

Report to SSB Council regarding the *Bulletin of the Society of Systematic Biologists*

June 14, 2023

Dear Council members,

I write this to update you on our efforts related to publishing the *Bulletin of the Society of Systematic Biologists*. I use subject headings as a way to organize this information.

History, part 1

The [Bulletin of the Society of Systematic Biologists](https://ssbbulletin.org/) was founded in response to conversations that occurred on the SSB council during 2015 - 2017 that were conducted in the context of council member frustrations with the commercial publishing industry, the renegotiation of the SSB contract with Oxford University Press for publishing *Systematic Biology*, and the article processing charges that OUP has asked us to charge for publication in *Systematic Biology*. Essentially, these conversations indicated that many people on the council at this time (i) recognized that we needed to move towards open access publishing, (ii) had reservations about the publishing model proposed by Oxford University Press, but (iii) also felt like we lacked the collective knowledge to think creatively about other options and the potential roles that SSB could play in this space. As part of my agreement to serve as Editor-in-Chief of *Systematic Biology* from 2018-2022, I proposed to explore options for starting a second journal for the society.

I worked with the [Library Publishing Program](#) at OSU to launch an online-only open access journal. In 2022 we published 11 articles in 3 volumes. Six of these articles resulted from an NSF-funded (DEB-1839202) workshop titled "Modernizing Monography" led by Meg Daly and Felipe Zapata. The other five articles were submitted and handled as independent submissions. All of the editorial coordination, copyediting, and typesetting was conducted by an undergraduate student named Dinah Ward who worked on an hourly basis.

All funding for the BSSB was provided in November of 2020 via the dispersal of a \$23,500 invoice from SSB to an account at OSU. This money met our needs until January of 2023; it was mostly used to pay salary for Dinah, although some funds were also used to purchase a large monitor and Adobe software for typesetting. In December of 2022 I requested an additional \$17,000 in funds from SSB, which were made available in my university account in June of 2023. Also note that \$12,000 in funds were paid to SSB from the organizers of the Modernizing Monography workshop. If these funds are considered a part of the journal budget, SSB has a net investment (to date) of \$28,500, of which nearly \$16,000 remain in our spend account at OSU.

Journal operations

Many of us have experience acting as authors, reviewers, and editors for *Systematic Biology* and other journals. As a result, we are familiar with this end of the publishing process – manuscript submission, reviewer selection, review submission, manuscript revision, editorial decisions. All of these tasks are

typically handled by a web-based manuscript submission software. The OSU Library has an implementation of the [Open Journal Systems](#) software, which is basically an open access package that is intended to handle editorial tasks. The library has an IT staff who have to implement this in the context of university IT standards and security requirements. These requirements have proved to be a roadblock to implementing some of the functionality that we would like to see implemented.

In addition to the manuscript handling, editorial, and review work, journals need to have a process in place for copy editing the accepted manuscripts. Copy editing consists of the both the basic editorial work involved with making sure that the grammar, organization, *etc.* meets journal standards and the enforcement of standards for figure and table display, reference formats, and supplemental sections of the manuscript.

Once copy editing has occurred, the manuscript needs to be typeset, or converting a .docx or .txt file into the published version that we read. The typesetting process involves layout tasks related to figures and tables, as well as adding information such as the journal name and logo, open access licenses, author ORCIDs, DOI hyperlinks, *etc.* As part of our agreement with the OSU Library publishing program, there are standards for readability and accessibility that we need to meet in our published articles.

History, part 2

When I started to consider the idea of publishing via the Library Publishing program, I was introduced to an OSU undergraduate student who was both interested and skilled at the work. Dinah Ward essentially did all non-editorial tasks for the Bulletin from our initial launch. However, I knew that Dinah planned to graduate in May of 2023. By the fall of 2022, it was clear that we needed to think about the long-term sustainability of the journal. It seemed unwise to assume that we would luck into another student with Dinah's skill set and interests, and by the fall of 2022 our submission rate was such that one student likely wouldn't be able to do all of this work anyway.

