

BOOK REVIEWS

Ichthyology & Herpetology 112, No. 2, 2024, 309–313

Health and Welfare of Captive Reptiles. Second edition.

C. Warwick, P. C. Arena, and G. M. Burghardt (Eds.). 2023. Springer Nature Press. ISBN 9783030860110. 638 p. \$249.99 (hardcover).—As someone who studies reptiles, and who also engages in reptile keeping as a hobby, I have noticed a void between academic herpetology and reptile keeping. The second edition of *Health and Welfare of Captive Reptiles* (Warwick et al., 2001) is an example of how we can bridge this gulf. This book is an indispensable resource for any herpetologist, casual reptile keeper, zoo personnel, or herpetoculturist, not only because of the impressive breadth and depth of knowledge assembled, but because of *how* this book frames reptiles. Rather than being seen as mere objects, the well-being of reptiles, as well as their agentive properties—their ability to exert influence on their owners, rather than as passive objects we collect—is recognized. This book “... offers concepts, principles, and applied information that relates to the well-being of reptiles... the book is about the biology of reptile welfare and meeting biological needs.” (p. 1). This volume delivers on these objectives.

The authors of this volume have expertise in captive-animal welfare (Clifford), digestive physiology (Arena), and behavior and cognition (Burghardt). Collectively, they have produced a wealth of publications on reptile care and biology. The second edition has 19 chapters spanning anatomy, sensory systems, stress, behavior, cognition, physiology, ontogeny, enrichment, effects of noise and light, ethologically informed design, spatial and thermal factors, nutrition, enclosure design, species suitability for keeping, record keeping, arbitrary husbandry practices and misconception, and miscellaneous factors, with the last two chapters relevant to herpetoculture. New subject matter in the second edition includes sensory systems, social behavior, reptile cognition, and enrichment. The authors also provide a more in-depth treatment of other topics, such as the effects of noise, light, and temperature. The chapters are prefaced with an abstract and keywords. After an Introduction section, each chapter charts an organized deep dive into the subject matter and ends with a concluding section, which contextualizes the information and its application to captive reptiles. Thereafter, references provide a thorough entry point into the relevant aspects of reptile biology. The editors are commended for assembling an expert array of international contributors who have deftly balanced the breadth and depth of content. For example, in the chapter on Enrichment, the authors propose a comprehensive flow chart and offer concrete examples (e.g., a keeper could offer multiple heated spots within an enclosure, so the animal is not constrained to a single basking area). In the chapter on Spatial/Thermal Factors, the authors list home-range estimates for various reptile species and use this evidence to argue against keeping animals in

racks of small plastic shoeboxes—a practice commonly used by herpetoculturists who breed snakes.

The strengths of *Health and Welfare of Captive Reptiles, Second edition* include its innovative ideas. Animals are increasingly seen as having agency and being more sophisticated than previously thought. The field of anthrozoology, for example, has emerged to specifically study human–animal relations and even the American Psychological Association has a Human–Animal Interaction section. Concepts like play, dreaming, and enrichment were not considered in prior guides on the captive care of research reptiles (Pough, 1991; Beaupré et al., 2004). The debate of the role of play among animals is an area of academic discourse (Burghardt, 2005; Dinets, 2015). Thus, the inclusion of play, learning, and even dreaming are forward-thinking topics and welcome additions to this volume that will surely provoke researchers to consider reptiles in a new light.

Health and Captive Welfare of Reptiles, Second edition is a great resource for intermediate to advanced reptile keeping. This book is easily accessible to those with a general biology background such as herpetologists, herpetoculturists, zoo personnel, veterinarians, and others caring for live reptiles. It may even appeal to pet store employees, and members of institutional animal care and use committees would benefit from updating their perceptions and knowledge of the needs of captive reptiles. The thoughtful husbandry of research reptiles can minimize effects of captivity on animal behavior and/or performance. Enthusiasts who keep many reptiles, such as herpetoculturists, will find it a useful guide for designing enclosures that allow captive animals to thrive, rather than simply exist. One downside is the high price of the hardcover edition, which will make it inaccessible to most students; however, a digital version may be available through their institution’s library. At more than 600 pages, the digital version would certainly be easier to transport! Recognizing that many herpetologically minded members of ASIH are also reptile keepers (for research and/or pets), this second edition of Warwick et al. will be a useful guide to help us attend to the health and welfare of our animals.

