

ACADEMY OF NATURAL SCIENCES SCIENTIFIC PUBLICATIONS
EXECUTIVE SUMMARY OF CALENDAR YEAR 2023

Overview.—The Ichthyology Department has been responsible for publishing the Academy’s academic journal, *Proceedings of the Academy of Natural Sciences of Philadelphia* (PANSP), since 2007. Established in 1841, the *Proceedings* is the longest running serial on natural history and the environment published in the Americas. The department’s responsibility was self-expanded to include *Special Publications* in 2020.

Staff.—In 2023, **Mark Sabaj** served as Managing Editor and **Kyle Luckenbill** served as Production Editor, posts they have held since 2018 and 2007, respectively. Also in 2023, **Mariangeles Arce H.** handled the submission of a MS on the Physiochemical and ecosystem properties of the Middle to Lower Xingu River submitted by co-authors Mark Sabaj, Dan Fitzgerald, and Kirk Winemiller.

Publications.—The highlight of 2023 was the printing of ANSP Special Publication 27: Diatoms of Montana and Western North America: Catalog and Atlas of Species in the Montana Diatoms Collection, Vol. 2 [biraphid pennates; 600 total pages]. This is the second and final volume of the Diatoms of Montana, the first published by the Academy in 2021. Volume 1 featured 204 plates of mostly centric diatoms in the herbariums of the Academy and the University of Montana, Missoula. The second volume included 255 plates of pennate diatoms. The two volumes present an image collection of 1444 named taxa plus numerous ones yet to be formally described, the largest image catalog of diatoms on the North American continent.

Both volumes of the Diatoms of Montana were authored by [Dr. Loren Bahls](#), Curator of the Montana Diatom Collection and Faculty Affiliate at the University of Montana. Loren has been studying diatoms for over 50 years and attended Charlie Reimer’s lectures at the Iowa Lakeside Lab in the 1970s. Kyle Luckenbill handled the layout for both volumes and Mark Sabaj handled the copyediting. Loren personally covered the costs of printing and shipping the volumes to the Academy loading dock. **Marina Potapova** (ANSP) and Sarah Spaulding (University of Colorado) provided Forewords for volumes 1 and 2 respectively. **Laura Aycock** (with help from **Roz Stellabotte**) are handling sales of the volumes (\$55 each plus shipping and handling).

This is the Academy’s 26th Special Publication, a book series dating back to Samuel Gordon’s 1922 “The Mineralogy of Pennsylvania”. Unfortunately, the numbering of the series is no longer chronological due to a hold up with the author of the Special Publication 26 which will be printed in 2024.

In 2023, Sci Pubs also published four papers (90 pages) in *Proceedings* volume 168:

1. Halley, M.R. 2023. Why was John James Audubon denied membership at the Academy of Natural Sciences of Philadelphia in 1824? *Proceedings of the Academy of Natural Sciences of Philadelphia* 168(1): 97–108. <https://doi.org/10.1635/053.168.0102>
2. Kuabara, K.M.D., M.P. Valim, and J.D. Weckstein. 2023. Catalogue of type specimens of lice (Insecta: Psocodea: Phthiraptera) held in the Field Museum of Natural History louse collection. *Proceedings of the Academy of Natural Sciences of Philadelphia* 168: 149–186. <https://doi.org/10.1635/053.168.0105>
3. McGhee, G.R., Jr. 2023. Evolutionary theoretician Edward D. Cope: a Quaker perspective. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 168(1):123–147. <https://doi.org/10.1635/053.168.0104>
4. Peck, R.M. 2023. Ernst Schäfer (1910–1992) – A Remembrance. *Proceedings of the Academy of Natural Sciences of Philadelphia* 168(1): 109–122. <https://doi.org/10.1635/053.168.0103>

Among the authors are two Academy staff members, [Robert Peck](#) (Curator of Art and Artifacts and Senior Fellow) and [Jason Weckstein](#) (Ornithology Curator), and Drexel doctoral student [Kamila Kuabara](#) (Ornithology). Academy Research Associate (Ornithology) [Matthew Halley](#) received his doctoral degree from Drexel in 2021 and is now the Assistant Curator of Birds at the Delaware Museum of Nature & Science. Michel Valim is an entomologist at the Universidade Iguacu and Universidade Santa Úrsula, Brazil. [George McGhee](#) is a paleontologist at Rutgers University and member of the Society of Friends.

