interesting aspects of ecology, evolution, and physiology the book could have been of great value for both a scientific and a general audience. For example, a good description of a compound eye is presented, but it would have been interesting to inform readers as to the advantage of such a vision system (movement is readily detected).

Quite a few facts could have been corrected, or at least described more precisely; the following are just examples. Some factual errors include the deep-water crab, *Bythograea thermydron*, is listed in Table 2 as a galatheid, when it is a Brachyuran. As they develop, Dungeness crab eggs do not change from white to pink to red. Their eggs have an orange yolk, graying with embryogenesis. Oviposition is described in such a colloquial manner that it verges on misleading. Crabs do not have "different techniques for extruding eggs" (p. 69); rather, crabs oviposit their eggs rapidly, the gelatinous matrix rather marvelously hardening as a membrane around each egg, all being connected to stalks that adhere to the pleopods but not to other eggs. This is a distinctive method of reproduction and merits some thought since the process is still little studied. Crab larvae do not "float"; both the zoea and megalops are active swimmers. A crustacean cuticle has four layers, not three; the membranous layer was omitted. Ecdysial sutures are not "weak seams," they are selectively decalcified as ecdysis approaches. The postmolt is not "recovering from [the] molt" (p. 79), but rather a dynamic process of calcification that can last for weeks in a large crab. *Carcinonemertes* ribbon worms are not parasites. They feed on individuals (crab embryos), so they are egg predators.

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A CHECKLIST OF NORTH AMERICAN AMPHIBIANS AND REPTILES: THE UNITED STATES AND CANADA. *Volume 1: Amphibians. Seventh Edition.*

By M. J. Fouquette Jr. and Alain Dubois. Bloomington (Indiana): Xlibris. $34.99 (hardcover); $23.99 (paper). 613 p.; index to generic and species names and index to common names. ISBN: 978-1-4931-7034-0 (hc); 978-1-4931-7035-7 (pb). 2014.

As someone involved in the "business" of names, therefore nomenclature and taxonomy, especially of North American amphibians and reptiles, I find Fouquette and Dubois' historical placement of their checklist unusual. They claim that the last list was Schmidt in 1953. However, since Schmidt (1953. *A Check List of North American Amphibians and Reptiles*. Sixth Edition. Chicago (IL): American Society of Ichthyologists and Herpetologists) there have been eight such lists for North American amphibians and reptiles (north of Mexico), the first in 1956 and the latest in 2012. The authors' claim that this is the seventh edition (therefore the direct descendant of the Schmidt volume) requires ignoring a long history of work. Schmidt (1953) was the first list sanctioned by a professional herpetological society (American Society of Ichthyologists and Herpetologists), as have all of the rest since, with the most recent list sanctioned by seven North American professional societies, whereas Fouquette and Dubois' work is not sanctioned by any. For a history of these names lists see Crother's *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding* (2012. Seventh Edition. Society for the Study of Amphibians and Reptiles Herpetological Circular 39:1–3).

Typical of such volumes, there is a time lag in the information presented. For example, they claim that the Center for North American Amphibians and Reptiles (CNAH) hosts a website of names that differs from a competing list (Crother 2012), however, CNAH officially supports Crother (2012) and the list it hosts is Crother (2012). The treatment of these lists as different leads to confusion in the volume for some common names because the archaic CNAH name is given (as C&T) with the name in Crother (shown as SECSN).

With regard to the species and subspecies recognized, it is difficult to say why Fouquette and Dubois frequently differ from current lists (e.g., Crother 2012; D. R. Frost. 2014. *Amphibian Species of the World 6.0, an Online Reference*. New York: American Museum of Natural History. http://research.amnh.org/herpetology/amphibia/index.html). Perhaps there are instances of time lag, but is the unusual move of *Pseudotriton montanus* to *Gyrinophilus* the result of missing recent phylogenetics, or is it novel interpretation, or disregard of the published recommendation? Subspecies recognition sometimes vary considerably between the currently accepted lists and this volume and *Gyrinophilus* is a good example.

