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**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.

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