LITERATURE CITED

- Beaupré, S. J., E. R. Jacobson, H. B. Lillywhite, and K. Zamudio. 2004. Guidelines for Use of Live Amphibians and Reptiles in Field and Laboratory Research. Second edition. American Society of Ichthyologists and Herpetologists. Available at: https://static1.squarespace.com/static/618bf11a71fcd5398996eda/t/62506ab46b41e01343215dd7/1649437365012/IACUC_GuidelinesforUseofAmphibiansReptiles2004.pdf
- Burghardt, G. M. 2005. The Genesis of Animal Play: Testing the Limits. MIT Press, Cambridge, Massachusetts.
- Dinets, V. 2015. Play behavior in crocodilians. *Animal Behavior and Cognition* 2:49–55.

Pough, F. H. 1991. Recommendations for the care of amphibians and reptiles in academic institutions. *Institute for Laboratory Animal Research* 33:S1–S21.

Warwick, C., F. L. Frye, and J. B. Murphy (Eds.). 2001. *Health and Welfare of Captive Reptiles*. Springer Science, Dordrecht, Netherlands.

Stephen M. Lochetto, *Program in American Studies, Pennsylvania State University, Harrisburg, Harrisburg, Pennsylvania 17057; Email: sml6433@psu.edu.*

A Paradise for Reptiles. Lizards, Snakes, and Giant Tortoises of the Galápagos Islands. Volume 1. Tortoises, Geckos, and Snakes. R. H. Rothman. 2024. Rochester Institute of Technology (RIT) Press. ISBN 97819393125897. 184 p. \$49.95 (paperback).—This cornucopia of information on the Galápagos tortoises, geckos, and snakes is enigmatic in its specific goals. Its preface details the author's first and subsequent visits (32 in total) to the Galápagos and his fascination with its geology and the biology of its reptilian inhabitants. Most of those visits were with students from his presumably annual course at RIT. It is these student tours and their preceding classroom lectures that I assume led to his dive into the primary literature of the reptiles of the Galápagos and subsequently encouraged him to summarize the voluminous literature on these islands in this book. As an aside, the iguanid (*Amblyrhynchus* and *Conolophus*) and tropidurid (*Microlophus*) lizards and sea turtles are not included in this volume. A comment in Chapter 1 indicates that the latter lizard groups will be the focus of a second volume.

This book consists of six chapters and a references section (primarily literature cited). The writing is clear, accurate, and non-technical in the sense of a non-jargon presentation. Chapter 1. The Most Striking Features of the These Islands (11 pages) contains a history of the discovery of the islands and the exploitation of the tortoises. Chapter 2. A Congenial Habitation (12 pages) summarizes the geological history of the islands. Chapter 3. Giant Tortoises: *Chelonoidis* (99 pages) accounts for more than half the pages in the book and provides a broad coverage of topics on the biology of the tortoises from their taxonomy (Rothman recognizes the different populations as distinct species) through their behavior, reproduction, physiology, etc. (knowledge current through 2021). Chapter 4. Geckos: *Phyllodactylus* (11 pages) focuses on their genetic relationships, briefly touches on their natural history, and their possible displacement (extinction) by the introduced gecko species. Chapter 5. Galápagos Racer Snakes (12 pages) similarly focuses on genetic relationships and nomenclature, and briefly on their natural history. Chapter 6. Afterword (five pages) contains brief comments on changing scientific names, incomplete knowledge of the biology of the geckos and snakes, reptile colonization of the islands, and the necessity of continuing conservation efforts for all Galápagos reptiles. The References section (26 pages) is largely (if not exclusively) literature cited, and an Index (six pages) provides a combined subject and name index.

