of humour. Its claims are strengthened by the fact that, despite the diverse material it covers, it is consistently good. It's also consistently stimulating and entertaining, and often provocative.

The most striking thing about the magazine is the quality of the numerous photographs accompanying its written content. These alone make it a must read for anyone with more than a passing interest in Zoology. The images provide a connection with the subject material and engage us, ensuring that we look beyond the outstanding photographs.

And it's not just a pretty face. The quality of the writing is excellent, with the list of contributors over the last

year reading like a who's who of Australian zoology. In many ways it passes one of the tests of a quality journal – interesting professional zoologists in material peripheral to their specific research interests whilst providing them with enough detail to bicker with each other when articles dare to touch on their research field.

It's hard to pick the "best" bit. *Nature Australia* is partitioned into numerous sections including general articles, regular features targeting specific aspects of natural history and "the last word". In many ways the latter is the zoology periodical's equivalent of the sports page, the one you turn to first every time. It's the bit that gets you thinking, makes you angry or re-assures you that you're probably thinking the right way. Often all at the same time. It is a forum that touches on issues that all Australian zoologists must be conversant in.

Although the imagery opens the doors to a wider audience, perhaps the biggest success of *Nature Australia* is its ability to communicate the complexities of the natural world in simple, accessible language and to do so honestly. This sets it apart from virtually every natural history publication.

It is a credit to the dedicated team who put *Nature Australia* together and it is with great pleasure that that, on behalf of the Royal Zoological Society of NSW, I present the Whitley award for best zoological periodical to *Nature Australia*.

Dieter Hochuli
Lecturer Biological Sciences, Sydney University

Prehistoric Mammals of Australia and New Guinea: One hundred million years of evolution John Long, Mike Archer, Tim Flannery and Sue Hand. NSW University Press \$69.95.

Prehistoric Mammals of Australia and New Guinea: One hundred million years of evolution by John Long, Mike Archer, Tim Flannery and Sue Hand is an in-depth, fact-filled and beautifully illustrated book that manages that rare thing: to be both an important book scientifically but also easily accessible to the general reader interested in Australian mammal evolution.

On the scientific side, it is difficult to know how this book could be improved. With Prehistoric Mammals of Australia and New Guinea, John Long continues his unbeaten record of providing award-winning books reviewing Australia's fossil faunas- previous contributions include fossil fish and dinosaurs, both also published by the University of New South Wales Press. Between them, Mike Archer, Tim Flannery and Sue Hand have contributed well over a hundred first-authored papers on Australian mammalian palaeontology, plus many more with the students working in their labs and under their tutelage.

The book itself begins with introductory chapters including 'Why Australian mammals are different' and 'a history of fossil mammal discoveries' extending back to great-grandfather of Australian mammal palaeontology, Richard Owen and the description of *Diprotodon* in 1838.

From here we get into the meat of the book- descriptions of fossil mammals in each chapter are organised according to the Linnean classification down to the species level, with information on type species, age, localities, as well as headings for general and technical information. At the end of each chapter is a cladogram of the group's relationships. This organisation means information can be accessed quickly and easily- the mark of a well-written reference book.

Illustrations include high-quality photographs of fossils and fossil localities, technical drawings of teeth and Anne Musser's incomparable reconstructions. A detailed glossary of scientific terms and reference list by Alex Baynes round out this major work.

Prehistoric Mammals of Australia and New Guinea: One hundred million years of evolution does justice to the amazing Australian fossil mammal fauna and to the work of all those researchers from Owen down to the authors themselves. Anyone attempting to write a book on the fossil mammals from other parts of the world should look to this book for inspiration- clearly written, concise, well-illustrated, informative, easy to use, rich in detail, perfect for researcher, student or interested layperson, it's simply fantastic.

Zerina Johanson
Research Fellow, Australian Museum

Whitley Medal for 2003

The Waterbug Book: A Guide to the Freshwater Invertebrates of Temperate Australia by John Gooderham & Edward Tsyrlin. CSIRO Press, 232 pages, ISBN 0 643 06668 3, published 2002; \$39.99.

This fine little book is a handy, much-needed guide to the major invertebrate groups of Australia's freshwaters: the rivers, creeks, lakes, wetlands and ponds. It includes an introduction to habitats, an illustrated key to the major groups, and detailed sections on all the major taxa (mostly to family level) with many high quality colour photographs of live specimens. As well, there is about a page of information on the basic biology and possible source of mis-identification for each group.

Freshwater invertebrates are increasingly being used as indicators of stream health, especially in schools and such community-based organizations as Streamwatch and Waterwatch. The presence of key taxa can be used to indicate water quality, such as outlined in the "SIGNAL Method". The Waterbug Book is ideal for all involved in such water monitoring projects. As well, this book is a boon for Australian trout fishermen, who have always been crying out for such a guide.

From the technical point of view, this book accurately treats most major families of freshwater invertebrates, and for insects, considers both larvae, the immature aquatic stage, and the winged adults. It is particularly nice to see such good colour photographs, especially of many obscure taxa.