External reviews of the articles were generously provided by Bob Peck and Lewis G. Scharpf (Halley, 2023), Ricardo L. Palma and an anonymous reviewer (Kuabara et al., 2023), Eric Hilton and Bob Peck (McGhee, 2023) and Jorge M. González (Peck, 2023).

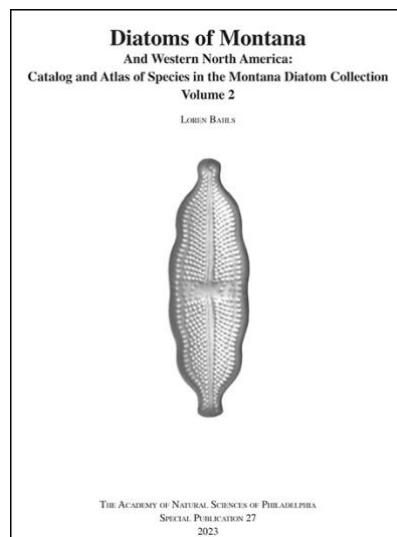
The total number of MSS received in 2022 was seven, same as 2021 and 2022 but below the 9.7 average for the past 14 years (see below). The total number of MSS published was five, again matching 2021 and 2022 but below the 8.9 average since 2010. The total number of pages published by the Academy in 2022 was 690, which set a new record (previously held by 2021), and is well above the 264-page annual average since 2010. The high number of pages published in 2023 was due to Loren Bahl's 600-page catalog. Although fewer papers are being published in the *Proceedings*, the total number of pages published by the Academy remains high due to the three *Special Publications* published in 2021, 2022, and 2023 respectively.

The Impact Factor of the *Proceedings* was a respectable 0.737 in 2022, but below the record setting value of 1.57 in 2020 (see below).

Revenue: BioOne & JSTOR.— The Academy received a total of \$24,007 in revenue from BioOne and JSTOR in 2023, setting a new annual record for such revenue. BioOne (nonprofit publisher of scientific research) and JSTOR (digital library) provide online access to articles published in the *Proceedings of the Academy of Natural Sciences of Philadelphia*. JSTOR serves 276 issues corresponding to volumes 1–165 published from 1841–2016. BioOne serves 18 issues corresponding to volumes 151–168 published from 2001 to present. Over the past four years (2019–2023), the Academy received annually \$21,039 to \$24,007 from BioOne and JSTOR combined (see below).

BioOne and The Academy of Natural Sciences of Philadelphia (“Publisher”) completed a new Electronic Licensing Agreement in 2022 that became effective in 2023 for the *Proceedings*. The new ELA did not affect revenue received in 2023 because that was based on 2022 sales. The new ELA will affect 2024 revenue in a way that that is hard to predict (for details on ELA, see 2023 Sci Pubs Exec Summary).

Revenue: TouchNet.—In September-October, Mark worked with **Thomson Weir** (Sr IT Business Systems Analyst at Drexel University) and others to establish a foothold for Academy Science in an exciting new field called “online sales.” Drexel uses TouchNet to sell items and receive credit card payments online. Mark and Tom set up an online storefront for [ANS Diatoms](#) that includes a store category ([Publications](#)) to receive orders and credit card payments for of Loren Bahls' *Diatoms of Montana*, volumes 1 and 2 published by The Academy of Natural Sciences in 2021 and 2023, respectively. Each volume sells for \$55 plus shipping and the volumes are modestly marketed via the [ANS Diatom Herbarium](#) website.



Since its publication, eleven orders have been fulfilled for volumes 1 and 2 (\$110) from persons/institutions in the US (6) as well as Canada (2), Iceland (1), The Netherlands (1), and United Kingdom (1). Eight orders were received via TouchNet and the other three were received by Laura Aycock (CM Collection Manager of Diatoms) outside of the online system. The 11 orders yielded about \$1210 in revenue that is deposited directly into the Diatom Herbarium via Fund-Org-Acct 111001-9562-1119. Buyers also cover shipping costs which were estimated and entered into TouchNet for inclusion in the total bill. Shipping costs are treated separately and charged to Scientific Publications (Org 9561). After the sale is completed, shipping costs are reimbursed to the Sci Pubs Sales account (111001-9561-1119). International shipments are handled via Drexel's CampusShip account with UPS.

