

**A brief history of Lepidoptera section contributions to *Zootaxa***JOHN W. BROWN¹, BONG-KYU BYUN² & DA-SOM KIM³¹ *National Museum of Natural History, Smithsonian Institution, Washington, DC, 20560 USA*✉ tortriciidae.jwb@gmail.com; <https://orcid.org/0000-0001-5610-9855>² *Department of Biological Science & Biotechnology, Hannam University, Yuseong-gu, Daejeon 34054, Korea*✉ bkbyun@hnu.kr; <https://orcid.org/0000-0003-0393-6464>³ *Natural History Museum, Hannam University, Daejeon, 34054, Korea*✉ n4311@hanmail.net; <https://orcid.org/0000-0002-9988-0225>

As a reviewer, John Brown received the first Lepidoptera manuscript submitted to *Zootaxa* in 2002. Within a year he was persuaded by a colleague to volunteer as its first Lepidoptera section editor. As submissions increased, he realized that he needed assistance, so in July 2005 he enlisted Robert Robbins (U.S. National Museum of National History), and the two editors split the submissions—Brown covered moths and Robbins butterflies. As submissions continued to grow, Robbins stepped down and Brown was again the sole editor. Owing to the ever-increasing manuscript load, in 2007 Brown submitted a proposal to several colleagues, inviting them to become Lepidoptera section editors, with the concept that the more editors there were, the fewer manuscripts each would have to handle, and their duties would include papers primarily in their area of expertise. The solicitation was successful, with four new subject editors coming on board in 2007: Lawrence Gall for macrolepidoptera families, Michael Toliver for butterflies, Jean-François Landry for microlepidoptera families, and Shen-Horn Yen for Pyraloidea and Zygaenoidea; the last two are still section editors today. Over the next 13 years, numerous editors came and went—turnover in editorship was always viewed as a positive way to involve new scientists and interject fresh ideas. From 2001 to 2020, a cumulative total of 21 scientists have served as Lepidoptera Section editors (Table 1), representing 14 different countries.

TABLE 1. Lepidoptera section editors—past and present.

editor	country	taxa edited	Years of service
John Brown	USA	all families	2002–2019
Robert Robbins	USA	Papilionoidea	2005–2007
Lawrence Gall	USA	macrolepidoptera	2007–2014
Jean-François Landry	Canada	microlepidoptera, especially Gelechioidea	2007–present
Shen-Horn Yen	Taiwan	Pyraloidea, Zygaenoidea	2007–present
Michael Toliver	USA	Papilionoidea	2007–2010
Jadranka Rota	Croatia	Sesioidea, especially Choreutidae	2009–2013
Carlos Prieto	Colombia	Papilionoidea	2010–present
S. S. Beliaev	Russia	Geometroidea	2014–2016
Markku Pellinen	Thailand	macrolepidoptera	2014–2017
Lauri Kaila	Finland	Gelechioidea	2015–2018
Aidas Saldaitis	Lithuania	Noctuoidea	2015–2018
Lívia R. Pinheiro	Brazil	Erebidae and Nolidae	2015–2018
Hideyuki Chiba	USA	Papilionoidea	2015–present
Sven Erlacher	Germany	Geometridae	2016–present
Jurate De Prins	Belgium	all families, primarily microlepidoptera	2016–present
Paul Goldstein	USA	Noctuoidea and other macrolepidoptera	2017–present

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TABLE 1. (Continued)

editor	country	taxa edited	Years of service
Reza Zahiri	Iran	macrolepidoptera, especially Noctuoidea	2017–present
David Plotkin	USA	Geometridae and other macrolepidoptera	2019–present
B.-K. Byun	Korea	Tortricidae	2019–present
Carlos G. C. Mielke	Brazil	microlepidoptera, especially Hepialoidea	2020–present