In some cases I feel the authors have tried to be too inclusive, especially where accurate identification requires detailed technical keys, good magnification, and sometimes dissection. For example, the larvae of some aquatic dipteran families are easily recognised by visible external morphology, e.g., the Culicidae (mosquitoes), Simuliidae (black flies), and Blephariceridae (net-winged midges). However, many families have a generalised "maggot" morphology and are *not* easily identified with a hand lens. And a single photo does not suffice for groups with such diverse larval morphology as Tipulidae or Empididae. Further, the key and text often groups systematically disparate taxa such as "Dolichopodidae, Tabanidae and Tipulidae", "Psychodidae and Stratiomyidae", and Ephydriidae, Muscidae, Sciomyzidae, and Syrphidae". These groupings are strange and I fail to see any great likeness uniting the larvae of these families. It would be far better to key out the distinctive fly families, and leave the rest as "other Diptera", rather than give a false sense of accurate identification. Learning that many taxa are difficult and poorly known is part of studying biology, and perhaps more important than just getting a name on a specimen.

This book will prove to be popular with a wide range of users, and undoubtedly will be reprinted. Therefore I strongly suggest that most of the line drawings in the Key (pp. 21-31) be replaced. They are very crude and detract from the overall quality of the book's layout and photographs. For example, on page 25 there are nine stick figures that look as if they were scribbled freehand with a ball point pen, supposed arthropods with shoes and blinking eyes! Their absurdity contrasts markedly with

the single decent figure on the page, that of the syncarid mountain shrimp. Please, none of the "Happy Face" mentality here – no intelligent child would be impressed. A few hours is all that is needed for an illustrator to produce a set of accurate pen and ink drawings – a small investment for a book that will bring so much return to CSIRO Publishing.

Daniel Bickel
Entomology, Australian Museum

The Royal Zoological Society of NSW decided this year to award a special contribution to an eminent Australian scientist for their significant contribution to zoological science in the form of publications.

The committee has made this award to Dr Hal Cogger, previously Deputy Director of the Australian Museum and eminent herpetologist.

I've been asked to present an award for a "significant contribution to Australian zoology" to Hal Cogger, with particular reference to the book "Reptiles and Amphibians of Australia". I do so with immense pleasure.

To understand the nature and magnitude of Hal Cogger's impact and contribution, you have to recognise that his professional life has spanned a period of rapid change in societal attitudes towards his beloved reptiles. That change has influenced his career, but more importantly, he has been a major player in inducing that change and in shaping its directions. So the best place to start may be to talk briefly about that shift in attitudes, before examining Hal's role in it.

You don't have to go back very far before encountering a very negative stereotype for reptiles, especially snakes. Early European explorers to Australia must have been severely disheartened to realise that most of the snakes they encountered were highly venomous, and a high level of public hysteria grew up around the idea that the Australian bush was a seething mass of dastardly serpents, all lying in wait for innocent travellers. Immigrants from the U.K. still seem to have this view, but most Aussies – especially the younger generation – have evolved a healthier and more balanced attitude. That shift is evident in many forms – most notably in the fact that some younger Aussies actually disagree with the statement that "the only good snake is a dead snake", in the inclusion of snakes in wildlife protection legislation, and in the appearance of snakes on posters produced by national parks associations and the like. We now take it for granted that reptiles as well as birds and mammals should be protected within national parks, but it is not long since killing snakes was part of the routine duties of rangers in those parks. Indeed, this was a common practice through the 1970's in some areas.

Rapid changes in societal attitudes, such as those towards reptiles, are complicated phenomena that reflect many different influences. Demographic shifts from the country to the city, increasingly ecofriendly education programs and television documentaries, and the growth of "green" attitudes to nature have all helped improve the public image of previously "unpopular" types of wildlife.

Ultimately, however, at the coalface of that shift in attitudes lies the activity of people who contribute to the gathering and dissemination of information and images about the animals in question. It's difficult to overstate the importance of Hal Cogger's role in those tasks, and especially the significance of his monumental field guide.

The easiest way for me to illuminate Hal's role is from my own personal perspective. At first sight this seems like a peculiar approach, because I'm an ecologist and behaviourist, interested in microevolutionary processes within reptile and amphibian populations. This might seem far removed from the primary fields of Hal's own contributions, which have spanned many disciplines but probably are most notable in taxonomy. In particular, it might seem that any ecologist worth his or her salt could at least identify the species in their own local study area, so a field guide wouldn't seem to be very relevant. So how and why was an ecologist's professional career influenced by a field guide, produced by a man who is best known as a taxonomist?

The answer is all about the breadth of Hal's impact on herpetology in Australia. My own career is probably fairly typical in many ways. Like most herpetologists, I was born with a fierce and completely irrational passion for these particular organisms. I enjoy reading, so as a child I devoured every book I could find that even mentioned a snake. For those poor unfortunates who don't share this passion, it's difficult to explain the intensity of this thirst for information. Unfortunately for those of us who hungered for knowledge of the Australian herpetofauna in the 1960's, very few books were available. There were some excellent popular treatments by people like Eric Worrell and David Fleay, but no overviews accessible to an untrained reader.

