

wildlife law to the 200-mile exclusive economic zone. However, some federal legal decisions have restricted these laws to the 12-nautical-mile territorial zone. Offshore pollution monitoring flights are made by Transport Canada and by the Canadian Coastguard; the Department of National Defence and Department of Fisheries and Oceans are encouraged as well. Although the Canadian Shipping Act, the Migratory Bird Convention Act, the Canadian Environmental Protection Act and the Fisheries Act deal with oil pollution issues, suspected ships have rarely been turned back to a Canadian port for further investigations. Only the Migratory Bird Convention Act protects migratory seabirds from oil-related offences; but so far, only five vessels were charged. Knowing that approximately 2500 offshore oil spills are reported per year in Atlantic Canada, one gets quickly an idea of the issue. Obviously, pollution pays ... and as the report convincingly shows, the polluter gets almost awarded due to the competitive business advantage when not punished. Atlantic Canada is simply the cheapest place to dump bilge oil on the Great Circle route between North Atlantic and Europe. No doubt, the enforcement needs to be stronger in Canada, higher fines are required, and on board disposal facilities, increased monitoring, increased awareness and other measures are necessary. Even the European Union uses RADARSAT (SAR), a satellite image product from Canada, in order to trace and to monitor offshore oil pollution.

As Wiese's WWF report presents, Canada does not really have a national standard for an EDA (Environmental Damage Assessment). It is surprising that the exact number on "how many seabirds are really oiled" is hard to get and not available with high accuracy; accurate numbers seem not to play a role in the legal decision and discussion even! Perhaps court fines should consider a price per oiled seabird, and thus could change the current dilemma?!

This document reports that approximately 40 million pelagic seabirds reside during the year on the Grand Banks off Newfoundland. However, some of the presented numbers are puzzling and might cause

confusion for the informed Naturalist. It was reported earlier that over 200 000 Thick-billed murre are killed annually during the Murre hunt off Newfoundland. Now, chronic oil pollution is even added, but breeding Thick-billed Murres in the Canadian Arctic – the seabird species believed to be affected the most by chronic oil pollution – does not show a significantly declining population trend at all. Are Canadian seabirds sensitive indicators of the marine environment? Or are birds from other areas in the world and being present in Canadian waters, such as Greenland's Thick-billed Murres and Manx Shearwaters from England (both populations are known to be declining), better indicators? More research is required. Some other confusion might arise from the presented population numbers of wintering Eastern Harlequin Ducks, and that no direct relationship is known to exist between the amount of oil spilled and the numbers of seabirds killed. For my taste, some key references such as J. Burger's 1997 book on "Oil Spills" would have been a great addition. Of interest might also be the seabird oil pollution work in British Columbia by A. Burger, the Festucca Oil Spill Trust Fund and the Provincial Government's work. Globally speaking, it might be interesting for the reader to learn how Norway, a country with major offshore oil resources and with a very long coastline and huge seabird resources, deals with chronic oil pollution! Perhaps it would also be informative to have a list of all known oil vessel accidents in Canadian waters.

However, this informative report provides many important details and baseline information on the slightly overlooked but very relevant chronic oil pollution topic in the offshore waters of Eastern Canada. It focuses on seabirds; but many other species and the entire ecosystem suffer from oil pollution, too. "Chronic oil pollution is an international problem whose solution requires national and international effort".

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Spiders of Australia: An Introduction to their Classification, Biology and Distribution

By T. J. Hawkeswood, 2003. Pensoft Publishers, Geo Milev Street 13a, 1111 Sofia, Bulgaria. 264 pages. EURO 19.95 paper, 34.95 cloth

The past few decades have seen the production of a considerable number of landmark volumes on the natural history of regional spider faunas. Volumes by Dippenaar-Schoeman and Jocqué (1997), Song *et al.* (1999), Ubick *et al.* (2005) among others have set a high standard for concise, useful, in-depth coverage of regional faunas. With this in mind, I readily agreed to review *Spiders of Australia: an Introduction to their Classification, Biology and Distribution*.