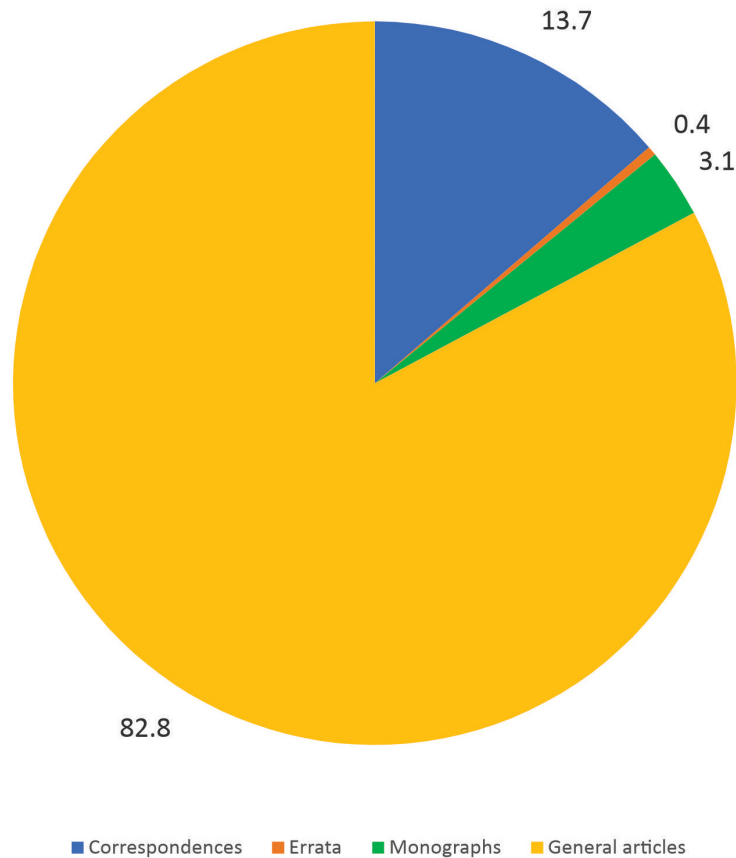


FIGURE 1. Percent of Lepidoptera contributions by category.

TABLE 2. Top 20 countries of origin of submissions (based on first author).

Rank	Country—number of papers	Rank	Country—number of papers
1	China—288	11	Finland—31
2	Russia—189	12	India—31
3	United States—164	13	Australia—30
4	Lithuania—75	14	Taiwan—28
5	Germany—74	15	Italy—26
6	Brazil—71	16	Thailand—24
7	Korea—65	17	Colombia—24
8	Hungary—46	18	Denmark—18
9	United Kingdom—45	19	Ukraine—17
10	Poland—35	20	Canada—13
			Czech Republic—13

