Effective publication dates in *Diatom Research* (volumes 27-32, 2011-2018)

David M. Williams, *Department of Life Sciences, the Natural History Museum, Cromwell Road, London, SW7 5BD, UK* (d.m.williams@nhm.ac.uk)

During a study on the diatom genera *Odontella* C.Agardh and *Zygoceros* Ehrenberg, it was necessary to investigate a number of recent taxonomic revisions for nomenclatural changes (Sims *et al.* 2018). One name, *Zygoceros atlanticus* (Frenguelli) Sar, was published in volume 30 (3-4) of *Diatom Research* (in Lavigne *et al.*, 2016: 328). This issue was not actually published until 2016 (17th February 2016) even though the printed cover has the date 'September-December 2015'. In this particular issue there are 13 contributions: nine full articles; two short notes; the remaining two contributions are a book review and a report on a workshop. Seven of the contributions have new nomenclatural acts*. Although parts 3 and 4 were combined into a single printed issue, the online appearance of the articles was grouped into separate issues (as indicated on the header of each article in the print copy).

All articles in *Diatom Research*, when published online as an 'early view' version, have no pagination other than the page range. The publishers replace the un-paginated online version with the paginated version when the sequence of print publication becomes known – apart from the addition of page numbers, the two versions are identical (Ellen Goodman, pers. comm.) – the online version, then, is considered the *Version of Record*‡. Thus, although the *avowed* publication date of *Diatom Research* 30(3-4) is 2016 (17th February), all the new nomenclatural acts in it should be dated 2015, the online publication date of each article with the exception of Lavigne *et al.*, which is 2016.

While not hugely important, knowing precise publication dates with respect to online and print versions, as well as knowing the Version of Record, may become useful in the future.

An electronic version of a paper containing any nomenclatural act is now an acceptable form of effective publication (defined in Art. 31), as stated in Article 29 of the *International Code of Nomenclature for algae, fungi, and plants* (*Shenzhen Code,* Turland *et al.,* 2018): "[…] Publication is also effected by distribution on or after 1 January 2012 of electronic material in Portable Document Format (PDF; see also Art. 29.3 and Rec. 29A.1) in an online publication with an International Standard Serial Number (ISSN) or an International Standard Book Number (ISBN)" (Art 29.1). Therefore, one has to be mindful of the online publication date as well as the printed publication date, which on occasion differ.

A comparison of the printed publication dates and the online publication dates for all diatom nomenclatural acts from 2012 until the present reveals a number that are effectively published before the printed publication date. These are collated in Table 1 (p. 2).

* A "Nomenclatural Act" is defined in the ICN Glossary as "An act requiring effective publication that results in a nomenclatural novelty or affects aspects of names such as typification (Art. 7.10, 7.11, and F.5.4), priority (Art. 11.5 and 53.5), orthography (Art. 61.3), or gender (Art. 62.3) (Art. 34.1 footnote)" (Turland *et al.,* 2018).

‡ As documented in *Journal Article Versions (JAV):Recommendations of the NISO/ALPSP JAV Technical Working Group*, Baltimore (April 2008), p. 3 (http://www.niso.org/).

Table 1. Issues of *Diatom Research* for volumes 27-32, 2011-2018 with nomenclatural acts that straddle two different years with their correct publication dates (in bold)