For the most part, this worked out well. On 26 Dec, however, [UPS rates jumped by an average of 5.9%](#), thereby exceeding the rates previously entered into the TouchNet system. During this time, US shipments were handled by USPS at the modest cost of \$17.00. Laura Aycock deftly handled the fulfillment duties for all orders.

Ship Vols. 1 & 2 to	via	with delivery rate set at
US	UPS (except via USPS during holiday season)	\$15.00
Canada	USPS (Priority Mail International Medium Flat Rate Box)	\$60.00
South America	USPS (Priority Mail International Medium Flat Rate Box)	\$70.00
Europe/Africa	USPS (Priority Mail International Medium Flat Rate Box)	\$80.00
Asia/Oceania	USPS (Priority Mail International Medium Flat Rate Box)	\$95.00
N Amer excl CA/US	USPS (Priority Mail International Medium Flat Rate Box)	\$70.00

Revenue: Diane Publishing.—Diane Publishing Co. (DPC) closed shop at the end of 2023 due to dwindling demand for printed works and attrition (loss of staff to COVID, cancer, etc.). Malacology Curator Gary Rosenberg facilitated an agreement with DPC circa 2009 to sell Academy printed works on its behalf. Collection Manager Ned Gilmore handled interactions with DPC from 2010 to 2020 during which time DPC sales generated \$12,117 in revenue for the Academy. No sales were recorded from 2021–2023. In December 2023, Gilmore retrieved the remaining stock DPC for storage at the Academy.

Printing & Library Exchanges.—The *Proceedings of the Academy of Natural Sciences of Philadelphia* was last printed in 2018 (volume 165) by Sheridan Books, Inc. at a cost of \$8,236 for 550 bound and 25 unbound copies containing 232 pages (136 in color, 96 in black and white). Since then, printing costs have become substantially higher due to low demand for print publications coupled with closures of US paper mills (especially during the COVID pandemic).

Over the Summer, Mark Sabaj and **Pedro Raposo** (Executive Director, ANS Library & Archives) discussed the future of printed *Proceedings* and exchanges with other libraries. They agreed that the high costs of printing and shipping the journal could not be justified given the current operating budgets of Sci Pubs and the Library (coupled with reduced demand for printed works). In July-August, Pedro and **Briana Giasullo** (Cataloging & Digital Resources Librarian), wrote and distributed a message to colleagues that print versions of *Proceedings* were no longer available for library exchanges. As expected, some institutions responded by discontinuing their exchanges with the Academy. It is worth noting that other institutions had previously discontinued their exchanges because, like the Academy, they could not afford to print and ship their own publications.