Throughout the last several years, we have also experienced substantial problems with the software [Open Journal System](#) (OJS) used to manage the manuscript submission and handling process. Essentially, OJS has proven to be problematic for authors, reviewers, and editors. Its single biggest shortcoming is that OJS makes it difficult for people outside of OSU to take on a substantive role as editor, which severely limits the journal activities. It does not allow, for example, a person to be designated as an Associate Editor, such that if we want to assign someone other than me to handle a journal they end up getting all communications about all manuscripts. Needless to say, this is confusing. Among the other problems created by this system were emails that appeared to be sent but that actually were not delivered, manuscripts that were re-labeled in non-identifiable ways, and reviewer comments that were submitted by reviewers but misassigned to different manuscripts. In short, nearly every essential function of a manuscript handling system was not handled in an adequate manner at some point, and often the identification and fixing of one bug led to two other bugs. Dinah and I have devoted a great deal of time working with IT Support Staff at the OSU libraries trying to fix issues, but after a year or so of this the situation seemed to be getting worse, not better. I ultimately made the decision in March of 2023 to abandon using this system.

With the impending graduate of Dinah Ward in May of 2022 and the backlog of chaos created by OJS the journal has been in a difficult place during the first six months of 2023. As a result, I made a series of decisions that have caused the Bulletin to take a half step back with the goal of moving forward more

efficiently in the future. Note that these were not necessarily made at the same time – I'll be the first to admit that I'm overextended due to my other roles as a PI of an active research lab and as Chair of my department. However, decisions were made:

1. I decided to work with a typesetting service provided by a company called [Scholastica](#). They charge us based on the number of words and display items to convert Word or Latex documents to the final version of the manuscript (so far, charges per article have ranged from \$85 to \$325). This process took several months to set up and implement in a manner that was acceptable to both the OSU Libraries and Scholastica, but now appears to be fully operational.
2. I made the decision to abandon the use of OJS for anything other than manuscript submission and the uploading of typeset articles to be published. It was clear that this system was causing more problems than it was solving, particularly in cases when it appeared to do something correctly (i.e., issuing an editorial decision or uploading a paper) without actually doing this thing correctly. This caused a number of challenges where an author would ask about a manuscript that they assumed had been submitted, or where an editor would think that they made a decision without actually having that decision be recorded.
3. I have enlisted the help of Shelby Moshier, a Ph D student in my group, to replace the coordination of journal activities that had previously been provided by Dinah Ward. My rationale here is that Shelby sees me almost every day at work and as such can efficiently communicate with me. Shelby will coordinate all journal communication. During the summer of 2023 I am paying Shelby from other funds to do this work, but this is a temporary solution. Shelby will coordinate the manuscript review, editing, revision, etc. using SSB emails as part of our institutional accounts with Google.
4. I have asked Dinah to continue to work as a copy editor for BSSB articles. As a recent graduate she is applying for professional positions but is willing to pick up extra work on the side. Since Dinah can no longer be paid as a student employee, she will provide invoices to the journal and be paid on a per-word basis at a rate of \$0.045 / word. This is at the market rate for copy editing of STEM manuscripts. Note that our manuscripts vary widely in word counts, and as such this expense will range between \$300-600 per article. Some editors have indicated that they would be willing to do copy editing provided that we create a clear and easy to follow style guide.

We currently have four articles in a special issue on edited by Andrea Quattrini that are either completely done or just waiting on typesetting. We have an additional three articles that are not part of a special issue that are also essentially ready to publish. We plan to publish these by the end of June. A second special issue on the topic of *Species Networks*, edited by Claudia Solis-Lemus and George Tiley, is also well along. Editorial work for three articles is complete, with six others in the revision stage. We also have ~10 other manuscripts in various stages of the editorial process. The progress on these has been slower than I (or the authors) would like because my attention has been devoted to working out the broader structural problems. We are now in a position to accelerate our handling of these papers. I will be working with a core group of editors to make this happen as fast as possible.