A Paradise for Reptiles offers a wealth of illustrations (figures), most of which are photographs, all sharply focused and well produced. The figures from prior publications are clearly reprinted as well. In-text tables are clear, and data are not crowded, and most of the geographic and geological figures are in color. Kudos to the author for providing good

copy and the production designer and printer for their layout of these sharp and well-placed images.

As I noted in my initial remarks, I could not identify Rothman's intended audience and that uncertainty remains, although I suspect that most of the topics covered were ones that he presented to his RIT students. Anyone wishing a general introduction to the Galápagos Islands, their geologic and human histories, and updated accounts of their reptiles (exclusive of the iguanian lizards and sea turtles) will find that information here. Similarly, this book is a better option for those desiring a less technical presentation of the islands' tortoises than that offered by Gibbs et al. (2021).

LITERATURE CITED

Gibbs, J. P., L. J. Cayot, and W. Tapia Aguilera (Eds.). 2021. *Galapagos Giant Tortoises*. Academic Press, London.

George R. Zug, *Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20013-7012; Email: zugg@si.edu.*

Women in Herpetology: 50 Stories from Around the World. U. Arfin, I. W. C. Solis, and S. Poo (Eds.). 2023. *Global Women in Herpetology*. ISBN 9798988585909. 323 p. \$27.99.—It is not very often that I get to read a well-written autobiography of a field biologist, but when I do, the adventurous stories of the forests and wildlife win me over instantly. The lives of many herpetologists are full of daring tales of meeting and handling mysterious wild creatures that elicit fear and disgust in most people. For most of us, being a herpetologist or an ichthyologist is more than just a hobby. It is a lifelong commitment that is often rife with battles. However, just like other professions (De Welde and Laursen, 2011; Reilly and Bauer, 2015; Rock et al., 2021), women who seek careers in herpetology have additional hurdles to jump through to accomplish their goals. These challenges were largely overlooked for generations, and fear prevented most of these issues from being voiced except for a brave few. The editors of this book—three remarkable women who have conducted outstanding research in herpetology and have overcome these challenges themselves—have compiled short autobiographies of 50 successful women herpetologists from around the world. In doing so, they have created both a platform and a resource for early career women to be heard and inspired.

This book organizes the autobiographies by continent, thus grouping the stories into six sections based on the geographic origin of each author. This emphasizes where each participant was born and raised, irrespective of their current location of work or study. Each section begins with an illustration of the continent, along with the names and illustrated picture icons of each author pointing to their home country on the map. The text is accessible to a wide audience, including those lacking a scientific background. The catchy titles and vibrant illustrations of each author and her study species at the beginning of each story captivates the reader's imagination, especially the ones featuring unfamiliar taxa. The authors represent numerous backgrounds and career stages, which highlights the diversity and inclusivity of the book. Each story is uniquely structured with a

different writing style, enhancing the book's appeal. The authors have clearly embraced the opportunity to be creative and empowered to use their unique voices.

According to the editors, the book's aim was to establish a platform for celebrating the accomplishments of courageous women who have made substantial contributions to the field of herpetology, while raising awareness of lingering gender-inequality issues in the field. The authors skillfully navigate this delicate balance, creating narratives that are empowering without shying away from addressing systemic issues. Among the challenges highlighted, gender bias and cultural and religious stereotypes emerged as the most prevalent. These are also likely the root causes of most other issues noted by the authors, including underrepresentation, limited networking opportunities, biases in hiring and promotion, lack of role models, and work-life balance.

Currently, most professions have at least some representation of women. However, in a recent publication like this book, it was intriguing to discover that many authors were the sole woman in their field teams or proudly claimed to be the first women to study reptiles and amphibians in their region or country. As a millennial woman herpetologist who has had similar experiences, I am not hesitant to say that the stories told in this book are authentic portrayals of the many challenges that have contributed to the underrepresentation of women in herpetology. Being rejected from herping groups many times, simply because I am a woman, has made the inequity of gender bias in our field personal for me.