The higher taxonomic names used also will get the attention of readers interested in such a volume. Are the names Imperfectibranchia or Pseudosauria more useful than other available names? Other such resurrected and novel names are sprinkled throughout. The authors employ subgenera to try straddle the fence between the Frost et al. (2006. *Bulletin of the American Museum of Natural History* 297:1–370) classification and the conservative and arguably less informative genera of Hillis and others (e.g., G. B. Pauley et al. 2009. *Herpetologica* 65:115–128) by using subgenera. At the outset of the volume the authors argue for nomenclatural accu-

racy over stability, a sentiment that I am in complete agreement with (B. I. Crother. 2009. *Herpetologica* 65:129–135). However, subgenera, in my opinion, do not solve the problem because they are rarely used, poorly known, and so not informative. What species are in the subgenus *Pycnacris*? I appreciate the attempt to recognize monophyletic groups, but such additions are not necessary and muddle instead of clarify. Although stability is illusory, we should at least attempt consistency, and adding lots of new subgenera does not help.

The species accounts are valuable because of the given synonymies. However, there are scattered typographical errors in the species accounts, some of which will have to be recognized in subsequent synonymies. For example, *Gyrinophilus porphyriticus* is also spelled as *porphoriticus* for some subspecies.

Finally, this is a required volume for those interested in the nomenclature and taxonomy of North American amphibians. There are indexes for genera, species, and common names. Is it a terrific addition to the current lists? I will let the users decide for themselves.

Postscript: The coauthor M. J. Fouquette Jr. recently died and his scientific contributions are worthy of note. He had a long and distinguished career and published on a wide variety of topics in herepetology, including ecology and systematics, and perhaps is most well known for his work on frog vocalizations and sperm morphology. He will be missed in the herpetological community.

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Reptiles and Amphibians of Australia. *Seventh Edition.*

By Harold G. Cogger. Collingwood (Australia): CSIRO Publishing. AU $150.00. xxx + 1033 p.; ill.; index of scientific names and general terms and index of common names. ISBN: 978-0-643-10035-0. 2014.

Crocodile. *Animal.*

By Dan Wylie. London (United Kingdom): Reaktion Books. $19.95 (paper). 222 p.; ill.; index. ISBN: 978-1-178023-087-0. 2013.

This volume is part of the Animal series of books. *Crocodile* is the first volume in this series I have read, and I look forward to reading more. Crocodilians are arguably the most widely distributed group of terrestrial animals that occasionally predate on humans. Not surprisingly, this has made crocodiles ubiquitous in human culture throughout history. From revered gods to feared foes to coveted fashion accessories, crocodiles have filled nearly every niche in the human psyche. Wylie takes advantage of this and uses the extant species of crocodilians found around the globe as a unique conduit into human history, culture, and psychology.

In the first chapter, the author provides an overview of the diversity, evolution, and biology of crocodilians and their ancestors. He creatively surveys the basic biology of the crocodile in the order of the anatomical structures one would encounter if unlucky enough to become its prey. Throughout the first chapter, Wylie interleaves the diversity of human perceptions of crocodiles, foreshadowing subsequent chapters that explore in detail the cultural roles of crocodiles throughout human history.

The chapters that follow are organized by geography, visiting each continent, starting in Africa and working westward. At the beginning of each chapter, Wylie provides a brief overview of the natural history and conservation status of each species within the region. He then delves into the long history of crocodiles in the culture, religion, and psychology of the people of the region.

The author has clearly done his research and, barring some minor errors, presents a very accurate overview of crocodilian biology and diversity. Importantly, he avoids the all-too-common cliché of overglorifying their predatory prowess or danger to humans. In general, however, the biology of crocodiles takes a back seat to the real emphasis of the book: the interplay of crocodiles and humans through time and space. The author's research into this subject is impressive, referencing works as diverse as ancient Egyptian papyrus to YouTube.

Some common themes emerge from Wylie's work. Ancient animistic societies generally emphasized respect, reverence, and coexistence with crocodilians. The spread of monotheism and imperialism often resulted in fear, misunderstanding, and hatred of crocodiles. Inevitably, industrialization lead to economical exploitation of crocodilian species. Finally, we reach the present when, ironically, we fear for crocodiles from a conservation point of view, and are beginning to appreciate their important role in many ecosystems.

Crocodile will be enjoyed by a diverse readership. Anyone interested in crocodilians, human history (from a unique perspective), or human interactions with biodiversity will enjoy this book.

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