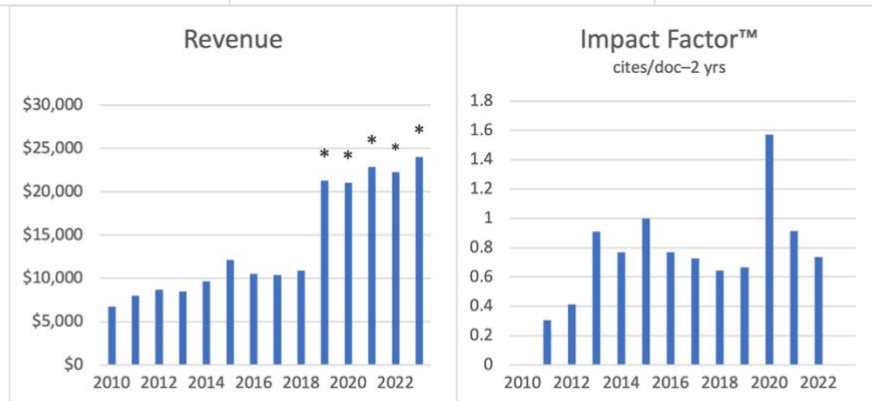
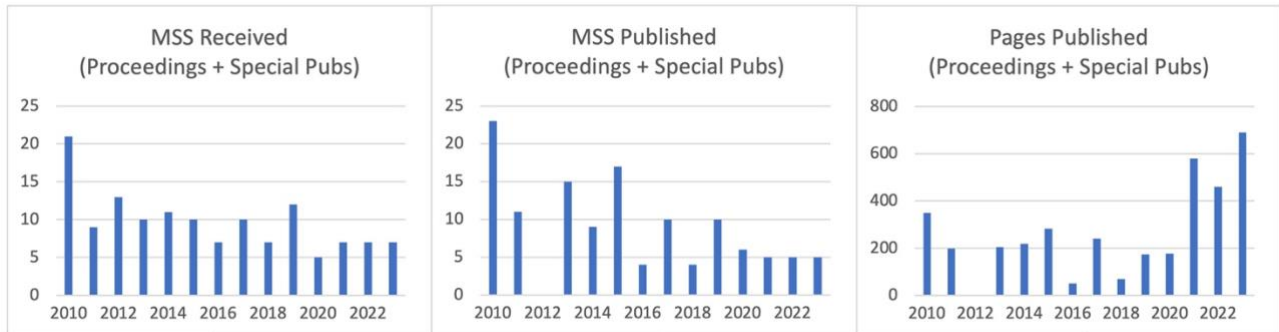
As an alternative to the *Proceedings*, Mark offered inquiring libraries print versions of recent *Special Publications* (generally authors, not the Academy, pay for the printing of such works). *Special Publications* 24 (Diatoms of Montana, vol. 1) and 25 (Catalog of Fascioliariidae) were mailed to Germany’s Senckenberg Gesellschaft für Naturforschung (SGN), the Swiss Ornithological Institute (SOI) Library, and Italy’s Museo Civico di Storia Naturale "G. Doria" (MCSN) Library. *Special Publication* 27 (Diatoms of Montana, vol. 2) also was sent to SGN and MCSN.

It is uncertain whether these substitutes will satisfy the library exchange programs with SGN and SOI. Regarding MCSN, Mark found a workaround that may keep our exchanges active. Via WeTransfer, Mark sent 15 pdfs corresponding to *Proceedings* volume 167 to librarian Cristina Maccio at MCSN.

Gary Rosenberg, Curator of Malacology, suggested that at least one bound copy of each new *Proceedings* volume be printed and cataloged into the Academy library to alleviate concerns over post-publication manipulation of digital-only works. The costs of printing one copy per volume, however, have not been investigated. Pedro Raposo noted that what counts is the Version of Record (VoR), and that the International Association of Scientific, Technical, and Medical Publishers (STM) has [guidelines and recommendations](#) for the preservation of an objective record of science.

The Academy of Natural Sciences of Philadelphia Scientific Publications

Year	Manuscripts Received			Manuscripts Published			Pages Published			Revenue	Impact Factor™ cites/doc-2 yrs
	Proc. ANSP	Special Pubs	Total	Proc. ANSP	Special Pubs	Total	Proc. ANSP	Special Pubs	Total	Proc. ANSP only	
2010	21	0	21	23	0	23	349	0	349	\$6,757	0
2011	9	0	9	11	0	11	198	0	198	\$7,990	0.304
2012	13	0	13	0	0	0	0	0	0	\$8,696	0.412
2013	10	0	10	15	0	15	205	0	205	\$8,475	0.909
2014	11	0	11	9	0	9	219	0	219	\$9,660	0.769
2015	10	0	10	17	0	17	283	0	283	\$12,130	1.0
2016	7	0	7	4	0	4	51	0	51	\$10,526	0.769
2017	10	0	10	10	0	10	241	0	241	\$10,376	0.727
2018	7	0	7	4	0	4	69	0	69	\$10,884	0.643
2019	12	0	12	10	0	10	173	0	173	\$21,264	0.667
2020	4	1	5	6	0	6	176	0	176	\$21,039	1.571
2021	5	2	7	4	1	5	71	508	579	\$22,839	0.913
2022	5	2	7	4	1	5	146	313	459	\$22,265	0.737
2023	7	0	7	4	1	5	90	60	690	\$24,007	—



*Includes revenue from BioONE & JSTOR
(JSTOR revenue unknown for previous years)

<https://www.scimagojr.com/journalsearch.php?q=18721&tip=sid>

—Mark Sabaj, 31 Jan 2024