Fear is one of the most prominent reasons why amphibians and reptiles are killed, potentially resulting in an erosion of their population sizes. With education, the fear toward most animals can be replaced with reverence once we learn more about them and begin to appreciate their true beauty, even those that are truly dangerous. Herpetologists all over the world make great efforts to bring awareness and educate communities to coexist with these creatures. Few have had the privilege of being raised by naturalist parents who let their children wander in nature and bring strange-looking animals into their homes to keep as pets. For those of us who had to discover our own path to appreciate nature, the journey was undoubtedly more challenging. So, I was not surprised by how many of these terrific herpetologists acknowledged the fact that they initially feared these animals, yet eventually came to love them and commit their lives to saving them from extinction.

As rewarding as a career as a herpetologist can be to those who are passionate about reptiles and amphibians, it also carries inherent risks. Many of the authors also noted the numerous health risks associated with the profession. For herpetologists specializing in venomous species or conducting fieldwork in regions inhabited by venomous snakes, the potential for life-threatening situations is a genuine concern. Specific anti-venoms are lacking for most venomous snakes, and even when these exist, they may not be available in healthcare facilities, particularly in remote regions. Further, exposure to zoonotic diseases, such as Lyme disease and leptospirosis, is not uncommon among field biologists. Operating in remote or challenging environments often involves physical hazards such as rough terrain, extreme weather, and potentially dangerous wildlife, which are common themes in the book.

Notable features of this book are the authors' candid narratives detailing their development from youths filled with

curiosity to eminent figures in their respective fields. These personal journeys were rarely smooth or as originally planned, but they ultimately culminated in highly fulfilling experiences that the authors would not substitute. As Jeanne Tarrant from South Africa aptly expressed, "... it can leave one feeling very despondent at the state of the world and feeling that one is fighting a losing battle ... but it is also an incredibly rewarding career" (p. 41). As such, these narratives will serve as invaluable models for aspiring herpetologists, offering compelling examples and encouragement to persist in their pursuits, while disregarding discouraging experiences. Another essential takeaway for young herpetologists is that despite the challenges, including inequalities in opportunity, there are mentors and allies who will support you and guide you throughout your journey. While recounting their personal journeys, the authors also provide insights into the sources and inspirations that fueled their passion and drive. The stories collectively underscore the importance of resilience, mentorship, and a supportive community in navigating and overcoming the obstacles inherent in the field.

The book achieves its objective by not only addressing the concerns initially outlined by the editors, but also substantiating these concerns with numerous real-life examples from the authors' own experiences. Importantly, the inclusion of contact information for all authors at the end of each story adds practical value, serving as a useful resource for students and others seeking careers in herpetological research, mentors, and labs to which they might apply. Additionally, it provides valuable connections for early career herpetologists exploring new areas within the field or those seeking to broaden their peer networks. While the book is worth its price for the collection of remarkable biographies, the price tag may be a bit out of reach for some students, who would likely benefit most from its contents. Perhaps an eBook or audiobook at a more affordable price would better serve a student audience.

Every page I turned and every story I absorbed in this book resonated with me in profound ways, prompting a reflection of my own journey as a female herpetologist from Southeast Asia. These narratives reinforced the significance of persevering and never giving up. In my opinion, this is the most valuable takeaway from the book, and there are undoubtedly many girls and women who need to hear and draw inspiration from these stories. These lessons are important not just for the scientific community, but I would especially recommend this book to early career women in herpetology and other STEM fields. It will inspire them to overcome obstacles in the pursuit of a successful career in science. Reading this book elicited immense joy, with each story leaving a lasting impact. Gratitude is extended to the editors for filling a crucial gap and creating such a remarkable production. Thanks are also expressed to the artists who created the wonderful illustrations that added color to these stories. Lastly, my heartfelt gratitude and deep appreciation goes to the courageous authors who openly shared their personal and inspiring stories, which will undoubtedly resonate with future generations of women herpetologists.