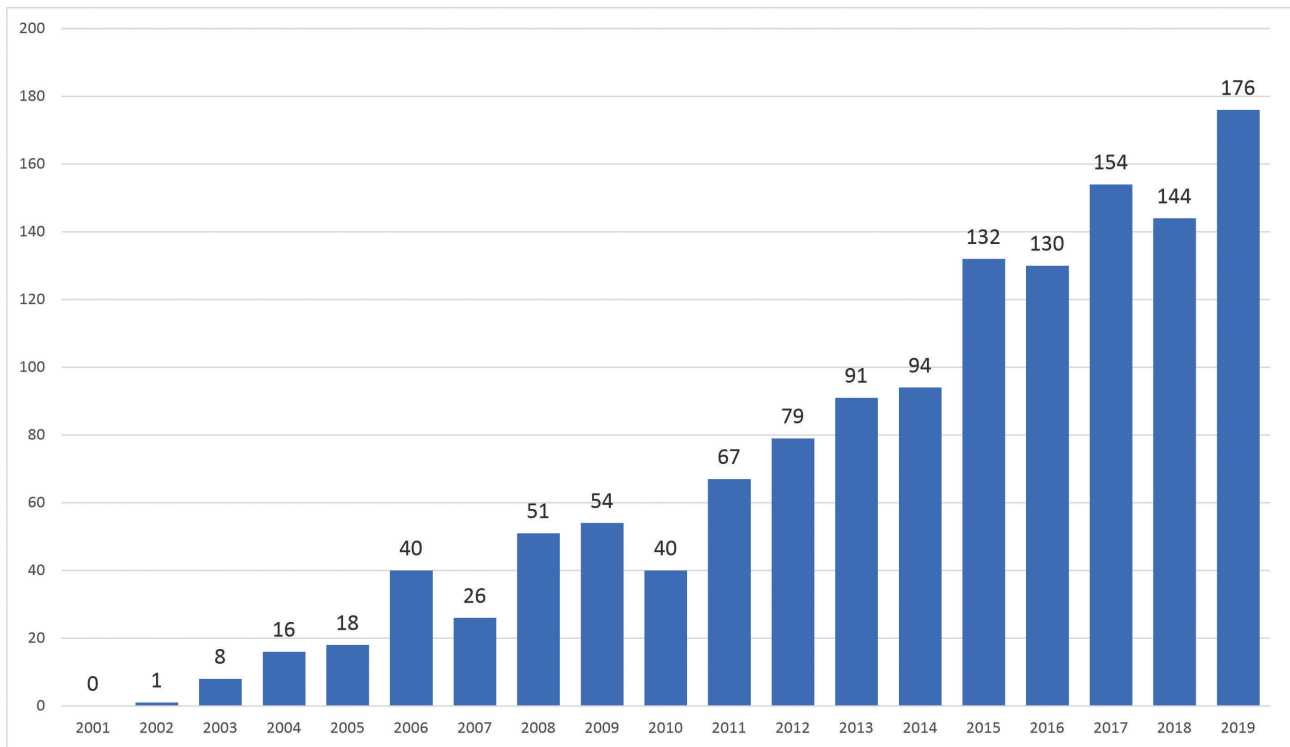


FIGURE 2. Number of Lepidoptera papers published by year.

Lepidoptera Section editors have been responsible for the publication of 1,490 contributions: 46 monographs, 1,234 general articles, 204 correspondences, and six errata (Figure 1), totaling over 11,000 printed pages. Various other *Zootaxa* articles have included data on Lepidoptera, in particular those on parasitic Hymenoptera, many of which have included lepidopterists as co-authors, and faunal inventories of insects in general. Figure 2 show a nearly continuous increase in Lepidoptera papers over the last 20 years, with a high of 176 published in 2019. Based on the country of the first author, published papers have originated from 42 different nations, with the greatest number from China ($n = 288$), followed by Russia ($n = 189$), U.S.A. ($n = 164$), Lithuania ($n = 75$), Germany ($n = 74$), Brazil ($n = 71$), and Korea ($n = 65$) (Table 2).

The subjects of contributions have ranged from descriptive taxonomy to molecular phylogenetics, and from checklists to conservation. Papers have dealt with the systematics of Lepidoptera from the most primitive (i.e., Micropterigidae) to the most advanced (Bombycoidea), with significantly more papers on moths than butterflies (82% and 18%, respectively). The top 10 superfamilies ranked by number of published papers are: Noctuoidea ($n = 387$), Papilionoidea ($n = 275$), Gelechioidea ($n = 185$), Tortricodea ($n = 119$), Geometroidea ($n = 113$), Pyraloidea ($n = 57$), Cossioidea ($n = 45$), Sesioidea ($n = 38$), Bombycoidea ($n = 31$) and Yponomeutoidea ($n = 27$). In all, 110 new subspecies, 4,062 new species, six new subgenera, 216 new genera, one new subtribe, eight new tribes, six new subfamilies, and one new family of Lepidoptera have been described in *Zootaxa* Lepidoptera papers.

The two Lepidoptera contributions with the greatest number of citations are van Nieukerken *et al.*'s (2011) contribution to the *Zootaxa* special volume on Animal Biodiversity, with 454, and Kristensen *et al.*'s (2007) paper on the state of inventorying global moth and butterfly diversity, with 75.

Most submissions to Lepidoptera section editors receive two reviews, and in a few cases more, occasionally with the editor providing a review owing to his/her expertise on the taxon that is the subject of the submission. Reviews have been solicited from a broad geographic and taxonomic range. Unfortunately, for some taxa, the existing pool of potential reviewers is small, and the same reviewers often are relied upon over and over; and for these reviewers we are exceedingly grateful. Rejection rate varies among editors, and ranges from about 4–30% (with an average of about 10%). Most Lepidoptera section editors are remarkably “generous,” often investing considerable time helping authors improve their manuscripts, which sometimes requires multiple iterations. Although serving as an editor is often a time-consuming chore with little recognition of one’s efforts, all Lepidoptera section editors are proud to have performed this critical service to the lepidopterological community through their editorship of *Zootaxa*.

The authors of this note thank former and current Lepidoptera Section editors for their helpful input on this brief contribution. In particular, we are grateful to Jean-François Landry for editorial assistance and Carlos Mielke for graphics.

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