I tried, I really did try, to find good things to say about this book. Certainly the dust cover of this volume, with its border of 24 colour images of various Australian spiders surrounding an anthropomorphic photograph of the front end of an immature male deinopid spider (looking as charmingly pugilistic as only an immature male can), promises an interesting and engaging piece of work. Unfortunately, as they say, you can't judge a book by its cover.

The content of *Spiders of Australia* falls far short of fulfilling the promise of either the cover or title. Interesting observations on the natural history of a variety

of relatively common and fairly well known spiders from Oz are marred by errors of fact and/or presentation on nearly every page. One is left with the impression that the well-meaning author has little professional knowledge of spiders and that the text never received professional content or copy editing.

This volume commences with a brief preface followed by several short introductory chapters covering spider morphology, natural history, classification and other general topics. Anyone with more than basic knowledge of spiders will find much to criticize or question within these pages. For instance, we are presented with the following dubious "facts."

- Spiders are important in controlling mosquito populations. In reality, fish, birds and various other organisms are vastly more important for mosquito control than are spiders.
- There are about 20 000 and 1800 spider species in the world and Australia respectively. The actual figures are closer to 40 000 (Platnick 2006) and 3300 (R. J. Raven, Queensland Museum, personal communications).
- Male and female spider genitalia fit together like a "lock and key mechanism." Wrong! Spider genitalia are one of the best known examples of rapid evolution likely resulting from sexual selection by female choice (Eberhard 1985).
- Palps of male spiders are "hollowed out" to hold sperm. An insult to male spiders everywhere! Mature male spiders are unique in (and defined by) their possession of palps bizarrely modified into complex sperm storage and transfer organs.
- A considerable number of Australian spiders pose "a serious threat to humans in Australia." Wrong! Among Australian spiders, only widows (*Latrodectus hasselti*) and a couple of funnel-web spiders (*Atrax* and *Hadronyche* spp.) pose any threat and true bites from these spiders are exceedingly rare (Isbister 2004, Isbister and Gray 2002). Australians are better off spending their paranoia time worrying about being hit by lightning.

Things don't get much better in the subsequent chapter ("Species described in this book") which forms the bulk of the text. Approximately 125 pages discuss 141 species in 29 families (or about 4 and a little more than 30% of the currently recognized species and families represented in Oz). Each family section lists the number of Australian and world species in the family and describes the general appearance, life history, and behaviour of one or more exemplar species. Unfortunately, the families are organized in a confusing quasi-phylogenetic manner, the species statistics are often erroneous, the descriptive information is largely useless for identification purposes, other information is often misleading or erroneous, and the vast majority of the unique and truly wonderful Oz spider fauna is ignored.

For instance, consider the author's treatment of the family Pholcidae. Australian genera and species are listed as 9 and "about 12" and the cosmopolitan *Pholcus phalangioides* is the token exemplar. The author references the most recent taxonomic work summarizing the Oz pholcid fauna (Huber 2001) but missed the fact that this work records 14 genera and nearly 80 species (and still counting). Well, okay, I sometimes have trouble with math, too. But in such a book I expect to be introduced to truly Australian pholcids instead of to an already well-known species found throughout the world. The section is further marred with factual and typographical errors. Similar problems surface in the treatment of other families. As well, erroneous medical "information" is regularly trundled forward – e.g. under Lamponidae, almost entirely an Australian family, discussion of the life and times of *Queenvic piccadilly* would be vastly preferable to reiteration of the discredited medical mythology surrounding *Lampona cylindrata*.

A short glossary of slightly less than 100 entries follows the "Species described ..." chapter. Explanations are generally clear but one wonders why such terms as anus, bark, and solitary warrant entries but mygalomorph does not. Nearly 30 pages of references conclude the text. There is an annotated section on general texts on Australian spiders and fairly complete and up-to-date scientific references are presented for each family. In spite of considerable repetition [e.g. Rainbow (1911) appears no less than 29 times] the references are easily the most useful part of the entire book.