I request that the council devote some of their time at the next council meeting to discussing the long-term future of the Bulletin. As a way of framing this conversation I have suggested several possible options, along with a few notes about what I consider to be their advantages and disadvantages, below. Please recognize that I do so in a manner that is intended to be as neutral as possible because I feel

strongly that this needs to be a council decision. Also note that these options are neither exhaustive or mutually exclusive.

Maintain the status quo. The Bulletin could likely continue to publish at a modest rate through the library publishing program so long as the council is willing to continue to invest SSB funds into this endeavor. I am willing to continue in my role as Editor through the end of the 2024 calendar year, provided that editorial coordination is available. My doctoral student is filling this role during the summer months and being paid using other funds. Under the going rates for OSU, it would cost \$42,000 to pay her to continue this work (note, this includes salary, fringe, and tuition). I have BSSB funds that could pay this amount for the Fall 2023 semester, but we would need to allocate \$42,000 for 2024.

Assuming that we also pay for copy editing and layout separately, our cost per article would be this amount + copy editing (\$300-\$600) + typesetting (\$85-\$325). It seems plausible to me that we could publish 24 articles in 2023 and 30 - 36 articles in 2024 under this model. If we use the most optimistic estimates and also include the 11 articles published in 2022, our cost per article by the end of 2024 would be nearly \$1000 / article published. This number should be evaluated in the context of the APCs that Oxford University Press and other journals charge authors for the publication of open access content.

Economize the publishing process. I have had multiple conversations with people who inevitably suggest that we should take steps to economize the publishing process. For example, people have suggested that we could do layout using Latex such that we could avoid paying the typesetting fees, or coordinate manuscripts using some other system (i.e., Scholastica offers a [platform for Open Access publishing](#) that costs \$10 per submission + \$350 a year) to reduce the need for a managing editor. I acknowledge that there are likely steps that could be taken to reduce costs. However, these steps would all take time and energy to implement and would come with potential drawbacks. For example, of the roughly 60 submissions we have had to the Bulletin, only about five have come in as Latex documents while the majority have been submitted as MS Word documents. Many potential authors, editors, and reviewers might not be comfortable working in Latex. I do not have the capacity to explore these options know from experience that it is *considerable work to be the point person for all journal communications*. It is possible that the council may be able to find other people who would like to lead this endeavor. If this option is preferred, I would be willing to stay in my current role until December of 2023 and publish the manuscripts that we currently have in the queue. This could likely be accomplished using funds that are currently in my account.

Commercial-ize the Bulletin. Oxford University Press has encouraged SSB in a number of different meetings to consider launching a second journal. The council could decide to convert the Bulletin into a more commercial journal and include the publishing of the Bulletin in our contract with OUP (or a different publisher). This would have the benefit of increasing revenue to SSB and would likely allow for an expansion of the number of articles that we could publish. Potential negatives would include a change of the publishing model (for example, OUP would likely require APCs) and loss of a member benefit (i.e., free open access publishing). If this option is preferred, I would be willing to stay in my current role until December of 2023 and publish the manuscripts that we currently have in the queue. This could likely be accomplished using funds that are currently in my account.

Radical innovation. It is clear to me from conversations that I have had with program officers and librarians that people do not like the current publishing landscape where commercial publishers make record profits while academics provide much of the labor for free and (in many cases) pay APCs for the right to publish their research. It is also clear to me that commercial publishers benefit from economies of scale that are difficult for a society like SSB to replicate. I feel as if there is space here for radical innovation: for example, could multiple small societies for a cooperative publishing entity, hire professional managing and copy editors, and publish their journals independently through library publishing programs? Or is there space for a proposal to a funding agency that would offer student training for undergraduates who are interested in pursuing a career in publishing while also supplying labor to accomplish tasks such as copy editing and type setting? Since the Bulletin was founded in the spirit of radical innovation, it may be the case that SSB would like to pursue a more radical publishing model. If this option is preferred, I would be willing to stay in my current role until December of 2023 and publish the manuscripts that we currently have in the queue. This could likely be accomplished using funds that are currently in my account.

In closing I would like to thank you for your service on the council and for reading and thinking about the Bulletin in addition to all of the other topics that are under consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Carstens".

Bryan C. Carstens

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