LITERATURE CITED

De Welde, K., and S. Laursen. 2011. The glass obstacle course: informal and formal barriers for women Ph.D.

students in STEM fields. *International Journal of Gender, Science and Technology* 3:571–595.

Reilly, E. C., and Q. J. Bauer (Eds.). 2015. *Women Leading Education across the Continents: Overcoming the Barriers*. Rowman & Littlefield, Lanham, Maryland.

Rock, K. N., I. N. Barnes, M. S. Deyski, K. A. Glynn, B. N. Milstead, M. E. Rottenborn, N. S. Andre, A. Dekhtyar, O. D. Dekhtyar, and E. N. Taylor. 2021. Quantifying the gender gap in authorship in herpetology. *Herpetologica* 77:1–13.

Himidu H. Pitigala Arachchilage, *Department of Integrative Biology, Oklahoma State University, Stillwater, Oklahoma 74078; Email: hpitiga@okstate.edu.*

Ichthyology in Context (1550–1880). Paul J. Smith and Florike Egmond (Eds.). 2024. Brill. *Intersections (Interdisciplinary Studies in Early Modern Culture)* vol. 87. ISBN 978-90-04-68117-0. xxxiii + 741 p. \$239 (hardcover) or free download at <https://brill.com/edcollbook-oa/title/68654>.—Despite its title and Library of Congress call number (QL614.8.I24), *Ichthyology in Context (1550–1880)* isn't really a book for ichthyologists. It's a book for historians who use ichthyology as a case study in how a branch of science emerges and takes shape within a broader cultural context. In this regard, do not expect a traditional ichthyological history (i.e., an overview of how the study of fishes progressed from Aristotle through Cuvier and beyond). Instead, the book looks beyond the familiar players and developments in ichthyology to include the following: the role of non-scientists (e.g., fishers, travelers) in producing knowledge, how illustrative styles and techniques influenced natural history, the role of art and literature in explaining the natural world, the importance of cabinets of curiosity and other private collections before the advent of museums, and the exchange of knowledge between Europe and non-western countries. And since the term “fish” in the 16th and 17th centuries included all aquatic animals, five of the book's 24 essays (not counting the introduction) discuss whales, seals, nautiluses, even sea monsters. As a fish nerd not trained in the ways of Early Modern Studies, maybe I'm not the best person to review such an inter- and transdisciplinary book. But I am qualified to answer this question: If the book isn't really for ichthyologists, should you still read it? Since the entire book is available for free online, my answer is: What's the harm in giving it a look?

A good place to start is the introduction by Paul J. Smith. Here you will find thumbnail summaries of each essay that should give you a good idea of whether it's worth reading or skimming, or safe to skip over based on your individual interests. You will also see that the essays are grouped into four sections: “Beginnings” (the early years, 1520–1550), “Depicting” (aquatic animals in art), “Fish and Society in Europe” (literature, fisheries, fish consumption, and medicine), and “Ichthyological Knowledge from Afar” (acquiring and communicating information about new species from non-European waters). In addition, Smith introduces the delightful term *aquatilia*, “a world with which man is familiar in his daily life, from fishing and the fish trade to the kitchen, but which at the same time remains unknown because it is hidden under water” (p. 4). *Aquatilia in Context* would have been a more accurate title for the volume.

Reviewing an anthology is tricky because the temptation is to give each entry its own mini-review. I will refrain from doing that. Instead, I will call attention to five essays I believe best represent the inclusion of “ichthyology” in the book's title. Then I will comment on some of the less fish-centric essays.

After Smith's introduction, the anthology gets off to a good start with Holger Funk's essay “Fish Images True to Life and a 16th-Century Controversy between Rondelet and Salviani.” Although accurate scientific illustrations of fishes and fish anatomy have long been an important tool in descriptive ichthyology, that hasn't always been the case. Funk, an independent scholar of early biological history, documents the advent of realistic, lifelike, or “true” illustrations of fishes in the 16th century rather than the fanciful or stylized images that had been the fashion of that time. (In this regard, Funk says, zoology lagged at least 20 years behind botany.) Funk's essay culminates in a detailed and entertaining account of a bitter feud between Guillaume Rondelet (1507–1566) and Hippolito Salviani (1514–1572), both of whom published lavishly illustrated fish books at around the same time. Rondelet accused Salviani of plagiarism regarding his fish images. Salviani defended himself by insulting Rondelet's work. Salviani called his images “superbly lifelike” whereas Rondelet's are “crude.” Apparently, “embarrassing bickering among educated men” (p. 61), as Funk described it, is not a recent invention!

