



New horizons for electronic paleontology: Forward in all directions

P. David Polly

In 1998, France beat Brazil in the World Cup three to zero, the extensible markup language (XML) was published by the W3C, singer Frank Sinatra died and *Palaeontologia Electronica* was born, providing open access paleontology on the internet for readers and authors alike. Electronic publishing was theretofore unknown to a field that valued papers with indefinite shelf lives, high-resolution photographic figures, and monographic descriptive works. The ultimate fate of all-electronic publications was unknown in that youthful world of Internet publishing, even though the electronic medium promised unlimited color figures, lengthy sections, and interactivity without fee. Established scientists were skeptical about PE's viability and younger scientists were timid to publish in a journal without an impact factor. To make the journal seem familiar to both readers and authors, we adopted a format in which papers were organized by volume and papers were bundled as issues, released with a fanfare of e-mail notifications to simulate the receipt of printed journals by post. Nevertheless, only eleven papers were submitted in 1998 and the rate of submission remained low during our first few years.

In 2012, *Palaeontologia Electronica*, now in its fifteenth year, has published 229 scientific papers, is indexed in Thompson-Reuter's Journal Citation Index, and is no longer alone in the online publishing world. Electronic publishing is now the norm with most journals allowing subscribers to opt out of receiving print copies and most readers preferring papers in the easily transportable and searchable PDF format. Services like Google and National Libraries now take snapshots of the web and longevity of electronic data is now a common concern, not one particular to PE. Indeed, last year an amendment to the International Code of Botanical Nomenclature (ICBN) was passed that for the first time recognizes the validity of new taxonomic names published solely in electronic format. If the Code of Zoological Nomenclature follows suit, then the archival paper editions of PE will be superfluous. In our most recent issue, we published forty-four papers, four times as many as in our first issue. Our growth has begun to strain our original paradigm and so we are instituting a number of changes this year with our fifteenth volume.

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CONTINUOUS PUBLISHING

Starting with this issue we will publish new papers on a continuous basis, putting them online as soon as they are proofed and approved by authors and editors. We will group papers by volume and issue, maintaining our current rate of three issues per year; new issues will be opened in January, May, and September and papers added to the issue's table of contents as they appear. Our article numbering system will continue as before. At the close of each issue, we will produce our print editions, which are distributed to our ten archive libraries and which are available for purchase at cost through our Lulu storefront. New zoological names will have priority stemming from the print copy, as is currently the case, and new botanical names will have priority stemming from the electronic publication, as per the new amendment to the ICBN. This change will allow our papers to be published more rapidly.

NO MORE SPECIAL THEMATIC ISSUES

Our new publishing paradigm and the high levels of manuscript submission that we enjoy both dictate that we will no longer publish special thematic issues. In the past we published four thematic issues: one on paleontological databases and taxonomy, guest edited by Colin Stearn and Timothy Patterson (Volume 2, Issue 1, 1999); one on microevolutionary dynamics, guest edited by Peter Roopnarine (Volume 8, Issue 2, 2005); one in memory of Will Downs, guest edited by Catherine Badgley, Larry Flynn, Louis Taylor and Louis Jacob (Volume 8, Issue 1, 2005); and our most recent issue in memory of Charles Repenning, guest edited by Louis Taylor, Chris Bell, and Louis Jacob (Volume 14, Issue 3, 2011). In the future, we will entertain proposals to release small groups of thematically-related papers at the same time on our table of contents, but we will no longer devote entire issues to special groups of papers because such thematic issues unnecessarily delay publication of manuscripts submitted through the normal route. Peter Roopnarine has served on the *PE* editorial board as Special Issues Editor since 2002. Peter will now move to a new role within the journal – thank you Peter.

HANDLING EDITORS

Heretofore, all of our papers have been handled by two executive editors, most recently by Mark Purnell and David Polly. Our current rate of submission has overloaded this system, so we are moving to a more traditional model of one Executive Editor and several handling editors. Mark Purnell will rotate off the editorial board, having served on it since *PE* started in 1998. David Polly will continue as Executive Editor, and Julien Louys and Sylvain Gerber will join as handling editors. Julien is the Curator of Geosciences at the Queensland Museum, Australia, and has broad interests relating to vertebrate paleoecology. Sylvain is a Research Officer at University of Bath, and has interests in evolutionary paleobiology. Welcome to both. Our new system will allow us to add more handling editors if submissions continue to increase.

NEW LOOK AND SERVER BACK END

This issue also marks a move to a content management system that will help us better manage new papers and our published back content. Jennifer Pattison Rumford, our managing editor, maintained the design of the entire site, with its nearly 230 papers, by hand. She and our technical editor Mark Sutton have made the move to the

Joomla ® content management system, which will help us manage the format of the material, will link articles through keyword matches, and will provide us with RSS feeds and other mechanisms to disseminate information about our papers. The move has not been without its trials – thank you Jennifer and Mark for the many hours you have invested in bringing us one step further in electronic publishing.

AUTOMATIC NOTIFICATION OF PE PAPERS

Thanks to our new content management system, readers will be able to subscribe to RSS feeds that notify them of newly published papers. This system will replace our current e-mail notification, so if you are a subscriber to our e-mail list, please consider subscribing to our RSS feed.

WESTERN INTERIOR PALEONTOLOGICAL SOCIETY CONTRIBUTES

Finally, we will have an additional financial contributor from this volume forward. The Western Interior Paleontological Society (WIPS) will contribute \$1000 per year towards *Palaeontologia Electronica*'s operating costs. Most of our financial support comes from our three sponsoring societies – the Paleontological Society, the Palaeontological Association, and the Society of Vertebrate Paleontology – each of whom contribute \$3000 per year and hold copyright to papers published in PE. WIPS will join at a lower level, supplementing the journal's budget to help us meet the costs of our increased volume of papers. Most of our budget goes towards production of the papers, each of which requires many hours of copy editing, image processing, and HTML setup. The second largest part of our budget goes toward printing copies of the journal to meet the ICZN requirements for validity of new zoological names. WIPS contribution comes at a crucial time when our current budget is strained each year. Thank you, WIPS.

CONCLUSION

When PE started fifteen years ago, the concept of electronic-only publishing was so novel in paleontology that we seldom planned further than the next issue. We were mostly concerned with getting our next manuscripts and how to best format them for accuracy and readability. Now, when electronic publishing is the state-of-the-art, when we have a large collection of published papers to manage into the future, and we benefit from more submissions in a month than we sometimes had in a year, we are able to plan with a longer-term vision. The changes we are implementing will let us handle papers faster, typeset them more efficiently, and release them more quickly. We are primed to move into the next fifteen years of paleontological publishing.