Issue	**Date printed on issue cover**	**Print version publication date**	**online publication date**	**Article and effective publication date**
32(4)	2017	12th March 2018	8th Jan. 2018	Morphological investigation and transfer of *Naviculadicta parasemen* Lange-Bertalot to the genus *Rexlowea* Kociolek & Thomas: **8th Jan. 2018** *Rexlowea parasemen* (Lange-Bertalot) Kulikoviskiy, Kociolek & Genkal in Kociolek *et al.***2018**: 479.
30(4)	[September –December] 2015	29th Feb. 2016 [3—4]	19th Jan. 2016	Morphological, taxonomic and nomenclatural analysis of species of *Odontella*, *Trieres* and *Zygoceros* (Triceratiaceae, Bacillariophyta) from Anegada Bay (Province of Buenos Aires, Argentina): **19th Jan. 2016** *Zygoceros atlanticus* (Frenguelli) Sar in Lavigne *et al.* **2016**: 324.
30(1)	[March—June] 2015	18th June 2015 [1—2]	8th Oct. 2014	New *Gomphonema* Ehrenberg (Bacillariophyceae: Gomphonemataceae) species from Xinjiang Province, China: **8th Oct. 2014** *Gomphonema pygmaeoides* Q.M. You & Kociolek **2014**: 2 *Gomphonema xinjiangianum* Q.M. You & Kociolek **2014**: 4 *Gomphonema intricatoides* Q.M. You & Kociolek **2014**: 6 *Gomphonema metzeltinii* Q.M. You & Kociolek **2014**: 7 *Gomphonema microlanceolatum* Q.M. You & Kociolek **2014**: 9
			12th Dec. 2014	Four new *Rhoicosphenia* species from fossil deposits in India and North America: **12th Dec. 2014** *Rhoicosphenia gandhii* E.W.Thomas, Karthick & Kociolek in Thomas *et al.* **2014**: 36 *Rhoicosphenia indica* E.W. Thomas, B. Karthick & Kociolek in Thomas *et al.* **2014**: 37 *Rhoicosphenia reimeri* E.W. Thomas & Kociolek in Thomas *et al.* **2014**: 43 *Rhoicosphenia patrickae* E.W. Thomas & Kociolek in Thomas *et al.* **2014**: 49
			10th Dec. 2014	*Frustulia curvata* and *Frustulia paulii*, two diatom species new to science: **10th Dec. 2014** *Frustulia curvata* Kulichová & Urbánková in Urbánková *et al.* **2014**: 66. *Frustulia paulii* Kilroy & Urbánková in Urbánková *et al.* **2014**: 69
29(1)	[March—June] 2014	17th March 2014 [1—2]	16th July 2013	An evaluation of selected *Neidium* species from the Antarctic region: **16th July 2013** *Neidium nyvltii* P. Hamilton, M. de Haan, Kopalová, Zidarova & Van der Vijer **2013**: 29 *Neidium antarcticum* P. Hamilton, M. de Haan, Kopalová, Zidarova & Van der Vijer **2013**: 32
			3rd Dec. 2013	New epiphytic araphid diatoms in the genus *Ulnaria* (Bacillariophyta) from Lake Titicaca, Bolivia: **3rd Dec. 2013** *Ulnaria titicacaensis* Morales, Ector & P. Hamilton in Morales *et al.* **2013**: 43 *Ulnaria macilenta* Morales, Wetzel & Rivera in Morales *et al.* **2013**: 45