The accuracy of Salviani's black-and-white copper engravings contrast starkly with the often fantastical images of Louis Renard (ca. 1678–1746). Ichthyologist Theodore W. Pietsch (one of only two ichthyologist contributors to the volume), along with Justin R. Hanisch, an ecologist and book collector, update Pietsch's introductory chapters from his 1995 annotated translation of Louis Renard's color plate book *Poissons, Ecrevisses et Crabes* (1719). Pietsch and Hanisch detail the discovery of another copy of Renard's book that escaped hand-coloring and was largely unknown until it was disassembled, colored, and sold leaf-by-leaf at an online auction in 2020–2021. If you don't own or have access to Pietsch's two-volume reprint, this essay will introduce you to Renard's curious work, which, despite its “ambiguous scientific merit” (p. 584), continues to fascinate fish (and fish-book) enthusiasts to this day. (Note: references to Pietsch's 1995 edition of Renard's book indicate it was published in “Baltimore, MA,” clearly a lapsus for “Baltimore, MD.”)

Johannes Müller's essay “Distance, Geography, and Anecdote in M. E. Bloch's *Natural History of Fishes*” examines how Marcus Elieser Bloch (1723–1799), who never left Europe, still managed to compile information about fishes from all over the world for his 12-volume *Naturgeschichte der ausländischen Fische* (1785–1795). As it turns out, much of what Bloch learned about “foreign” fishes came from anecdotal or second-hand sources (e.g., travel writing), and, as such, was often unreliable. For example, Bloch repeatedly conflated Java with Japan (Müller explains why). Unfortunately, Müller himself repeats a Blochian error. In his analysis of Bloch's fascination with the Electric Eel (*Electrophorus* spp.), Müller twice makes reference to “African and South American electric eels” (p. 625 and p. 626, f. 47) without acknowledging that *Electrophorus* do not occur in Africa. Bloch's claim that Electric Eels were encountered in the rivers of Senegal was based on his misinterpretation of a 1751

account of the Electric Catfish *Malapterurus* spp. (Finger and Piccolino, 2011)—precisely the kind of factual slip-up to which Bloch's reliance on anecdotal sources made him susceptible!

Martien J. P. van Oijen (the other ichthyologist featured in the book) is no stranger to historical ichthyology. His works on Bleeker (e.g., van Oijen et al., 2009; van Oijen and Loots, 2012) are essential contributions to our understanding of Bleeker's development as an ichthyologist. His essay "Early 'Dutch' Contributions to Japanese Ichthyology" is another excellent effort. Why single out the Dutch? Because from 1641 to 1854, the Dutch—and foreigners employed by the Dutch—were the only Europeans allowed to enter Nagasaki and trade with the Japanese. Through the Dutch, the Japanese learned about scientific developments in the western world, including Linnaean nomenclature. The exchange of information, however, wasn't exclusively one way. Van Oijen also describes how Bleeker used an obscure 1838 Japanese picture book on fishes to identify several species and record their catch localities. Van Oijen's contribution should serve as a model for similar studies documenting the introduction of European ichthyology to other non-western countries.