The book finishes with a set of 139 photographic plates and 27 paintings of the main species discussed in the text, arranged 3 to a page. Some of the photographs are quite nice illustrations (e.g., plate 5 *Deinopis subrufa*, the cover boy mentioned earlier, and plate 16 *Lycosa bicolor*, also featured on the cover as one of the border images). The paintings are without exception unexceptional – two-dimensional, flatly coloured, and crudely rendered.

In summary, if you are looking for an interesting decorative wall piece, frame the cover and recycle the rest (maybe keep the references section). If seriously curious about general spider biology and classification, spend your money on Levi and Levi (1968) or Foelix (1996). For specific information on the spiders of Oz, buy Murphy and Murphy's (2000) treatise on southeast Asian spiders – it does a much better job of introducing the fauna than does *Spiders of Australia*.

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Annotated Bibliography of Quaternary Vertebrates of Northern North America With Radiocarbon Dates

Edited by C. R. Harington. 2005. University of Toronto Press, 10 St. Mary Street Suite 700, Toronto, Ontario M5T 1R5 Canada. 539 pages. \$150.00 CDN.

Bibliographies have proven an essential tool in any historical based research, yet are often underrated. In paleontology, specifically vertebrate paleontology, many have relied upon *Bibliography of Fossil Vertebrates Exclusive of North America 1509-1927* (Romer et al., 1962), and *Bibliography of Fossil Vertebrates* (BFV) (produced by the Society of Vertebrate Paleontology), and their earlier versions. The BFV, however, is no longer updated. Taxon-oriented bibliographies are also produced, like Crossman and Casselman's (1987) annotated bibliography of *Esox lucius*; and theme oriented bibliographies like Tokaryk et al. (1992) annotated bibliography of the Cretaceous-Tertiary extinction event. Without continued maintenance, these, however, are quickly dated.

Harington's *Annotated Bibliography of Quaternary Vertebrates of Northern North America – with Radiocarbon Dates* is a recent contribution to the stacks of paleontological resources. This volume contains 1347 citations (in 328 pages) from 1748 to 2000, containing descriptions or notices of fauna from 2 million to 5000 years ago. The region is inclusive of Alaska, Greenland, and Canada.

The annotation is of sufficient depth when warranted and the reader will note the brevity given to many of the pre-20th century articles as these themselves lack sufficient depth. The indexing, always a vital tool in

bibliographic construction, is subdivided into five sections: scientific names; common names; localities and stratigraphic terms; personal names and institutions; and of a general index. This latter section, always constrained by the subjective nature of its composer, can be relied upon for consistency simply for the fact of Harington's long time standing in Quaternary paleontological research, which is beyond reproach.

The facet that will make Harington's work not only stand out but retain a longer shelf life is the 138 additional pages devoted to radiocarbon dates associated with taxa. This extended table, all the more important in Quaternary paleontology than in any other paleontological subdivision, includes institutions responsible for the results, and published references. Collectively, this volume will provide a long lasting reference for students and professionals of Quaternary life in North America.

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White as a Ghost: Winter Ticks and Moose

By Bill Samuel. 2004. Federation of Alberta Naturalists, 11759 – Groat Road, Edmonton, Alberta, T5M 3K6 Canada. 100 pages. \$ 24.95.

Parasites are a fascinating study. They are able to adapt and evolve in order to survive in or on their hosts, but usually will not kill their hosts. Books about parasites are not often found in a public library, but *White as a Ghost* would be a good addition. It has a large format, 28 cm × 23 cm, with excellent photographs illus-

trating the text, but is not a coffee table book. It is intended to give trappers, Fish and Wildlife officers, hunters, farmers and biologists the knowledge they need to understand and recognize the life cycle of the tick which causes Ghost Moose: *Dermacentor albipictus*. Wilderness campers, more than the general public, are most likely to come across Ghost Moose.

Dr. Samuel is a parasitologist who studies parasites of deer, Elk and Moose and in particular the tick which causes Ghost Moose. The tick is widespread



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