A passion for herpetology is largely incurable, and thus I persisted in my snake-collecting pursuits, did an undergraduate science degree, and started a PhD on reptile ecology. Around about this time I encountered a marvellous little book that Hal had published in 1967, a few years previously ("Australian Reptiles in Colour", Reed Books). It provided a brief summary of the biology and diversity of Australian reptiles. I was particularly struck by a single sentence in the section on elapid snakes on page 92 – "up to the present time no species of elapid snake has ever been studied intensively enough to provide an accurate picture of its biology and life history". Up until then, I had always assumed that basic biology of the common Australian species was surely already well-known. Could it really be true that nobody actually knew what red-bellied blacksnakes eat, how many young they

have, and so forth? A bit of time at the university library convinced me that this was indeed the case - everything written on the subject, even though it sometimes sounded terribly authoritative, was clearly just the author's speculation and opinion - or even worse, rehashed speculation and opinion from others.

So, with Hal's words ringing in my ears (at least metaphorically, since I hadn't actually met him by then), I hurled myself into a Ph D project on the basic biology of snakes. Within a couple of years I had gathered data on all those simple kinds of traits that had previously been undocumented, in the process supporting some of the earlier statements and disproving others. So I was getting ready to submit my thesis in 1975, feeling like the brand-new World Expert on elapid snake ecology, when I heard that Hal was about to publish a field guide to the entire Australian herpetofauna. He was kind enough to send me a Xerox copy of the relevant section pre-publication, and I was stunned when I saw it. The level of information and presentation far exceeded any field guide I'd ever seen, on any group of animals anywhere in the world - but what really shocked me was that the book revealed to me the extraordinary extent of my own shortcomings. For example, it included a whole range of Australian elapid species (and even genera) that I had never even heard of. It was a deflating experience for a self-claimed expert, because it was immediately clear that although I knew quite a bit about the ecology of a few species of elapids in one small area, I was incredibly ignorant of diversity within the group at a larger scale.

And that, in a nutshell, was what was achieved by the Field Guide ("Australian Reptiles and Amphibians", Reed Books, 1975). It suddenly made the entire Australian fauna accessible to researchers and to the general public. For the first time, we could not only identify the animals we found, but also appreciate where they were distributed, how they differed from related taxa, and where their relatives were found. It was like having a set of very restrictive blinkers removed, so that one's own firsthand knowledge could be placed within a broader context. At a single blow, the first edition of the Field Guide shone a bright spotlight into an abyss of ignorance. Simply accumulating the information and obtaining the photographs for that book would have been a Herculean task in and of itself, but the truly extraordinary thing was that the information and photographs were not simply out there waiting to be assembled. Hal had to work out what species occurred in Australia, how to distinguish Species A from Species B and so forth, where they were distributed, etc., etc. - and to take his own photographs of most of them.

The Field Guide surely ranks as among the most significant biological books ever published in this country. Much of the flowering in Australian herpetology over recent decades has its genesis in the availability of reliable information within the Guide. It has been a major stimulus to research, because it's a lot easier to frame a project if you have the appropriate background in which it can be placed. Again, the easiest way to demonstrate this fact is to use my own research as an example. As I mentioned above, I am an ecologist not a taxonomist - but I went through piles of my own reprints last week to score how many of my papers on Australian elapid snakes cite Hal's Field Guide. The answer is 33 of 57, which comes in at a clear majority of 58%. No other reference comes close in terms of citation frequency. Sometimes I've just cited him as a source of information on the study taxon, but frequently I've used details of the information within the book (especially the distribution maps) to test specific hypotheses about topics such as the determinants of geographic distribution in elapid snakes, or species diversity in desert lizards. And I'm not the only one: a search of the Web of Science bibliographic database yielded records of more than 580 citations to this book.

The book has evolved considerably over the years, growing from 664 species to 1050 over the course of six editions to date. Hal has continued to refine and improve the information and its presentation through that period. And of course, there are many Cogger publications beside the field guide - comprehensive summaries of nomenclature, of conservation status, of regional faunas, and so forth - as well as many papers in journals. Recently, Hal has been exploring other ways of presenting information as well, including interactive keys in CDRom format.

I have intentionally focused on Hal's contribution through books in this talk, for two reasons. First, the Whitley awards are centred around books, so it makes sense to talk about the Field Guide. Second, if I talked at length about other reasons why Hal deserves this award, I couldn't ignore personality traits such as his extraordinarily helpful approach to younger workers etc. - and thus, he'd probably be even more embarrassed than he is already. But, consider it said ..

So, I take great pleasure in presenting this award for "a significant contribution" to Hal Cogger, and I'd like to say three things to Hal as I do so. First, a vote of thanks from all the herpetologists in Australia for what you've done for our field, and especially for the magnificent Field Guide. Second, on a personal level, thanks for the support and inspiration that you've given to me throughout my own career. And third, congratulations on this richly-deserved award.

*Rick Shine FAA
Professor, Sydney University*