One essay suffers from a touch of ichthyological naïveté. This is hardly surprising considering that all but two of the book's 24 chapters were penned by non-ichthyologists, among them historians (of art, science, medicine, culture, environmental), literature professors (French, German, Nordic), linguists, an epistemologist, a bibliophile, an art curator, a chemical engineer, an animal ecologist, and a non-primate animal behaviorist. In her essay "The Afterlives of Fish Far from Home: (Mis)Representations in the Iconography of Preserved and Printed Pufferfish in 18th-Century Germany," Dorothee Fischer explores why early images of the White-spotted Pufferfish *Arothron hispidus* do not show its conspicuous white spots. "The forceful transfer from their natural habitat into human collection systems," she writes, "was accompanied by the permanent loss of crucial information about the 'real' fish" (p. 580). In other words, dead, preserved fishes often do not look like living ones. This revelation would come as no surprise to ichthyologists who work with color-faded museum specimens on a regular basis.

As for the 19 other essays in the volume, there's little or no ichthyology in them: lists of fish names in early German literature, Arctic sea monsters in the poetry of a Norwegian priest and fish merchant, and fishing legislation and water management in early modern Venice, to cite but three examples. This is not to denigrate their scholarly value, but to point out their potentially limited interest to ichthyologists.

With that said, I must admit that two of the most readable essays in the book only tangentially deal with fishes. Using newspaper articles, Paul J. Smith tracks how Dutch public opinion regarding seals radically changed in the 1800s. During the first half of the century, seals were hunted because they preyed on commercially important herring, plaice, and salmon. Then, in the second half of the century, seals became a symbol against unregulated hunting and animal

cruelty. Apparently, live-animal acts with trained seals helped change public sentiment. Once people got to see seals in person, and were entertained by them, they became more empathetic regarding their plight in the wild.

Rob Lenders's essay "The Historical Truth behind the 'Salmon-Servant' Myth" is a fine piece of historical detective work. Lenders examines anecdotes from the 12th into the 20th century that repeat the same basic scenario: lower-class workers (servants, farm hands, laborers, and the like) were so tired of being fed Atlantic Salmon *Salmo salar* by their employers that they stipulated in their contracts, or had it mandated by regional law, that they would *not* be fed the fish more than 2–3 times a week. The implicit assumption here is that Atlantic Salmon were so abundant and inexpensive that only the lower classes would eat them. However, Lenders demonstrates that these anecdotes are sheer myth, handed down from generation to generation. Atlantic Salmon were, in fact, already in decline and consumed largely by the upper, not lower, classes. Lenders compares the situation with Daniel Pauly's concept of the shifting baseline syndrome. "Thus, for centuries," Lenders writes, "people have been aware of the decline in salmon stocks, but they did not realise that their 'reference' was a reflection of already decimated salmon stocks" (p. 470).

To return to my question: Should ichthyologists read this book? Will they find value in its content? That depends on the ichthyologist. I know many fish enthusiasts who collect fish art, antiquarian fish books, who are curious about the history of natural history, and are more than happy to pursue fish-themed topics beyond the field, lab or aquarium. For them, *Ichthyology in Context*, or at least parts of it, may inform and delight. But I also suspect that many ichthyologists would find that too much of the book strays too far afield. Just because it's in the QL600 section of the library doesn't mean it shouldn't be shelved somewhere else.

LITERATURE CITED

- Finger, S., and M. Piccolino. 2011. *The Shocking History of Electric Fishes: From Ancient Epochs to the Birth of Modern Neurophysiology*. Oxford University Press, New York.
- Pietsch, T. W. 1995. *Fishes, Crayfishes, and Crabs: Louis Renard's Natural History of the Rarest Curiosities of the Seas of the Indies*. 2 vols. Johns Hopkins University Press, Baltimore, Maryland.
- van Oijen, M. J. P., and G. M. P. Loots. 2012. An illustrated translation of Bleeker's *Fishes of the Indian Archipelago Part II Cyprini*. *Zoologische Mededeelingen* (Leiden) 86:1–469.
- van Oijen, M. J. P., G. M. P. Loots, and F. J. G. Limburg. 2009. Bleeker, P. A precursor of the fishes of the Indian Archipelago. Part 1: Siluri. *Zoologische Mededeelingen* (Leiden) 83:iii–xi + 1–317.

Christopher Scharpf, *The ETYFish Project, Baltimore, Maryland*;
Email: chris@etyfish.org.