28(1)	[March—June] 2013	28th May 2013 [1—2]	19th Oct. 2012	Three new species of freshwater *Diploneis* from Japan: **19th Oct. 2012** *Diploneis aokiensis* M. Idei **2012**: 2 *Diploneis yamanakaensis* M. Idei **2012**: 5 *Diploneis linearifera* M. Idei **2012**: 8
			23rd Oct. 2012	New diatom taxa from high-altitude Andean saline lakes: **23rd Oct. 2012** *Navicula venetoides* Blanco, Álvarez-Blanco & Cjudo-Figueiras in Blanco *et al.* **2012**: 14 *Pinnularia boliviana* Blanco, Álvarez-Blanco & Cjudo-Figueiras in Blanco *et al.* **2012**: 15 *Nitzschia sansimoni* Blanco, Álvarez-Blanco & Cjudo-Figueiras in Blanco *et al.* **2012**: 18 *Surirella striatula* var. *halophia* Blanco, Álvarez-Blanco & Cjudo-Figueiras in Blanco *et al.* **2012**: 20 *Surirella morales* Blanco, Álvarez-Blanco & Cjudo-Figueiras in Blanco *et al.* **2012**: 22
			1st Nov. 2012	Several new species of *Amphora* and *Halamphora* from the western USA: **1st Nov. 2012** *Amphora waldeniana* Stepanek & Kociolek **2012**: 63 *Amphora copulatoides* Stepanek & Kociolek **2012**: 66 *Halamphora latecostata* Stepanek & Kociolek **2012**: 68 *Halamphora subtilis* Stepanek & Kociolek **2012**: 69 *Halamphora punctata* Stepanek & Kociolek **2012**: 70 *Halamphora coloradiana* Stepanek & Kociolek **2012**: 73
			8th Nov. 2012	The genus *Surirella* (Bacillariophyta) in the sub-Antarctic and maritime Antarctic region: **8th Nov. 2012** *Surirella subantarctica* Van de Vijver & Cocquyt in Van de Vijver *et al.* **2012**: 96 *Surirella heardensis* Van de Vijver & Cocquyt in Van de Vijver *et al.* **2012**: 100 *Surirella australovisurgis* Van de Vijver, Cocquyt, Kopalová & Zidarova in Van de Vijver *et al.* 2012: 101
			25th Oct. 2012	*Alveolophora robusta* comb. nov. from Miocene deposits of the Vitim Plateau, Russia: **25th Oct. 2012** *Alveolophora robusta* (Khursevich) Usoltseva & Khursevich **2012**: 110
27(1)	2012	8th June 2012	14th Dec. 2011	*Tursiocola podocnemicola* sp. nov., a new epizoic freshwater diatom species from the Rio Negro in the Brazilian Amazon Basin: **8th June 2012** *Tursiocola podocnemicola* Wetzel, Van de Vijver & Ector in Wetzel *et al.* **2012**: 2
			16th Dec. 2011	Ontogenetic and interspecific valve shape variation in the Pinnatae group of the genus *Surirella* and the description of *S. lacrimula* sp. nov.: **8th June 2012** *Surirella lacrimula* J.D.English in J.D.English & Potapova **2012**: 22

It is worth noting that in *Diatom Research* 27(1-2), *Tursiocola podocnemicola* Wetzel, Van de Vijver & Ector (in Wetzel *et al.,* 2012: 2) and *Surirella lacrimula* J.D. English (in English & Potapova, 2012: 22) were both published online on the 14th and 16th of December 2011, respectively, but their effective publication dates are 8th June 2012 as the online publication date occurred prior to 1st January 2012.

Finally, the 'content' of online publication is described in the ICN (Art. 30.3) as:

> "Content of an electronic publication includes that which is visible on the page, e.g. text, tables, illustrations, etc., but it excludes volume, issue, article, and page numbers; it also excludes external sources accessed via a hyperlink or URL (Uniform Resource Locator)."

An example of how to cite online publications involved two different approaches: the first uses the page number from the unpaginated article, the second uses the page number from the paginated print copy (they can be combined, if both are known; cf. Art. 30.3, example 5). Following these suggestions, *Gomphonema matanensis* Kapustin, Kociolek & Kulikovskiy (in Kociolek *et al.*, 2018) could currently be cited as: *Diatom Research* (online): [4 of 10] 4th October 2018. When the print version is finally issued, the given page number is substituted for the [4 of 10]. The print version with pagination replaces the unpaginated version online so latter ceases to exist. It is, thus, impossible to add the unpaginated citation to those in Table 1 as all these versions have disappeared (unless retained in a personal collection of pdfs – I have found none). How detrimental this will be to future citations is difficult to foresee.

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English, J.D. & Potapova, M.G. (2012). Ontogenetic and interspecific valve shape variation in the Pinnatae group of the genus *Surirella* and the description of *S. lacrimula* sp. nov. *Diatom Research* 27 (1-2): 9-27, DOI: 10.1080/0269249X.2011.642950.

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